

Rob MALPELI Amanda TELFORD Rachael WHITTLE Lee ANTON-HEM Claire STONEHOUSE
Dean DUDLEY Jonathan FENDER Kim VANDERVELDE Sam WATKINS Emmé WILD



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Fit for Life!

LEVELS 7 & 8

HEALTH & PHYSICAL EDUCATION

for the Victorian Curriculum

Rob MALPELI Amanda TELFORD Rachael WHITTLE Lee ANTON-HEM Claire STONEHOUSE
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NELSON CENGAGE Learning

Fit for Life! for the Victorian Curriculum Levels 7 and 8
1st Edition
Rob Malpeli
Amanda Telford
Rachael Whittle
Lee Anton-Hem
Claire Stonehouse
Dean Dudley
Jonathan Fender
Kim Vandervelde
Sam Watkins
Emmé Wild

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Cengage Learning Australia
Level 7, 80 Dorcas Street
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Unit 4B Rosedale Office Park
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ABOUT THIS BOOK

This book has been freshly written to match the Victorian Curriculum for Health and Physical Education for levels 7 and 8. We have tried hard to make the text clear and easy to read, with lots of photos and illustrations. There are heaps of activities, as we know you learn best from doing things!

What is important?

The chapter objectives at the beginning of the chapter are important for you to know and understand. The information in the chapter summary or quiz at the end is also important to know. The rest of the chapter in between explains the ideas and helps you practise the skills, so that's important too.

In each chapter

Each chapter starts with an opening spread containing the chapter objectives (linked to the Victorian Curriculum) and the main headings within the chapter, with page numbers for easy navigation.


GET SMART ABOUT DRUGS!

In this chapter you will learn about drugs and alcohol – what they are and what effect they can have on you, your family and the entire community. Legal and illegal drugs are examined, as well as the role of drugs in sport.

By the end of this chapter, you should be able to:

- analyse and discuss factors that influence the use of alcohol and other drugs by you and by others
- explore the range of health decisions you will be confronted with and analyse factors that influence choices you make
- analyse different social and cultural perspectives in relation to illegal drugs, legal drugs, prescription medicines, over-the-counter products, bush medicines, alternatives to medicines and performance-enhancing drugs
- explore how peer groups and family values can influence an individual's decisions relating to drug use
- identify strategies that you can use to support others who are going through a challenging time
- assess and analyse media messages about drug-related issues
- design health promotion campaigns targeting the wellbeing of young people in the community.

Get smart about drugs! 4
Safe use of medicines 5
Alternative medicines 9
How drugs affect the body 13
Factors that influence the use of different types of drugs 32
Impact of drug use on individuals, families and the community 36
Making informed decisions about drugs 37
Performance-enhancing drugs 42

2 3

Case studies

In most chapters there are a few case studies, with a real world focus.


Swapping between sitting and standing at desks is good for heart health

By Grant McArthur, Herald Sun, 13 May 2013

OFFICE workers need to take a stand against lazy work habits to save themselves from heart disease and other conditions, research has found.

A Melbourne study has found swapping between sitting and standing at desks each half-hour during an office working week can equal 45 minutes' exercise.

With Australians now sitting for about 80 per cent of their working days, Professor David Dunstan, of the Baker IDI Heart and Diabetes Institute, said height-adjustable desks could make a significant impact.

'If you can replace four hours of the work day sitting with standing, across a five-day working week, the net gain could be equivalent to a 45-minute brisk walk,' he said.

'It sounds small, but everybody is trying to arrest the situation of weight gain, and this is another way of making a small impact.'

Backed by the Heart Foundation, researchers simulated a work space at the Baker's laboratory and examined 20 office staff working with regular periods standing up. Workers burnt 13 per cent more energy than when seated all day.

The Heart Foundation's Kate Bolaffi standing at her computer

Source: www.heraldsun.com.au/business/worklife/swapping-between-sitting-and-standing-at-desks-is-good-for-heart-health/story

(previous page) Corbis/Seb Oliver/cultura

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Videos

In Chapter 10 there is a short video clip of an example of a sport dance. The video is available only on the NelsonNet website for this book (www.nelsonnet.com.au).


Sport dance

Activities

There are five different types of activities within the chapters, so you don't get bored. The different types are identified by an icon.



Face 2 face: do these activities with a partner or the whole class.



Up and moving: for these activities, you get up and move around.



Critical and creative thinking: in these activities you will need to be creative.



Review and reflect: these are the thinking activities: sometimes by yourself, sometimes in a group.



Web activities: these are activities using the internet; sometimes you will watch a video clip and answer questions about it and there are activities using digital tools or apps.



Higher order thinking: these activities are a bit harder, and may need a fair bit of time to do.

SCAFFOLD>> Scaffolds

For some of the activities, you will be asked to construct a table or complete a quiz. Scaffolds are just blank tables or graphic outlines to make the activity easier or faster. If you have access to the NelsonNet website, you can fill in the scaffolds online, or you can print them out and fill them in. If you don't have access to the internet in class, your teacher can print them out for you to fill in.

SCAFFOLD>>
Australian Guide to Healthy Eating

WORKBOOK>> Workbook references

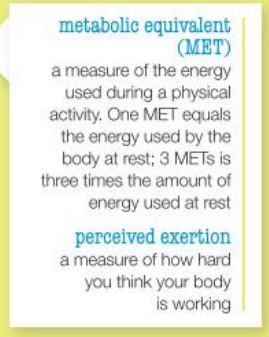
As part of the Fit for Life! Victorian Curriculum series there is a printed write-in workbook to go with your student book. The workbook is full of extra write-in activities and some 'Up and Moving' activities as well. It also repeats a few of the write-in activities from the student book, so you can do them at home.

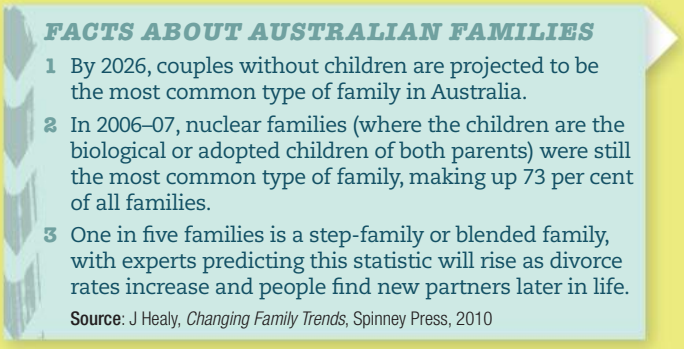
WORKBOOK>>
Worksheet 1.2

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Glossary definitions

Key terms in each chapter, which may be unfamiliar, are defined in the margin.





Fast facts

These short bits of information are sprinkled though the book to keep you awake!

Weblinks

There are no direct urls in this book, as web pages and addresses constantly change.

Instead, if you key in http://ffl78vic.nelsonnet.com.au, the link will take you to a page of direct links. You only need to open the page once per lesson.

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Fit for Life NelsonNetBook

NelsonNetBook is a web-based ebook for secondary schools, compatible with interactive whiteboards, computers and iPads, with optional Web2 functionality for class groups and individual functionality to add highlights, annotations, audio and video clips and weblinks. It is available free to students for 26 months if your school has booklisted *Fit for Life! for the Victorian Curriculum*. Visit the **NelsonNet** portal at www.nelsonnet.com.au to find out more, to register or to log in when your teacher has given you the class code. Features of the NelsonNetBook include:

- a direct link to weblinks within the book, by chapter
- direct links to scaffolds
- direct links to the extra activities
- a direct link to the video in Chapter 10
- the ability to highlight, annotate, add audio or video files, and generally customise your own digital copy of *Fit for Life! Vic Levels 7&8*. Your customising will last for 26 months from your first access.

Please note that complimentary access to NelsonNet and the NelsonNetBook is only available to teachers who use the accompanying student textbook and workbook as a core educational resource in their classroom. Contact your sales representative for information about access codes and conditions.

Feedback

We'd love to hear what we could improve for you, so email us: aust.secondary@cengage.com
We hope you have fun using and learning from this book!



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ABOUT THE AUTHORS

Robert Malpeli teaches at The Knox School, Victoria. He has been a leading light in senior Physical Education for more than 25 years and his texts and resources are used in Victoria, Western Australia and New Zealand. He is regarded as a pre-eminent Physical Education leader and educator. Along with Amanda Telford, he runs a Phys Ed teacher network in Victoria that supports both teachers and students at professional development sessions and seminars.

Amanda Telford is an Associate Professor in Exercise Sciences and Program Director of a Health and Physical Education (PE) degree within the tertiary sector. She lectures in physical education pedagogy, health and physical activity and curriculum development. Amanda taught secondary school Health and Physical Education and was a VCE PE examiner. Her research interests are in youth physical activity behaviour with an emphasis on school environments. Amanda has co-authored numerous journal articles and reports and more than 10 PE textbooks used in Victoria, Western Australia and New Zealand.

Rachael Whittle has been a Physical Education teacher for many years and has been heavily associated with the Victorian Curriculum Assessment Authority and the Western Australian Curriculum Council, in assessment and curriculum development. She was involved in the writing of the VCE Study Design and Assessment Handbook. Rachael is currently undertaking research at RMIT University on effective teaching strategies in post-compulsory Physical Education and presents teacher PD across Victoria and in Western Australia.

Lee Anton-Hem has more than 20 years' experience as a Physical Education specialist. She currently lectures at RMIT University, Victoria and teaches part-time in schools. Lee has written several resources for teachers, including *Fundamental Motor Skills and Literacy*, a Hip Hop program for the DEECD and other motor skill and fitness resources. In 2008, Lee was awarded an Australian Learning and Teaching Council Citation for Outstanding Contribution to Student Learning, and in 2007 was the recipient of the RMIT University Teaching Award-Early Career Academic.

Claire Stonehouse lectures at Deakin University in Health and Student Wellbeing and Sexuality Education. She is currently studying to gain her PhD. Claire has worked in many sectors of the community and has experience writing curriculum and educating young people across the board. Her areas of interest include the educational impact that parents have on their children, opening up the conversations about mental health, and sexuality education.

Dean Dudley is a former Health and Physical Education Head Teacher and Director of Sport and now works as a Physical Education academic at Macquarie University, NSW. His research interests are evidence-based physical education teaching, assessment and reporting strategies, and games-centred pedagogies. In 2013, Dean was a Churchill

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Fellow and an invited Expert Consultant to the United Nations on Quality Physical Education. He is also a keen surf lifesaver, swimmer, runner and footballer.

Jonathan Fender has been a Physical Education teacher for more than 20 years in the UK and in Australia. He has mainly taught Health & Physical Education from Years 7–12 and more recently Years P–5. He has had experience as a NSW HSC Marker, Head of Department, and Coordinator of School sport. He currently teaches H/PE at Scots PGC College in Warwick, Queensland.

Kim Vandervelde is currently Head of Department at Monte Sant' Angelo Mercy College in North Sydney. Kim was part of an internationasl team who wrote the new HPE guide for all MYP International Baccalaureate schools globally. She has also written for Nelson *Sport, Lifestyle and Recreation*.

Sam Watkins graduated from the University of Ballarat in 2002, and has taught Physical, Health and Outdoor Education, Certificate II and III in Sport and Recreation, and Information Technology in both Melbourne and Perth. He has worked in public and private schools, teaching Years 7 to 12, and in various coordinator and leadership roles. He currently teaches at Peter Moyes Anglican Community School. Although he has extensive experience in curriculum writing and development at a school level, this is his first opportunity writing for a national audience.

Emmé Wild graduated from the University of Warwick, England in 1997. She has worked in different educational systems including both private and public schools. Since arriving in Perth in 2003, Emmé has been involved in curriculum planning and writing for the School Curriculum and Standards Authority in WA as well as being a member of the Course Advisory Committee for Physical Education Studies. Emmé is currently Head of Sport, St Hilda's Anglican School for Girls.

About the reviewers

One of the reasons this book is so good is that really good classroom teachers read the chapters and gave us feedback on what we could improve. We would like to thank them for their excellent and very helpful work.

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FOR THE TEACHER

All teachers of Levels 7 and 8 should carefully read the introductory pages to the new Victorian Curriculum for this level, found at http://victoriancurriculum.vcaa.vic.edu.au/health-and-physical-education/introduction/rationale-and-aims, in order to understand the difference in the way this curriculum should be taught.

Our book is structured into chapters based on the ten focus areas. However, teachers may use other focus areas to cover the required knowledge and skills. It is important to cover the content descriptions for the two main strands: Personal, social and community health; and Movement and physical activity – the way you do it is up to you, and your school. Some content descriptions may already be covered in other subjects offered by your school, such as Dance, Home Economics, and Outdoor education.

This book covers all the content descriptions, using several contexts (focus areas); the way you use the book is up to you, but we hope you find it a useful tool.

Below is a grid showing broadly how the content descriptions are covered in the different chapters of this book. See also the Victorian Curriculum Levels 7 and 8, at the website above, for the achievement standard for these levels.

	Strand: Personal, Social and Community Health	Applicable chapters in *Fit for life! levels 7&8*
Being healthy, safe and active	Investigate the impact of transition and change on identities (VCHPEP123)	4 Mental health and wellness 5 Positive relationships 6 Think safe, act safe, be safe
	Evaluate strategies to manage personal, physical and social changes that occur as they grow older (VCHPEP124)	4 Mental health and wellness 5 Positive relationships
	Examine barriers to seeking support and evaluate strategies to overcome these (VCHPEP125)	1 Get smart about drugs 2 Eat well, live well 3 Health benefits of physical activity 4 Mental health and wellness 5 Positive relationships 6 Think safe, act safe, be safe
	Investigate and select strategies to promote health, safety and wellbeing (VCHPEP126)	1 Get smart about drugs 2 Eat well, live well 3 Health benefits of physical activity 5 Positive relationships 6 Think safe, act safe, be safe
Communicating and interacting for health and wellbeing	Investigate the benefits of relationships and examine their impact on their own and others' health and wellbeing (VCHPEP127)	1 Get smart about drugs 2 Eat well, live well 3 Health benefits of physical activity 4 Mental health and wellness 5 Positive relationships 6 Think safe, act safe, be safe
	Analyse factors that influence emotions, and develop strategies to demonstrate empathy and sensitivity (VCHPEP128)	1 Get smart about drugs 4 Mental health and wellness 5 Positive relationships 6 Think safe, act safe, be safe
	Develop skills to evaluate health information and express health concerns (VCHPEP129)	1 Get smart about drugs 2 Eat well, live well 3 Health benefits of physical activity 4 Mental health and wellness 5 Positive relationships 6 Think safe, act safe, be safe

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	Strand: Personal, Social and Community Health	Applicable chapters in *Fit for life! levels 7&8*
Contributing to healthy and active communities	Plan and use strategies and resources to enhance the health, safety and wellbeing of their communities (VCHPEP130)	1 Get smart about drugs 2 Eat well, live well 3 Health benefits of physical activity 4 Mental health and wellness 5 Positive relationships 6 Think safe, act safe, be safe
	Plan and implement strategies for connecting to natural and built environments to promote the health and wellbeing of their communities (VCHPEP131)	3 Health benefits of physical activity 4 Mental health and wellness 7 The great outdoors 9 Enhancing personal fitness through lifelong activity
	Examine the benefits to individuals and communities of valuing diversity and promoting inclusivity (VCHPEP132)	2 Eat well, live well 4 Mental health and wellness 5 Positive relationships 6 Think safe, act safe, be safe
	Strand: Movement and Physical Activity	**Applicable chapters in *Fit for life! Levels 7&8***
Moving the body	Use feedback to improve body control and coordination when performing specialised movement skills (VCHPEM133)	7 The great outdoors 8 Playing the game and being a good sport 10 Just dance!
	Compose and perform movement sequences for specific purposes in a variety of contexts (VCHPEM134)	7 The great outdoors 8 Playing the game and being a good sport 10 Just dance!
	Practise, apply and transfer movement concepts and strategies (VCHPEM135)	7 The great outdoors 8 Playing the game and being a good sport 9 Enhancing personal fitness through lifelong physical activity 10 Just dance!
Understanding movement	Participate in physical activities that develop health-related and skill-related fitness components, and create and monitor personal fitness plans (VCHPEM136)	3 Health benefits of physical activity 9 Enhancing personal fitness through lifelong physical activity
	Demonstrate and explain how the elements of effort, space, time, objects and people can enhance performance (VCHPEM137)	8 Playing the game and being a good sport 10 Just dance!
	Participate in and investigate the cultural and historical significance of a range of physical activities (VCHPEM138)	3 Health benefits of physical activity 8 Playing the game and being a good sport 9 Enhancing personal fitness through lifelong physical activity
Learning through movement	Practise and apply personal and social skills when undertaking a range of roles in physical activities (VCHPEM139)	5 Positive relationships 7 The great outdoors 8 Playing the game and being a good sport 9 Enhancing personal fitness through lifelong physical activity
	Evaluate and justify reasons for decisions and choices of action when solving movement challenges (VCHPEM140)	7 The great outdoors 8 Playing the game and being a good sport 9 Enhancing personal fitness through lifelong physical activity 10 Just dance!
	Modify rules and scoring systems to allow for fair play, safety and inclusive participation (VCHPEM141)	6 Think safe, act safe, be safe 7 The great outdoors 8 Playing the game and being a good sport 9 Enhancing personal fitness through lifelong physical activity 10 Just dance!

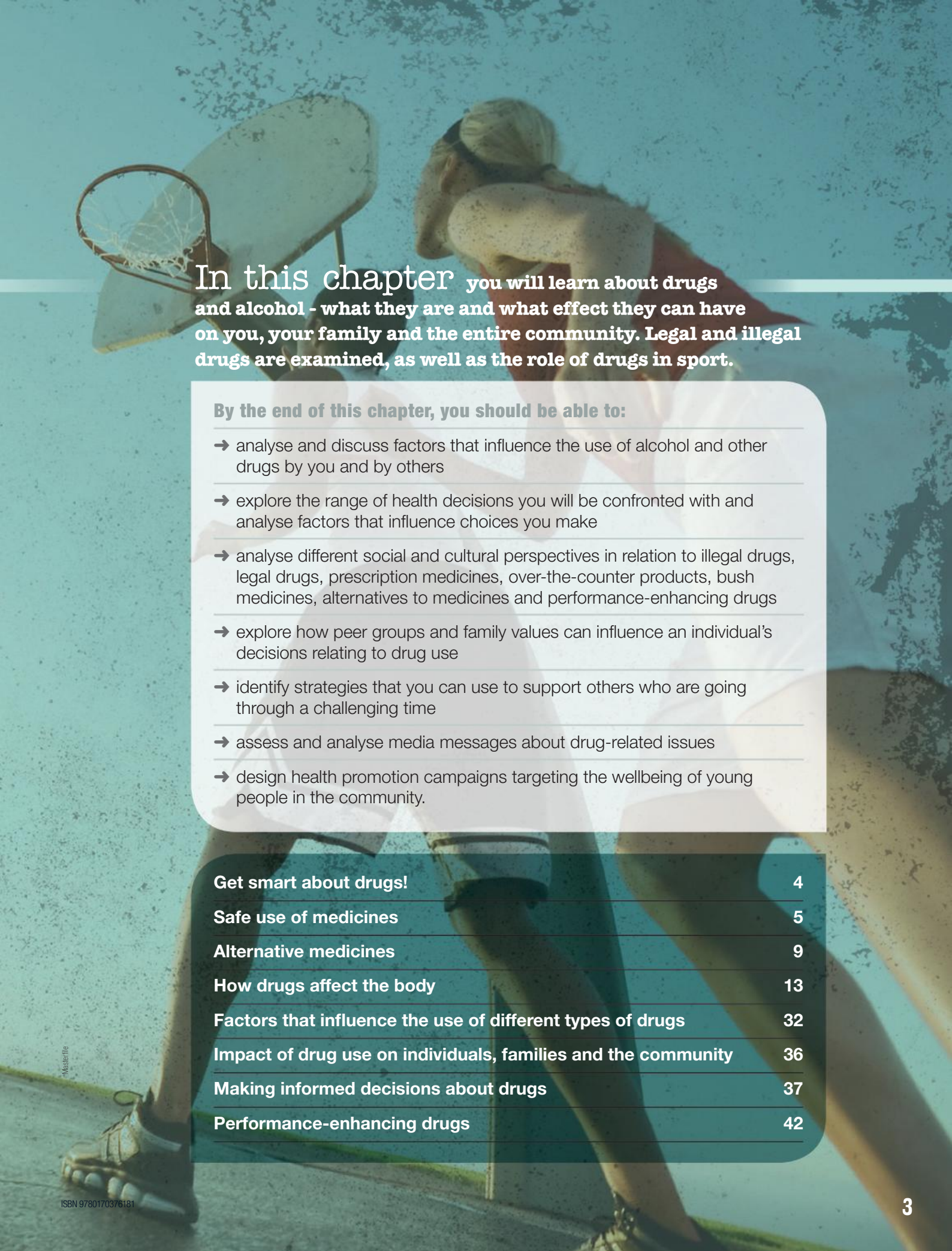
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GET SMART ABOUT DRUGS!



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In this chapter **you will learn about drugs and alcohol - what they are and what effect they can have on you, your family and the entire community. Legal and illegal drugs are examined, as well as the role of drugs in sport.**

By the end of this chapter, you should be able to:

- ➜ analyse and discuss factors that influence the use of alcohol and other drugs by you and by others
- ➜ explore the range of health decisions you will be confronted with and analyse factors that influence choices you make
- ➜ analyse different social and cultural perspectives in relation to illegal drugs, legal drugs, prescription medicines, over-the-counter products, bush medicines, alternatives to medicines and performance-enhancing drugs
- ➜ explore how peer groups and family values can influence an individual's decisions relating to drug use
- ➜ identify strategies that you can use to support others who are going through a challenging time
- ➜ assess and analyse media messages about drug-related issues
- ➜ design health promotion campaigns targeting the wellbeing of young people in the community.

Get smart about drugs!	**4**
Safe use of medicines	**5**
Alternative medicines	**9**
How drugs affect the body	**13**
Factors that influence the use of different types of drugs	**32**
Impact of drug use on individuals, families and the community	**36**
Making informed decisions about drugs	**37**
Performance-enhancing drugs	**42**

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GET SMART ABOUT DRUGS!

drug
A chemical substance that can alter the biological functioning and structure of a living organism. Drugs can either be synthetic (man-made) or natural.

In this chapter you will learn about a range of **drugs** including prescription, bush and alternative medicines, energy drinks, caffeine, tobacco, illegal drugs and performance-enhancing drugs. You will also explore the impact that each of these drugs can have on your friends, family and the community in which you live.

The human body is a complicated organism. You begin life as a single cell and develop into a highly complex, multicellular, efficient machine. As you grow, you must balance your physical activity with eating nutritious food and getting enough sleep to ensure your body stays healthy.

Unfortunately, as strong and resilient as the human body is, the effects of alcohol, tobacco and other drugs can be damaging and long lasting, leaving the body vulnerable to illness, disease and dangerous situations.

psychoactive
having an effect on your mind and your senses

Drugs are substances containing chemicals that can affect the way you think, feel and behave. Such substances are said to be **psychoactive** because they work on your mind and your senses and can change the way the body functions. Once a drug reaches the brain, it can change the messages brain cells send to each other and to the rest of the body.

PENICILLIN

In the 1940s, a team led by Australian scientist Howard Florey discovered the healing properties of penicillin. This antibiotic is now widely used to treat many serious diseases and infections. You may have been prescribed penicillin by your doctor when you had a bacterial infection such as tonsillitis or a chest infection.

WORKBOOK>>
Worksheet 1.1

LEGAL DRUGS KILL

In Australia, legal drugs such as alcohol and tobacco kill more people than illegal drugs. Tobacco (smoking cigarettes) kills more people than any other drug.

Source: www.betterhealth.vic.gov.au

Some drugs are legal; many others are illegal. Examples of legal drugs include prescription medication, over-the-counter medicines (OTCs), caffeine, tobacco and alcohol. Illegal drugs include substances such as cannabis, ecstasy and cocaine.

There are thousands of different drugs available. Some drugs occur naturally and come from plants and animals while other drugs are synthetic (made in laboratories).

Penicillin is an example of a medicine derived from a plant, in this case the *Penicillium* fungus.

While many young people avoid taking drugs that may be harmful to their health and wellbeing, adolescence is a time where young people may experiment with a variety of drugs including alcohol, tobacco and cannabis. Any substance that can have an adverse effect on the body can become addictive, which means that it is very hard to stop using it. Addiction can lead to many physical, social and mental problems later in life.

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Getty Images/Monkey Business Images

CREATE AN ANTI-DRUG POEM

critical + creative thinking

Can you write a poem about the negative impact of drugs? Think of the harm that drugs can have on everyday people, families and their communities. Use the poem below as inspiration.

WORKBOOK>>
Worksheet 1.2

DRUGS by BH

Some drugs are helpful
Some drugs are bad
Some make you better
While others send you mad.

One thing is certain
Make sure you're no fool.
Only what the doctor orders
Should be your rule.

Source: www.cyh.com/HealthTopics/HealthTopicDetailsKids.aspx?p=335&np=289&id=1559

SAFE USE OF MEDICINES

Advances in science have led to the manufacture of many medicines. Medicines are made up of chemicals and compounds that are used to treat a variety of illnesses and ailments and ultimately, to improve lives.



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Prescription medication

Medicines are generally prescribed by an authorised health-care professional such as a doctor or are purchased 'over-the-counter' from a pharmacy or supermarket. Prescription medicines are licensed and regulated by law; it is against the law to supply prescription medication without a prescription from a doctor. There are heavy penalties, which include fines and prison sentences, for people caught supplying prescription drugs without a prescription.



Shutterstock.com/Tyler Olson

You can purchase over-the-counter medication without a prescription

Over-the-counter medicines (OTCs) are medicines that are readily available and do not require a prescription from a health-care professional. They are also known as non-prescription medicines. When did you last go to the chemist to purchase medicine to make you feel better?

How medicines are administered

Drugs used to treat illnesses and infections are usually taken in the form of a tablet or pill. However, there are many different ways that drugs can be administered. These are listed in Table 1.1.

TABLE 1.1 Different forms of prescribed or OTC medication

Form of medicine	Example medication
Liquids	Cough mixture
Sprays/inhalers	For asthma or hay fever control
Drops	For ears and eyes
Patches	Skin patches to control smoking
Creams, gels or other ointments	Steroid creams for skin disorders
Tablets/capsules	Antibiotics
Injection	Vaccinations, such as the flu vaccine
Intravenous	Fluids inserted into veins by medically trained staff

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Healthy, safe and active choices

When people think of drug abuse in Australia, they often focus on illegal street drugs such as ecstasy and cannabis. Many people are unaware that the misuse of prescription drugs is the major drug issue faced by ordinary Australians. Prescription drug abuse is more common than you think. It occurs when medicine is obtained with a prescription but used in a manner not 'prescribed' by the health-care professional. Using prescription drugs that have not been prescribed by a doctor can be just as dangerous as using illegal drugs.

The most commonly abused prescription drugs include benzodiazepines and opiate-based drugs.

PRESCRIPTION DRUG MISUSE

Australia has one of the world's highest rates of prescription **drug abuse**. Almost 50 per cent of teenagers believe that prescription drugs are much safer than illegal street drugs. The primary source for prescription drugs is the home medicine cabinet.

Source: www.drugsalvage.com.au

drug abuse
the harmful misuse of illegal, prescription or over-the-counter drugs that can ultimately lead to addiction or dependency

CASE STUDY Prescription drug use

JESSIE felt unwell and had a headache. She took some over-the-counter pain relieving tablets but the pain didn't go away. While Jessie lay in bed, she remembered that her mother had some painkillers in the medicine cabinet that had been prescribed by her doctor for a back complaint. She decided to take a couple, thinking that if they had been prescribed by a doctor, they would be OK.

WORKBOOK>>
Worksheet 1.3

Benzodiazepines, also known as 'minor tranquillisers' are depressants, which slow down the messages sent between the brain and the body. They are prescribed by doctors to relieve the symptoms of stress and anxiety and also help people to sleep.

Opiate-based drugs have a **narcotic** effect and are highly addictive. There are many drugs that fall into this category, including codeine, morphine and OxyContin. Opiate-based drugs are commonly prescribed by doctors because of their effectiveness in providing pain relief.

opiate
a drug produced from the opium plant

narcotic
an addictive drug used to relieve pain, which also dulls the senses and promotes drowsiness

There are many reasons why people choose to abuse prescription drugs. First, there is the belief that prescription drugs are safer than illicit street drugs. Unfortunately, this is a very common misconception. Prescription drugs are intended only for the individual who has been examined by the doctor. Second, prescription drugs are seen to be more readily available than illicit drugs as users may see more than one doctor at a time and obtain a number of prescriptions for the same product. Finally, people don't believe that taking prescription drugs is against the law. This is another misconception; any form of drug abuse is against the law.

Why do people abuse medication that has either been prescribed or purchased over the counter? There are many factors that influence these types of choices. Develop an understanding of why people take drugs to improve their health and why people abuse these drugs to make better choices.

ISBN 9780170376181



PAINKILLERS

Go to the *ABC TV 7.30 Report* website (http://ffl78vic.nelsonnet.com.au) and search for the item by Conor Duffy from 16 November 2012: 'Emergency rooms and clinics report an increase in people needing help for the misuse of over-the-counter painkillers, particularly codeine and ibuprofen, leading to calls for a review of how they're sold'.

Too many popping pills, expert warns

By Cathy O'Leary, Medical Editor

YOUNG Australians increasingly abuse common prescription drugs such as sedatives, painkillers and anti-anxiety pills to help manage their lives, an expert has warned.

Professor Dan Lubman, who chairs the Royal Australian and New Zealand College of Psychiatrists' addiction section, said harm from so-called safe medication now rivalled that of illicit drugs.

Young people in particular routinely shared with family and friends prescription drugs such as opioid analgesics and benzodiazepines to treat pain, anxiety and insomnia.

They also often changed the dose or used them to prevent rather than treat a problem.

'There are increasing rates of prescription drugs generally but we're seeing more "off label" use that is not according to the doctor's instructions, where people use them and share them to enhance their lives,' he told the group's congress in Hobart yesterday.

'If people have drugs they were once prescribed for pain or insomnia, they will take them if they are worried they might be in pain again or have trouble sleeping.'

For some people, their first drug use is not alcohol or illicit drugs but grandma's painkillers or sleeping tablets.

Professor Lubman said there was still a strong Australian culture of people expecting to get a prescription from their doctor. Time-poor doctors also felt pressured to give tangible treatment.

There was a strong culture of wanting a 'pharmaceutical fix' and an increasing sophistication among young people to self-medicate.

'Because they're prescription drugs that have come from a doctor, people think they must be safe, even if they're using them for unintended purposes', he said.

Professor Lubman said Australia risked creating a huge black market for prescription drugs as there was in the US and it was becoming a significant health problem.

Doctors needed to be more vigilant about drugs that were abused and to look for patients who ran out of the drugs early, increased the dose or were becoming dependent.

Questions

1. Young people routinely share what two drugs to treat pain and insomnia?
2. According to Dr Lubman, which other country has a huge black market problem with prescription drugs?
3. Name an analgesic (painkiller) that if taken in large quantities can harm the liver.
4. Give two possible reasons for anxiety and insomnia in modern living.

Source: *The West Australian*, 22 May 2012, http://au.news.yahoo.com/thewest/a/-/wa/13743301/too-many-popping-pills-expert-warns/



PILLS FOR STRESS

Your friend appears stressed about a maths test that is coming up. She appears to be having trouble concentrating and has mentioned taking pills that were prescribed by the doctor for her sister to help her concentrate in Year 12. What advice would you give to your friend and why?

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ALTERNATIVE MEDICINES

In addition to the medicines available from doctors and pharmacies, there are a huge range of other medicines and treatments that are known as alternative medicines.

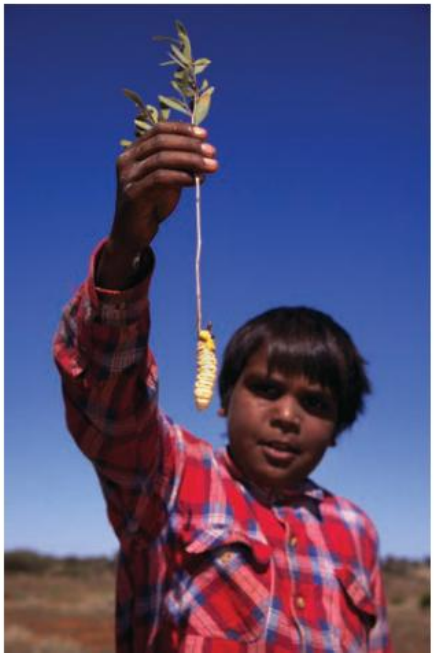
Traditional medicines

herbal remedy
medicine made from plants or parts of plants

Traditional medicines are used by many cultures around the world. For thousands of years, the Chinese have used **herbal remedies** to cure a wide range of ailments and diseases, from headaches to stomach problems. Chinese herbal remedies include a tea made from the leaves of the sweet wormwood tree to treat chills and fevers, and the dried and ground roots of the ginseng plant, which have been used for more than 2000 years to help boost energy, increase endurance and reduce stress. The ancient Chinese also treated coughs and colds with the root of the liquorice plant, which was ground into a powder and drunk as a tea. The ancient Egyptians also used herbs and plants to produce traditional medicines. To cure coughs and colds, they used extracts from the hibiscus plant, which were placed in a hot bath so that the patient could inhale the steam. The ancient Egyptians used garlic to give them vitality.

Australian bush medicines

Australian Aboriginal people have long relied on the resources of the environment around them to provide the medicines that they need for daily life. The term 'bush medicine' refers to the traditional medicinal practices that have been used for thousands of years to promote healing and maintain health and wellbeing.



Alamy/© Bill Bachman

Witchetty grubs are a traditional treatment used by Australian Aboriginal people for burns and wounds.



Alamy/© Travelscape Images

A traditional Chinese medicine practitioner at work

WORKBOOK>>
Worksheet 1.4

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Alamy/© Geraldine Buckley

Plants used for bush medicine include (1) Emu bush, (2) snake vine, (3) goat's foot, (4) kangaroo apple

Top 10 Aboriginal bush medicines

Tea tree oil: crushed tea tree leaves used to treat wounds and throat ailments. The oil has been scientifically proven to have strong antiseptic properties.

Eucalyptus oil: used to treat pains, fevers and chills.

Billygoat plum/kakadu plum: this fruit contains 50 times more vitamin C than an orange. It is the world's richest source of vitamin C.

Desert mushroom: when sucked, these mushrooms cure sore mouths and lips. Also used as a natural teething ring for babies.

Emu bush: the leaves of this bush are used to wash sores and cuts and are occasionally gargled. The leaves have been found to have similar properties to some antibiotics.

Witchetty grub: crushed grubs are used to treat burns. The grubs are made into a paste, then applied to the wound and covered with a bandage. They are also a good source of food.

Snake vine: crushed vine is used to treat headaches and arthritis; the sap and leaves are used to treat wounds.

Sandpaper fig and stinking passion flower: the rough leaves of the sandpaper fig and the crushed fruit of the stinking passion flower are used together to relieve itching and to treat fungal skin infections.

Kangaroo apple: crushed fruit is used to treat swollen joints.

Goat's foot leaves: used to relieve the pain of stonefish and stingray stings.

Source: www.australiangeographic.com.au/journal/10-most-common-aboriginal-bush-medicines.htm

face 2 face

GET CREATIVE

Create a poster identifying the top 10 Aboriginal bush medicines.

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Alternative medicines in Australia

Increasing numbers of Australians use alternative methods of healing in addition to **conventional medicine**. There are many alternative practices that use natural and **holistic** processes that claim to have healing properties, including ayurvedic medicine, yoga, acupuncture and massage.

conventional medicine treatment of illnesses and injuries by health-care professionals such as doctors and nurses, using drugs, radiation or surgery

holistic health an approach that considers the health of the whole body, including mental, physical, spiritual and social health

Ayurvedic medicine

Ayurvedic medicine refers to the traditional medicinal practices of ancient India. Ayurveda is often referred to as the 'science of life' (*ayu* means 'life' and *veda* means 'knowledge'). This 5000-year-old medicinal practice relates to the health and wellbeing of the mind and body, using a combination of diet, herbal medicine, massage, meditation, yoga and breathing exercises.

ALTERNATIVE MEDICINES

Approximately 60 per cent of Australians use alternative medicines to improve or sustain a healthy lifestyle.

Yoga

Yoga is also a practice that originated in ancient India. Physically, yoga exercises focus on developing strength, increasing flexibility and improving posture. Yoga can also develop mental and emotional wellbeing by relaxing the mind and raising spiritual awareness.



Alamy/© PHOTOTAKE Inc.

Many ayurvedic medicines are based on herbal ingredients including bark from various trees and shrubs, plant and tree roots, seeds and herbs



iStockphoto/YinYang

Yoga is practised to strengthen the body and increase overall wellbeing

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Acupuncture

Acupuncture is used to alleviate pain and nausea. It is the oldest form of medicine in the world and is very popular in Australia. It is an ancient Chinese system of healing that stimulates the mind and the body's healing response. This traditional practice involves inserting very fine needles into the skin at specific points. The needles are left in place for around 30 minutes.



iStockphoto/paulpreston172

Acupuncture originated in ancient China and is one of the best known alternative medicine practices

Massage

Massage therapy has been around for thousands of years and is used to treat a variety of health-related issues. Pain relief, management of stress and anxiety, rehabilitation of sports injuries and general wellbeing are among the benefits of massage.



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Massage therapy is another type of alternative medicine

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DIFFERENT TYPES OF MASSAGE



Use the internet to research the different types and methods of massage that are used around the world today, as an alternative to taking contemporary medicines. Ensure you include the main health-related focus of each massage type.

HEALTH PROMOTION CAMPAIGN



As a class, create a school-wide campaign that raises awareness of alternatives to conventional medicine. Subject to time and resources available, campaign materials could include the following:

- campaign message
- slogans
- posters/flyers
- social media: Twitter/Facebook
- school announcements
- guest speakers.

Be creative with the campaign. You may wish to enlist school administrators and other teachers to support your campaign among the school community.

HOW DRUGS AFFECT THE BODY

A **psychoactive drug** contains chemical substances that can adversely affect the functioning of the central nervous system and alter a person's conscious state. This can result in confusion, as well as changes in mood, behaviour and level of consciousness.

psychoactive drug
a drug that can alter your senses, awareness and mood

Classification of drugs

Drugs can be grouped within three main categories: depressants, stimulants and hallucinogens. It is important to understand that legal and illegal drugs can be found under each category, and that all drugs can lead to addiction and dependency.

Depressants

Depressants do not necessarily make people feel depressed; in fact they are among the most commonly used drugs in the world. Depressants affect the body's central nervous system by slowing down the messages sent between the brain and the body. People who take depressants in small quantities may feel more relaxed and drowsy, have an increased heart rate and their concentration and coordination may be affected. When taken in larger quantities, depressants can induce panic attacks,

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paranoia, headaches, aggression, vomiting, comas and, ultimately, death. Some common examples of depressants:

- alcohol
- cannabis
- opiates and opioids (heroin, morphine, codeine)
- barbiturates
- inhalants (solvents, aerosols, gases, nitrites).

Stimulants

In contrast to depressants, stimulants speed up brain activity. Stimulants can make you feel more alert and awake by increasing your heart rate, body temperature and blood pressure. There are many side effects of stimulant abuse, including suppressed appetite, anxiety and insomnia. Caffeine is an example of a natural legal stimulant; it is found in coffee, tea, energy drinks and even chocolate. Other common examples of stimulants:

WORKBOOK>>
Worksheet 1.5

- nicotine (found in tobacco)
- cocaine
- amphetamines (ice, methamphetamine, speed)
- ecstasy
- ephedrine
- khat.



Examples of stimulants: (1) cocaine plant, (2) khat plant, (3) ecstasy pills

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Hallucinogens

Hallucinogens, also referred to as 'psychedelics', can alter the way you perceive reality. In other words, hallucinogens can alter the way your mind works by affecting all your senses and emotions. They can initiate hallucinations, causing you to see or hear things that don't actually exist. Hallucinogens are either made in laboratories or occur naturally in some trees, vines, seeds, fungi and leaves. Examples of hallucinogens:

- 'magic' mushrooms
- cannabis
- MDMA (ecstasy)
- ketamine
- LSD.



Shutterstock.com/William Casey



Alamy/© Janine Wiedel Photolibrary

Cannabis (left) and 'magic' mushrooms are examples of hallucinogenic drugs

Polydrug use

Polydrug use is when more than one drug is used at the same time or during the same occasion. It can also refer to using one drug to counteract the effects of another. A polydrug user may mix legal with illegal drugs. A common legal drug used by polydrug users is alcohol. The effects of combining more than one drug can often be very dangerous and unpredictable, especially when drugs of unknown content and purity are mixed together. Such effects include overdose, violence and aggression, unwanted sexual activity, **psychosis** and even death.

psychosis
mental illness that is associated with the loss of contact with reality and severe changes in mood and personality

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Alcohol

Drug classification: depressant

Alcohol is a popular recreational drug. Pure alcohol is so strong that its concentration in most alcoholic drinks is relatively low. There are four main types of alcoholic drink:

1. **Wine**: made from fermented fruits (usually grapes). The alcohol content of wine is around 9 to 16 per cent.
2. **Beer**: prepared by brewing and fermenting water, barley, yeast and hops together. The alcohol content is usually around 4 to 6 per cent.
3. **Spirits**: made from grains such as barley and rye and produced by fermentation and distillation. Examples include vodka, rum, whiskey and gin. Often spirits are mixed with other beverages to produce cocktails. Spirits have a high alcohol content, usually 20 to 40 per cent.
4. **Liqueur**: made by adding flavourings and sugar to spirits. Generally sweet, liqueur typically contains 15 to 30 per cent alcohol.



iStockphoto/draghicich

ALCOHOL FACTS

1. One in two Australians aged 15 to 17 who get drunk will do something they regret.
2. Four Australians under 25 die from alcohol-related injuries in an average week.
3. In some states in Australia, it is illegal to provide alcohol to a person under 18 in a private home without his/her parent's approval.
4. Some alcopops can contain as much as three standard drinks in one bottle!

Alcohol-related harm

After tobacco, alcohol is the second-largest contributor to drug-related harm in Australia. Unfortunately, the social acceptance of alcohol prevents many people from recognising the harmful long-term effects of this drug. Alcohol has been culturally and socially accepted since British colonisation of Australia in 1788. In those days, convicts were partially paid with rum!

For many young people in Australia, drinking alcohol is regarded as a sign of maturity. Every day, many adults mark the transition from work to home with an alcoholic drink. Many people consume alcohol with food, to celebrate a special occasion, to relax or to unwind and have fun.

What is a hangover?

A hangover is the body's reaction to drinking too much alcohol. There are many unpleasant effects of a hangover.

Mental symptoms of a hangover	Physical symptoms of a hangover
• poor motivation	• headache
• poor concentration	• tiredness
• vertigo (loss of balance or dizziness)	• dehydration
• anxiety	• nausea
• irritability	• vomiting
• depression	• sweating

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There are two main reasons why people suffer unpleasant symptoms after a night of drinking. First, alcohol is a diuretic, meaning that it causes the drinker to become dehydrated. Second, the way that alcohol is broken down in the body creates toxic by-products that can affect many of the body's internal systems. The more alcohol consumed, the worse the hangover will be.



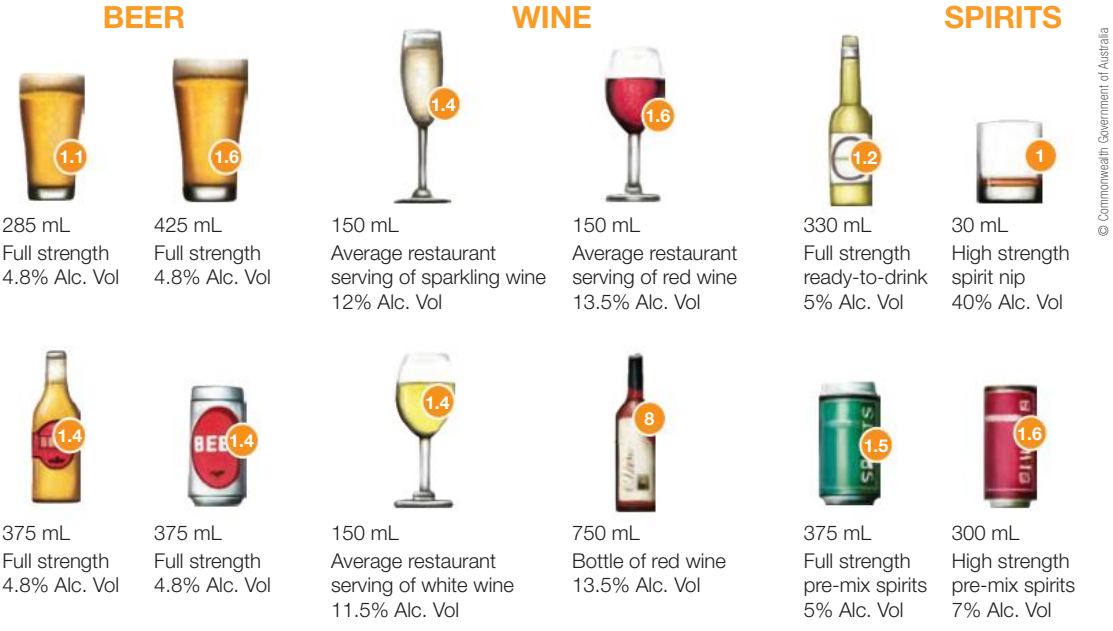
Alamy/Image Source

What is a standard drink?

In Australia, a standard drink contains approximately 10 grams of alcohol. One standard drink will always contain the same amount of alcohol, regardless of the size of the container or the type of alcoholic beverage.



These are the standard drink logos that appear on bottles and cans of beer, spirits and wine. The number on the logo identifies the number of standard drinks contained in the bottle or can – this varies depending on the size of the container and the type of alcohol involved.



© Commonwealth Government of Australia

Standard servings of beer, wine and spirits, adapted from *Australian Guidelines to reduce health risks from drinking alcohol.*

WORKBOOK>>
Worksheet 1.6

CAN YOU POUR A STANDARD DRINK?

Go to the New Zealand Health Promotion Agency website (http://ff178vic.nelsonnet.com.au) to see whether you can pour a standard drink.

1. Click on 'Can you pour a Standard Drink?' game. Do you know how much you are really drinking? This game is a fun way to see whether the drinks you pour are huge servings or standard.
2. Go to the Drug Info Clearinghouse website (http://ff178vic.nelsonnet.com.au) and click on 'Guide to Standard drinks'. Read the fact sheet and see how many standard drinks are in different types of alcohol containers. This tool has been designed to visually display the alcohol content for different types of alcoholic drinks.

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Short-term effects of alcohol

Brain
dizziness/headache
poor concentration
memory loss
slurred speech
unstable emotions
blurred vision
flushed appearance
reduced coordination
coma



Alamy/© David J Green

Stomach
reduced hunger
nausea
vomiting

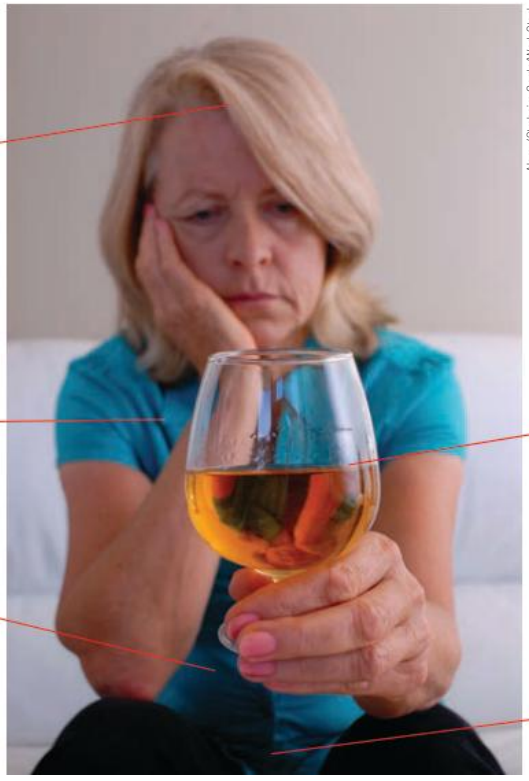
Bladder
loss of bladder control

Long-term effects of alcohol

Brain
stroke
concentration and memory lapses
personality and mood changes

Other
nutrition-related disorders
increased risk of cancers

Liver
liver damage



Alamy/Strohein Gerda/WoodyStock

Heart
high blood pressure

Reproductive system
impotence
reduced fertility

WORKBOOK>>
Worksheet 1.7

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Alcohol and the law

WORKBOOK>>
Worksheet 1.8

Although alcohol is usually considered a socially acceptable legal drug, it is against the law for people to sell alcohol to those under the age of 18. It is also illegal for those under the age of 18 to purchase alcohol. In most states in Australia, a zero blood alcohol concentration limit applies to all learner and probationary/provisional licence holders, regardless of age.

Aboriginal and Torres Strait Islander people and alcohol consumption

Aboriginal and Torres Strait Islander people have historically been cast in an unfavourable light with regards to alcohol consumption and drug use. However, statistics show that the rates of alcohol consumption among the Indigenous population as a whole are similar, and in some cases lower, than the rates for non-Indigenous people. Unfortunately though, more Aboriginal and Torres Strait Islander people die from conditions caused by alcohol than non-Indigenous people.

Some Aboriginal communities experience high levels of alcohol and drug abuse and these are the communities that are often highlighted in the media. However, substance abuse, whether alcohol or drugs, is not a part of Aboriginal and Torres Strait Islander culture. When Europeans settled in Australia, they brought alcohol with them and it became a type of currency. When alcohol was given to Aboriginal and Torres Strait Islander people in return for labour, Indigenous communities were exposed to alcohol and a culture of heavy drinking for the first time. For some, consuming alcohol became a way to deal with many of the problems faced by Aboriginal and Torres Strait Islander people following European settlement. These problems include being dispossessed of their lands, forcibly separated from their families, poor living conditions, low income, unemployment and lack of medical, educational and recreational facilities.

INDIGENOUS AUSTRALIANS AND ALCOHOL

1. More non-Indigenous Australians drink alcohol than Aboriginal and Torres Strait Islander people.
2. The proportions of Aboriginal and Torres Strait Islander people and non-Indigenous Australians who are long-term drinkers or high-risk drinkers are almost identical.
3. The rate of binge drinking for Aboriginal and Torres Strait Islander people is twice the rate of non-Indigenous Australians.
4. Aboriginal and Torres Strait Islander people die from alcohol-related causes at five times the rate of non-Indigenous people.

Source: *Substance use among Aboriginal and Torres Strait Islander people*, Australian Institute of Health and Welfare, February 2011

There are many programs in place to address the problems of alcohol and drug abuse in Aboriginal and Torres Strait Islander communities. Many of these are aimed at teenagers, to get them involved with challenging and interesting activities outside school hours. Total alcohol bans in some communities have drastically reduced alcohol-related issues such as domestic violence and alcohol-related injuries.

DRUGS AND ALCOHOL USE IN ABORIGINAL AND TORRES STRAIT ISLANDER COMMUNITIES

Read the information produced by the Australian Drug Foundation about drug and alcohol issues in Aboriginal and Torres Strait Islander communities. Does this confirm what you had thought about alcohol use by Australian Indigenous communities, or has it given you some new ideas? (You can link direct via http://ff178vic.nelsonnet.com.au)

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Tobacco

Drug classification: stimulant

In Australia, tobacco smoking has been practised for more than 300 years. It was first introduced to Indigenous communities in northern Australia by Indonesian fisherfolk in the early 1700s. After 1788, when British settlers colonised Australia, tobacco smoking was considered a popular pastime by all. In the years following 1788, Indigenous Australians adopted this British behaviour and the habit became an accepted part of Australian society.

FACTS ABOUT SMOKING

1. Aboriginal and Torres Strait Islander populations are 2.6 times more likely to die from smoking-related diseases such as stroke, heart and vascular disease compared to the overall Australian population.
2. Approximately 15 000 Australians die from smoking-related diseases every year. That's the equivalent of a passenger plane with 290 people on board crashing every week.
3. Between the ages of 12 and 17, girls are more likely to smoke daily than boys.

What's in a cigarette?

Tobacco is the main ingredient in cigarettes. It is made from the leaves of the tobacco plant, which is grown in warm climates around the world. Farmers use fertilisers to ensure the soil is rich and fertile and insecticides to kill the insects that may destroy the tobacco plant. The leaves are picked and dried, then processed by machines. Chemicals and artificial flavours are added to the dried tobacco by cigarette manufacturers.

carcinogen
a substance that causes cancer

Cigarettes contain approximately 600 ingredients. When smoked, these ingredients will produce more than 4000 chemicals. However, around 50 of these chemicals are **carcinogens** that are known to cause cancer and can have deadly effects. Some of the main chemicals and substances found in cigarettes are shown in Table 1.2.

TABLE 1.2 Chemicals and substances in cigarettes

Nicotine	An addictive drug that makes people want to smoke more. Also used as an insecticide.
Ammonia	Commonly found in household cleaning products. Used to boost the effect of nicotine.
Carbon monoxide	Toxic, tasteless, odourless gas found in motor vehicle exhausts.
Methanol	A main component of rocket fuel.
Acetone	A solvent commonly used to remove nail polish.
Pesticides	Toxic chemicals used to kill insects.
Formaldehyde	A chemical found in a variety of products, from disinfectants to cosmetics. Used also to delay the decomposition of dead bodies!
Hydrogen cyanide	Toxic gas used in gas chambers.
Arsenic	An ingredient in rat poison.
Tar	Used to surface roads.
Butane	Highly flammable substance found in lighter fuel.
Radon	Radioactive gas.
Cadmium	Active component of battery acid.

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Changes to tobacco packaging in Australia

In order to reduce tobacco consumption, all tobacco products in Australia are now sold in standardised plain, logo-free, drab, dark brown packaging. The company brand name must be a certain size, in a certain font and in a certain place on the pack. No colours, logos or promotional text are allowed on the pack. Additionally, health warnings and other legally required information, such as toxic ingredients, must also be identified on the packaging. The health warning must cover 75 per cent of the front of the pack and 90 per cent of the back of the cigarette pack.

AAP Images



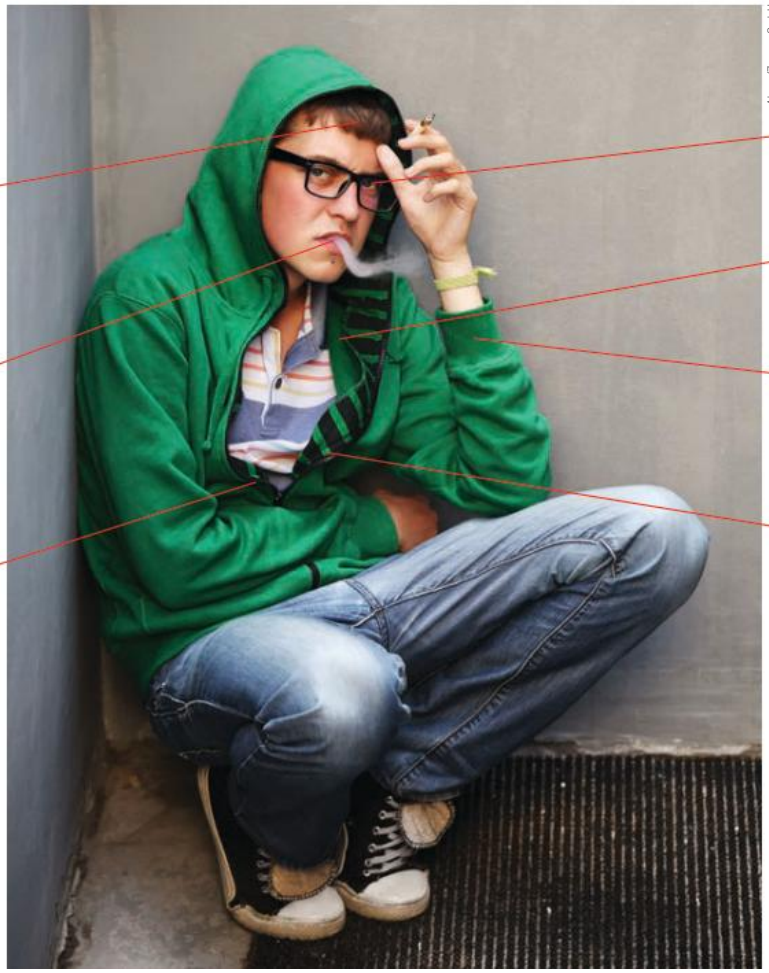
Cigarette packs are required by law to display graphic anti-smoking messages, designed to 'scare' consumers into thinking about the implications of smoking

WORKBOOK>>
Worksheet 1.9

Short-term effects of smoking

WORKBOOK>>
Worksheet 1.10

Alamy/Zoonar GmbH



Brain
less oxygen

Mouth
bad breath
stained teeth

Lungs
coughing
wheezing
less oxygen (onset of asthma, shortness of breath)

Eyes
redness

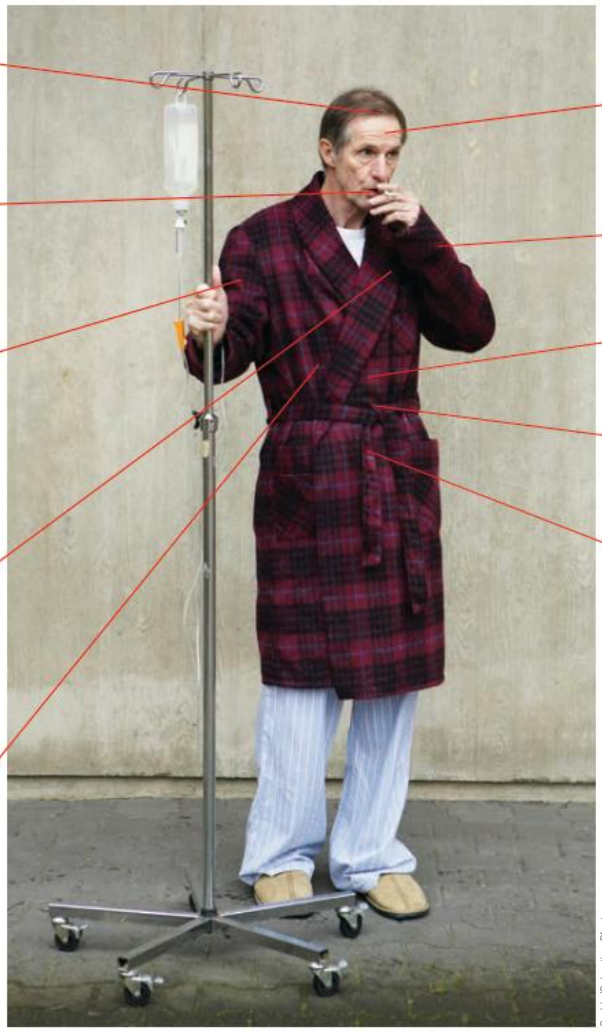
Heart
increased heart rate
increased blood pressure

Hands
stained fingers

Clothes
smoky smell

ISBN 9780170376181

Long-term effects of smoking



Corbis/Sebastian Pluetze

DAMAGING EFFECTS OF SMOKING ON THE BODY

Use this online activity to see the damaging effects of smoking on your body. Go to the Quitline website (http://ffl78vic.nelsonnet.com.au). Click on 'Why Quit' and 'Damaging your body'. Select a body part to see the damage caused by smoking.

Tobacco and the law

WORKBOOK>>
Worksheet 1.11

Although tobacco is a legal drug, it is against the law for tobacco products to be sold to people under the age of 18. It is also illegal for those under the age of 18 to purchase cigarettes.

It is becoming increasingly difficult to smoke in public areas such as shopping centres, bars and restaurants, and within the workplace. It is also against the law to smoke in a car carrying a person under 18 years of age.

Smoking is now prohibited by almost all airlines around the world. People caught smoking may face a hefty fine or jail term.

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QUIT NOW

Quit Now is an Australian Government program created to help Australians stop smoking. It is part of the National Tobacco Campaign, one of several health-related campaigns run by the Australian Government. The aim of this campaign is to reduce the numbers of adults who smoke on a daily basis from the current 15.9 per cent to 10 per cent or less by 2018. Go to the Quit Now website (http://ffl78vic.nelsonnet.com.au).

WORKBOOK>>
Worksheet 1.12
Worksheet 1.13

Using the information on the website, answer the following questions:

1. What is the aim of the National Tobacco Campaign?
2. What was the aim of the 4000 Chemicals Campaign in 2010?
3. What is the aim of the National Tobacco Campaign – Break the Chain?
4. The National Tobacco Campaign – More Targeted Approach focuses on targeting smokers from which groups in society?
5. What is the current rate of pregnant women who smoke in Australia? This number rises for those women living in which particular areas?
6. What advertising strategies are being used to target women who smoke during their pregnancy?

WRITE A TV COMMERCIAL

Examine a 'script' of one of the anti-smoking television commercials found on the Quit Now website (http://ffl78vic.nelsonnet.com.au). Using a script format, write a television commercial that presents the anti-smoking message to teenagers.

Caffeine

Drug classification: stimulant

Caffeine is a naturally occurring compound found in the leaves, seeds and fruits of a variety of plants, including cocoa, coffee beans and tea leaves. Drinking caffeine triggers the release of adrenaline, a hormone that acts on the central nervous system by speeding up messages that are sent to and from the brain to the rest of the body. In small amounts, caffeine can make you feel alert, more focused and able to think and react faster. However, larger amounts of caffeine may lead to heightened irritability, anxiety and difficulty sleeping.

Caffeine has been around for thousands of years. Even though the coffee 'tree' originated from Ethiopia,

CAFFEINE IN AUSTRALIA

According to the results of the 2007 Australian National Children's Nutrition and Physical Activity Survey, the estimated daily intake of caffeine for children aged 9 to 13 years is 19.2 mg. That is the equivalent to one cup of brewed coffee.

Daily recommendations

It is recommended that children and teenagers should not consume more than 2.5 mg caffeine per kilogram of body weight per day. For a teenager weighing 50 kilograms, that means no more than 125 mg of caffeine a day.

Energy drinks

Australians spend more than $500 million a year on energy drinks. Energy drinks can contain as much as 200 mg of caffeine per can.

1,3,7-TRIMETHYLXANTHINE

The chemical name for caffeine is 1,3,7-trimethylxanthine. This chemical is also used as a pesticide to kill frogs, but is best known as the world's most popular drug.

ISBN 9780170376181

TRADITIONAL ETHIOPIAN STORY

One day, a farmer moved his herd of goats to a new pasture and noticed that they were becoming restless and irritable. After watching his goats closely, the farmer noticed that they were grazing on small seeds. These seeds were later dried and called 'coffee beans'.

it was the Arabs who first cultivated the plant and used it as a drink. Although coffee was well established in the Islamic world in the 16th century, it was not until the 17th and 18th centuries that it became popular in European coffee shops. Today, 120 000 tonnes of caffeine are produced globally every year and used in a variety of food and beverage products, including the following:

- coffee
- tea
- chocolate
- energy drinks
- energy bars
- over-the-counter medications (such as cough medicines)
- cola drinks
- chocolate milk.



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WORKBOOK>>
Worksheet 1.14

Energy drinks

What exactly are energy drinks? Are they soft drinks, sports drinks or potentially dangerous cocktails that can have life-threatening effects? Energy drinks are non-alcoholic carbonated drinks that contain substances known to boost energy levels, such as caffeine or guarana, a herbal source of caffeine. In Australia, the consumption of energy drinks is growing rapidly. Energy drinks should not be confused with sports drinks, which are designed to rehydrate and replace **electrolytes** lost during physical activity. Sports drinks provide carbohydrates that the body requires to create energy for muscular contraction, unlike energy drinks, which contain higher concentrations of caffeine, producing a sense of alertness and focus. Some energy drinks contain twice as much caffeine as many soft drinks.

electrolytes
Inorganic compounds used to create electrical energy for a variety of bodily functions. An example is salt.

What's in energy drinks?

- Caffeine: depending on the brand of energy drink, the amount of caffeine can vary from 30 to 200 mg per 250 mL can. The higher amount is well over your recommended daily intake of caffeine in one drink!
- Guarana: a herbal source of caffeine.
- Protein: taurine, an amino acid, is added to energy drinks.
- Sugar: typically around 13 teaspoons per can.
- Vitamin B.



iStockphoto/skodonnell

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The harmful effects of energy drinks

In 2012, Australians consumed approximately 225 million litres of energy drink. That's approximately 10 litres per person. Although the risks associated with the long-term use of energy drinks are not yet known, recent data collected by the Australian Poisons Centre highlights the most common side effects associated with the over-consumption of energy drinks

- palpitations/faster than normal heartbeat
- tremors
- agitation
- upset stomach
- chest pain
- dizziness
- tingling/numbing skin
- difficulty sleeping
- breathing problems
- headaches.

CASE STUDY Jamie's freestyle BMX competition

JAMIE had his sights set on an upcoming freestyle BMX competition. He was in his element when he rode, always aiming for a higher level of achievement and living his dream. When Jamie was on his bike, he was constantly redefining his personal performance boundary, setting his limits and pushing them further. The thrill of extreme competition only heightened his adrenaline rush.

The night before the competition, Jamie lay awake, thinking of his moves and couldn't wait to get on his beloved bike. On his way to the competition he felt a little tired and didn't hesitate to purchase a few cans of energy drink from his local store. Because he hadn't slept well, he wanted to ensure he performed at his best.

During the five hours of competition, Jamie consumed six cans of energy drink. He needed to be alert, focused and confident that he could pull off the stunts. Towards the end of the day, Jamie started to experience chest pain. He could feel his heart palpitating and he noticed he was sweating more than usual. The effects of the increased levels of caffeine consumption were starting to show. Unbeknown to him, he was dangerously close to suffering a heart attack.



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Energy drinks and alcohol consumption

WORKBOOK>>
Worksheet 1.15

Recent research suggests that the combination of alcohol with energy drinks could be more harmful than drinking alcohol alone. There has been an alarming increase in the number of people who are now choosing to drink energy drinks with 'shots' of alcohol. This polydrug use combines a depressant (alcohol) with a stimulant (caffeine-laden energy drink). Such a blend will allow the person to feel the effects of alcohol yet remain more alert and awake, while masking the tiredness and relaxed state associated with alcohol consumption.



Fairfax/Gret Totman

The combination of alcohol and energy drinks can have fatal consequences

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People who combine alcohol with energy drinks often falsely perceive themselves to be more confident and alert and subsequently take more risks, including driving while under the influence of alcohol. They may increase their chances of experiencing alcohol-related accidents.

TABLE 1.3 Caffeine content in food and drink

Drink/product	Amount	Caffeine content
Tea (medium strength)  Shutterstock.com/Nitr	250 mL	65–105 mg
Cocoa  Shutterstock.com/Elina Manninen	250 mL	30–60 mg
Coffee  Shutterstock.com/Elina Manninen		
• Instant	250 mL	80–120 mg
• Drip/percolated	250 mL	150–240 mg
• Espresso	250 mL	105–110 mg
• Decaffeinated	250 mL	2–6 mg
Cola soft drink  iStockphoto/gvictoria	375 mL	40–50 mg
Chocolate milk drink  iStockphoto/thotfack2	250 mL	2–7 mg
Energy drink  iStockphoto/rontek	250 mL	50–80 mg
Milk chocolate bar  Shutterstock.com/Andrjuss	55 g	3–20 mg
Dark chocolate bar  Shutterstock.com/Andrea1971	55 g	40–50 mg

Source: Australian Drug Foundation, www.druginfo.adf.org.au/drug-facts/caffeine

face 2 face

CALCULATING YOUR CAFFEINE INTAKE

It is recommended that children and teenagers consume no more than 2.5 mg of caffeine per kilogram of body weight per day. Using this recommendation, calculate how much caffeine you are allowed to consume on a daily basis. Now, using the information in Table 1.3, work out what products you can consume that will keep you within your recommended daily allowance. Discuss your findings with the rest of the class.

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Short-term effects of caffeine

The effects of caffeine can be felt in as little as five minutes after consumption and can last up to 12 hours. As with all drugs, the side effects can differ among individuals. Symptoms are more likely to increase if consumption increases.



WORKBOOK>>
Worksheet 1.16

Long-term effects of caffeine



Caffeine and the law

In Australia, it is legal to purchase and sell caffeinated products. They are considered socially acceptable.

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Cannabis

Drug classification: depressant (small doses); hallucinogen (larger doses)

Cannabis is an illegal drug made from the leaves and dried flowers of the *cannabis sativa* plant. The leaves of this plant have very distinctive characteristics, with between five and seven arrow-shaped leaflets attached to a centre point. The greyish-green dried plant matter can either be smoked or mixed with food and eaten.

The main active ingredient in cannabis is a chemical called delta-9-tetrahydrocannabinol, otherwise known as THC. The concentration of THC varies depending on the part of the plant that is being used and its growing conditions. This ingredient causes the 'high' associated with cannabis use, leaving the user with feelings of happiness and euphoria.

Cannabis has been around for thousands of years. It is the only plant in the world that is cultivated for its fibre, used in the manufacture of cloth and also used for its psychoactive properties. Early Chinese records, dated to 2737 BCE, refer to cannabis being used as a medicine to treat conditions such as rheumatism and malaria. Originally, there was mention of the intoxicating properties of cannabis, but the medicinal properties were considered more important. Recreationally, the drug was used in India and by Muslims in place of alcohol, which was forbidden by the Qur'an.

CANNABIS IN AUSTRALIA

Cannabis is the most common illegal drug in Australia.

OTHER NAMES FOR CANNABIS

Cannabis is known by a variety of names, including marijuana, grass, pot, dope, mull, yandi, hash, weed, hemp, ganja.



iStockphoto/sumogratka

The dried leaves and flowers of the cannabis plant are known as marijuana

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Short-term effects of cannabis

The effects of cannabis usually occur within the first few minutes when the drug is smoked, and may last for up to two or three hours, depending on the concentration of THC. If cannabis is eaten, the effects are slower to occur and may last longer than when smoked.



Brain
feeling of elation and wellbeing
giggling and talking more than usual
slower reaction times
difficulty concentrating
short-term memory loss
bloodshot eyes
distorted perceptions (time, senses)

Heart
elevated heart rate

Stomach
increased appetite

WORKBOOK>>
Worksheet 1.17
Worksheet 1.18

Long-term effects of cannabis

Over time, the regular use of cannabis may cause a number of health-related problems.



Brain
dependence
learning difficulties
poor memory retention
poor concentration
depression
psychosis
decreased motivation

Mouth
cancers of the mouth, throat and tongue

Lung
lung cancer

Reproductive system
decreased sex drive
infertility

Cannabis and the law

It is illegal to use, sell or give cannabis to someone else in Australia. Serious penalties such as substantial fines or prison terms apply to those convicted of supplying cannabis or being in possession of items used to smoke cannabis, such as pipes and bongs.

WORKBOOK>>
Worksheet 1.19

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Ecstasy

Drug classification: stimulant, hallucinogen (rare)

synthetic
a manufactured substance, not natural

Ecstasy is the common name for the **synthetic** drug MDMA (methylenedioxymethamphetamine). It is an illegal drug. Primarily a stimulant, ecstasy is a psychoactive drug with hallucinogenic properties. People taking ecstasy may feel physically energised and emotionally relaxed. Depending on the contents of the drug, there may also be some hallucinogenic effects, including distortions in reality.

MDMA was originally manufactured in Germany in the early 1900s. In the 1970s and early 1980s, MDMA was used experimentally by psychotherapists during counselling sessions to help people understand their feelings by promoting deep inner thinking and enhancing communication. MDMA has been used in nightclubs and on the 'party' scene since the 1980s.



Alamy/David Hoffman Photo Library

Ecstasy tablets are sold in a variety of forms, usually with a distinctive design.

Forms of ecstasy

Ecstasy can be supplied as a tablet, capsule or a powder. Tablets (or pills) are the most common forms of MDMA and they come in a variety of colours, shapes and sizes and usually display popular imprinted commercial logos or graphic designs. Ecstasy is primarily swallowed, but can also be injected or snorted.

It is important to note that not all ecstasy tablets contain MDMA. Although MDMA is usually the main ingredient in ecstasy, availability is becoming more difficult and alternative ingredients are being used to mimic the effects of MDMA. Such alternative ingredients may include caffeine, amphetamine, ephedrine, methamphetamine and talcum powder. Some ecstasy tablets may contain no MDMA at all because the demand for the drug is greater than the supply of MDMA. The majority of the ecstasy sold in Australia is amphetamine-based.

ECSTASY IN AUSTRALIA

Around 10 per cent of Australians aged over 14 years have used ecstasy at some stage in their life.

OTHER NAMES FOR ECSTASY

E, pingers, the love drug, pills, eccy

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Short-term effects of ecstasy

Brain (psychological effects)
increased self-confidence
increased feelings of happiness
empathy
anxiety
depression
hallucinations
paranoia
panic attacks

Brain (physical effects)
energised
alert
increased body temperature
sweating
dehydration
seizures



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Mouth
jaw clenching
teeth grinding

Heart
increased heart rate
increased blood pressure

Muscles
aching muscles

Stomach
stomach pains
loss of appetite
nausea

WORKBOOK>>
Worksheet 1.20

Long-term effects of ecstasy

Unfortunately, not much is known about the long-term effects of ecstasy use. Some evidence suggests that long-term use can cause damage to the body's organs such as the liver, heart and brain, and may also lead to depression.

Ecstasy and the law

It is illegal to use, sell or give ecstasy to someone else in Australia. Serious penalties such as substantial fines or prison terms apply to those convicted of supplying ecstasy.

TRIVIA GAME

Do you think you know all there is to know about drugs and alcohol? Try 'The Spinner – Drug & Alcohol Trivia Game', on the 'Your room' website (http://ffl78vic.nelsonnet.com.au).

DRUG AWARENESS DEBATE

In groups of four, formulate an argument on a drug-related topic to debate against another team of four. You will be asked to debate your argument either for or against the motion selected.

Examples of 'motions':
- cannabis is an evil weed leading to harder drugs
- alcohol is the most damaging drug in society
- should smoking be banned on public beaches?
- should energy drinks be banned?

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FACTORS THAT INFLUENCE THE USE OF DIFFERENT TYPES OF DRUGS

Young people choose to take drugs for a variety of reasons. They are influenced by personal, environmental and social factors. But the decisions adolescents make can adversely affect the rest of their lives.



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Influences on decision making

There are three main factors that influence decisions about taking drugs: personal factors, social factors and environmental factors.

Personal factors: do you have a friend like Ben?

Ben had been going out with Charlotte for nearly three years. Charlotte ended the relationship by text message, saying that she didn't want to go out with Ben any more. She gave no reason. Ben pretended that the break up did not bother him, but deep inside he was struggling to come to terms with not being around Charlotte.

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After a while, Ben began to feel depressed and wanted to find a way to deal with his emotions. He started drinking caffeine-laden energy drinks to pick him up. Ben soon became dependent and was drinking up to four energy drinks a day.

There are a number of personal factors that may influence teenagers to use drugs. These may include stress and self-esteem.

Stress

From time to time, all teenagers experience stress. Stress is handled by people in many different ways. In Ben's case, he was unable to deal with his break up with Charlotte and needed to find a way to help ease the emotions he was feeling. Unfortunately, abusing a substance does not address the underlying factors that may have caused the stress. Ben's addiction to the buzz of energy drinks has in fact made the situation worse.

Self-esteem

If teenagers experience low self-esteem, the likelihood of drug abuse can increase significantly, with little thought of the consequences associated with their actions.

Social factors: do you have a friend like Kaitlin?

Kaitlin is 16 years old and has smoked four cigarettes a day since she was 12. She first started smoking when she was offered a cigarette by one of her older brother's friends, who regularly visited the house. Whenever Kaitlin hangs out with her friends, they smoke. She has also tried marijuana for a laugh and because it made her feel part of the in crowd. Kaitlin says that she can stop smoking at any time, but this has yet to happen.

There are a number of social factors that may influence your friends to use drugs. These may include peer pressure, role models and socioeconomic background.

Peer pressure

In Kaitlin's case, she first smoked a cigarette because she wanted to 'fit in' and be accepted. She may have wanted to try smoking out of curiosity and may have felt pressure from her peers.

Role models

Some teenagers may have seen their role model on television or in movies smoking, not considering the consequences of their actions. Such 'glamourisation' of drug use may influence teenagers' decisions to use drugs.

Socioeconomic background

Poverty, family financial stress and mental and physical abuse may prompt teenagers to use drugs as a way of coping with certain situations. Often, drug accessibility is more prevalent in impoverished areas, as some people may find selling drugs to be a means of overcoming poverty.

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Environmental factors: do you have a friend like Patrick?

Every night, Patrick's father would come home from work and head straight for the fridge. He would drink on average six bottles of beer a night, often asking Patrick to get another one for the 'old man'. After a couple of beers, Patrick found his father grew funnier and he loved listening to the stories he told around the dinner table. One day, when Patrick was 16, he asked his father if he could have a beer from the fridge. His father gave him a pat on his back and said, 'Go for it, son!'.

There are a number of environmental factors that may influence teenagers to use drugs, including the influence of family members, family conflict and education.

Influence of family members

Family members who smoke or drink alcohol are more likely to influence young people living in the same household to either drink or smoke. Young people see the drug as a normal part of everyday life.

Family conflict and home-management issues

Family conflict, lack of support and direction, divorce or separation may be factors that contribute to the increased risk of drug taking. Family transition and mobility may also add stress to young people.

Education

A student's performance and participation at school can be a major risk factor associated with drug use. Expulsion, truancy, boredom and poor academic achievement, coupled with a lack of motivation and commitment, can also increase the risk of drug use.

WORKBOOK>>
Worksheet 1.21
Worksheet 1.22

Risk factors associated with drug use

Anyone can become dependent on drugs. It can happen to people of any age, economic status or gender. There are, however, certain risk factors that can increase the likelihood of becoming dependent on drugs. These include the following:

- poor academic achievement
- expulsion from school
- truancy
- boredom
- living in local children homes, poor housing or homelessness
- abusive relationships
- low self-esteem
- pressure from peers

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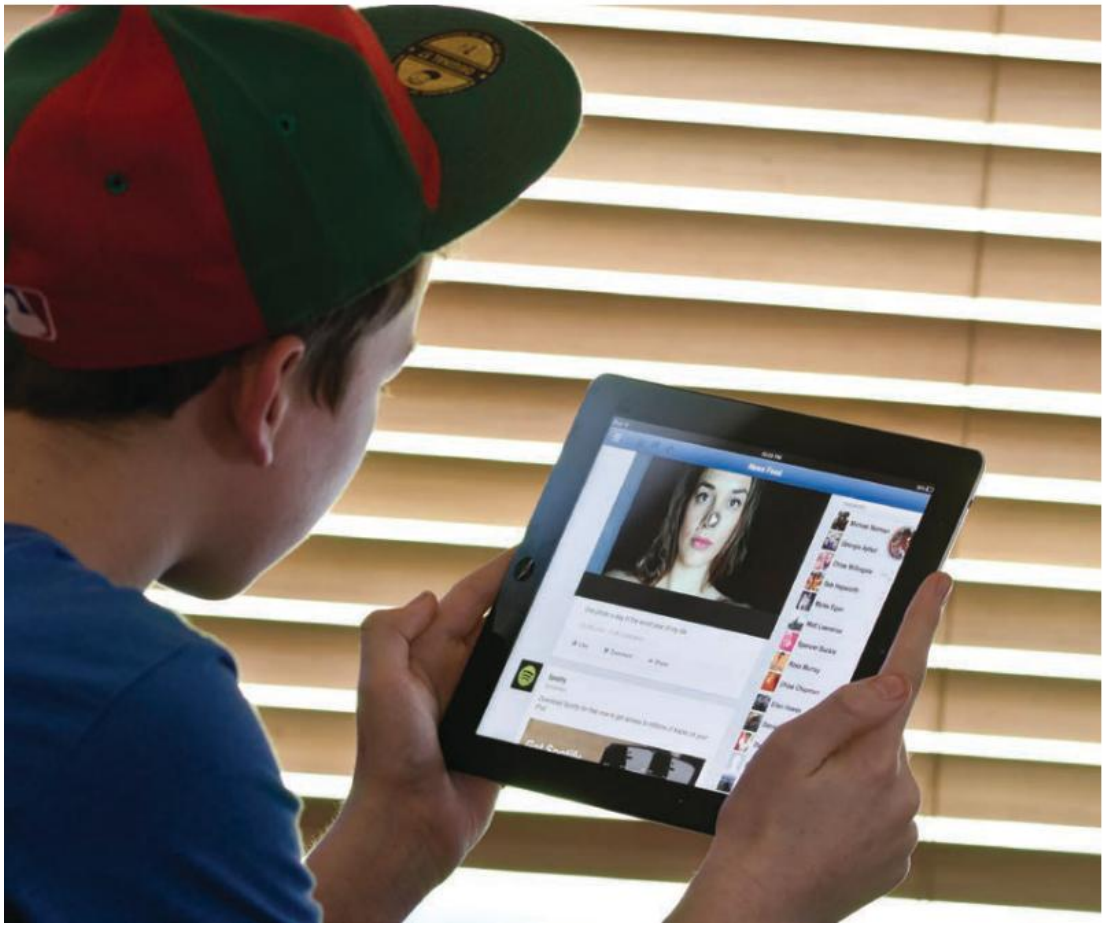
- peer pressure from social media
- acceptance of drug use within family setting
- drug use is considered normal behaviour
- experimentation
- poor socioeconomic background
- family conflict and home-management issues
- drug accessibility
- mental health issues.

WORKBOOK>>
Worksheet 1.23

Social media influences on drug use

Do you like to surf the web and chat to friends online? Did you know that many young Australians are addicted to social media websites like Facebook and Instagram?

Interestingly, these young Australians are three times more likely to abuse alcohol and twice as likely to abuse drugs and it's very easy to see why. When friends post photos of themselves drinking and partying on sites like Facebook, others could be misled into believing that this behaviour is socially acceptable, even though it's not. The need to 'fit in' can lead to experimentation, which ultimately can lead to dependence.



Alamy/Lenscap

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IMPACT OF DRUG USE ON INDIVIDUALS, FAMILIES AND THE COMMUNITY


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Around 17 million Australians over the age of 14 years have never used any form of iillegal drug. Unfortunately, approximately 2.3 million Australians 14 and over use at least one illegal street drug each year with cannabis being the most commonly used drug. Another 1.5 million Australians use cannabis, 600000 use ecstasy and 300000 use methamphetamine every year.

Taking any form of drug may have numerous consequences, not only for the person involved but for their families, communities and the Australian economy. In Australia, the harms caused by drug use can cost Australian taxpayers billions of dollars every year. Drug abuse contributes to thousands of deaths, illness and disease, accidents and injuries, social and family disorders, problems within the workplace, violence, crime, and diminishes community safety.

Patterns of drug use

The National Drug Strategy Household Survey conducted in 2010 invited a sample of the Australian population to answer questions about their knowledge and attitudes towards drugs, their drug consumption history and related behaviours.

Findings – the bad news

- Illicit drug use has increased, mainly because of an increase in the proportion of people who had used cannabis (from 9.1 per cent in 2007 to 10.3 per cent in 2010).
- There has also been an increase in the use of prescription drugs for non-medical purposes (3.7 to 4.2 per cent), cocaine (1.6 to 2.1 per cent) and hallucinogens (0.6 to 1.4 per cent).

Findings – the good news

Encouragingly, findings from the 2010 National Drug Strategy Household Survey indicate that attitudes towards drug use are changing, for the better:

- Tobacco use has declined. The number of people aged 14 years or older who smoke on a daily basis has declined, continuing a downward trend that began

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in 1995. However, there are still approximately 3.3 million people who smoke on a daily basis in Australia.

- Alcohol use has declined, but there has been a noticeable increase in 'binge drinking'. The number of people aged 14 years or older who consume alcohol on a daily basis declined between 2007 and 2010. Unfortunately, as the Australian population has increased, so too has binge drinking where dangerous levels of alcohol are being consumed at one given time.
- Ecstasy use has declined.

MAKING INFORMED DECISIONS ABOUT DRUGS

'Every now and then, somewhere, some place, sometime, you are going to have to plant your feet, stand firm, and make a point about who you are and what you believe in'.

Pat Riley, former NBA basketball player and coach

Making and implementing healthy and safe choices

Everyone reacts differently to drug use. Being drug dependent means that you need drugs to make you feel normal. There is a fine line between recreational drug use and drug dependency, and it can be difficult to know whether or not that line has been crossed. If drug use is starting to cause problems in someone's life, such as arguing more with their parents, distancing themselves from friends and family or neglecting their schoolwork, then more than likely, the situation is becoming problematic. Drug dependency reduces the level of control over drug use. Prolonged use of drugs can alter the way the brain functions, resulting in constant cravings that can only be suppressed by ongoing drug use.

Because drugs can impair the user's ability to take control of a situation, it is not difficult to cross the line between recreational use and dependency without even noticing.

The compulsive need to take drugs can be reversed. Taking control again may be difficult but it is possible. Therapy, medication and support from friends, family and support groups can help to break the habit and regain control.

Learning how to say 'no' can be hard, but one simple two-letter word may mean the difference between leading a healthy and active lifestyle or living a lifestyle that could spiral out of control.

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Assertive behaviours

Being assertive means being able to communicate thoughts and feelings freely and confidently while also taking into consideration the feelings and thoughts of the person being addressed.

As an individual you have many rights:



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- make your own decisions
- express your own thoughts and feelings
- ask for what you want
- say 'no' without feeling guilty
- be treated with respect
- maintain self-control
- listen to the views of others (whether you agree or disagree)
- change your mind
- accept responsibilities
- take reasonable risks
- make mistakes as well as apologise
- choose not to be assertive
- identify your needs
- take time to stop and think.

critical + creative thinking

YOUR RIGHTS

1. How many of the above rights do you have?
2. Identify which rights are more difficult to carry out.

Being assertive does not necessarily mean winning an argument. It does, however, mean you have the responsibility to express your thoughts and feelings in an appropriate manner.

Steps to being assertive:

1. Keep what you want to say to the point. Avoid lengthy explanations.
2. Maintain eye contact with the person you are talking to.
3. Remain calm and avoid anger.
4. Be polite, yet firm.

review & reflect

ASSERTIVENESS

1. Make a list of situations in which you would like to be more assertive.
2. Write a statement that you would use when in a situation where you would have liked to have been more assertive.

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Harm minimisation

Harm minimisation focuses on ways in which the harmful effects of alcohol and other drugs on individuals, families and communities can be reduced.

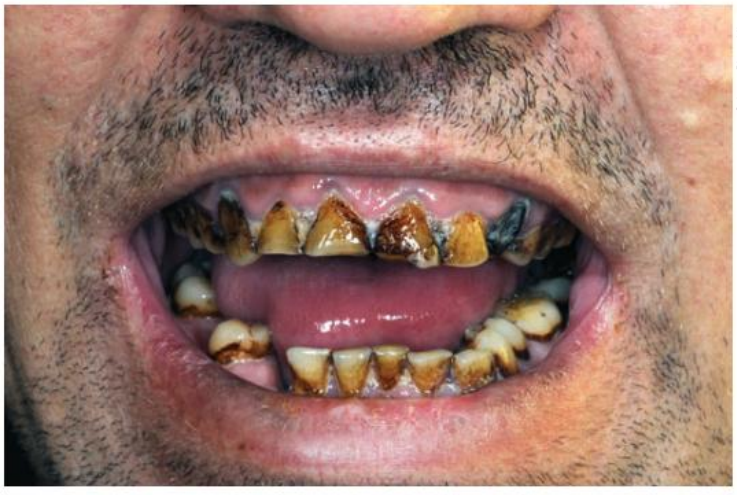
In order to minimise the harmful effects of alcohol and other drugs, it is important to understand these facts:

- alcohol and drugs are prevalent in society
- it is impossible to permanently remove drugs from society
- the removal of drugs may increase the risk of harm to society.

There are many strategies that are used to inform people about the risks associated with alcohol and other drug use. Can you think of any strategies that are used to raise people's awareness on these issues and the harm that drug abuse can cause? In Australia, the federal and state governments have adopted a number of strategies aimed at preventing alcohol and drug-related issues. Harm minimisation aims to improve the health, social and economic situations for individuals and the communities in which they live.

Shock tactics

The Australian Government has released many confronting campaigns designed to shock people into breaking habits that may have a deadly effect on their health. These advertisements have included the effects of smoking, drink- or drug-driving and even binge drinking on individuals, families and their communities.



Science Photo Library

Graphic photos are used in the campaign to stop people smoking

SHOCK TACTICS

face 2 face

Do a web search for '7 News Shock tactics for anti-smoking message'. Watch the video clip of the 7 News item.

Many people say that shock tactics don't work. In pairs, discuss the following questions:

1. Do you think shock tactics work?
2. Are shock tactics a good way to inform young people about the dangers of drug use?

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Peer influence

Deciding whether to take drugs is an individual choice. Dealing with life's pressures can be difficult at times so seeking help and advice from friends and family will help you make the right decision so that you feel in control of what you say and do. While friends can have a positive influence, some friends may influence others to do something that they wouldn't normally do. This is 'peer influence' or 'peer pressure'. Don't be afraid to say 'no'. True friends will respect the decisions that others make, even if they are not the same.

WORKBOOK>>
Worksheet 1.24



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Making informed decisions is very important in minimising harm and reducing the associated risks. Before you make a decision, consider the consequences. It's not all about you. Consider the impact of your decision on your friends and your family as well. Any young person can reduce risky behaviour by adopting a safe attitude. A safe attitude can help you to focus on your own safety and the health and wellbeing of others around you. Never adopt the attitude 'it won't happen to me'; and accept responsibility for your own health and safety.

How can you help a friend in need?

Helping a friend in need is easier than you think. When you're a teenager, it may seem that the only person who can really understand you is another teenager. Talking to a friend may be easier than talking to an adult. However, it is important

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to speak to someone you can trust. It might be your favourite teacher, a close friend or a member of your family. There are many places where you can go to get help. Medical professionals and school counsellors can offer advice and can even refer you to a community drug program appropriate for your needs. However, if you do not want to talk to anyone at school, don't be afraid to pick up the phone and call any of the helplines provided for a chat. You can also check them out on the internet.

EXTRA ACTIVITY>>
Tom's story
Being a supportive friend

Lifeline Saving Lives
Crisis Support. Suicide Prevention.

beyondblue
Depression. Anxiety.

Kids Helpline
1800 55 1800

There are a number of alcohol and other drug information services across Australia. The Australian Drug Foundation is committed to minimising drug- and alcohol-related problems in communities across Australia. Its website also provides an in-depth list of support services for those with drug-related problems.

DRUG AND ALCOHOL SUPPORT

Using the internet, identify the drug and alcohol support services that are available in your local community.



Basic first aid

Would you be able to assist a friend if they needed help? Would you like someone to help you if you needed help? If you think your friend has taken something they shouldn't have and is having a bad reaction, the following tips may help.

- If you are not sure how serious the problem is, **always call 000**. It is better to get immediate medical assistance than delay. Never avoid calling for an ambulance because you don't want to get the police involved or you don't want to get in trouble. It's not about you; it's about your friend. Any delay could result in severe consequences for your friend. Monitor your friend carefully before help arrives.

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- If your friend is unconscious but breathing, place them on their side, in the recovery position, making sure that their head is tilted back so they can breathe and avoid choking on their own vomit.
- If your friend has stopped breathing, start CPR (cardiopulmonary resuscitation). Don't panic! If you call 000, the operator will talk you through this process while the ambulance is on its way. You could save your friend's life.

WORKBOOK>>
Worksheet 1.25

PERFORMANCE-ENHANCING DRUGS

More than 6 billion people around the world play sport regularly. For many people, sport is played to stay healthy, to socialise and relax, as well as to have fun. For others, sport is a business and athletes will risk anything in order to win. **Ergogenic aids** are substances that are used to improve performance and can include both legal and illegal **performance-enhancing** substances. As methods used to test for illegal performance-enhancing drugs have improved over the years and with the increased threat of detection and a lifetime ban from the sport, athletes and coaches are turning their attention to legal alternatives used to improve both performance and recovery times.

ergogenic aids
any substance or factor that may improve sporting performance

performance-enhancing drugs
substances taken by athletes to improve sporting performance

Why do athletes take legal or illegal substances to help them perform at their peak? There are many reasons why athletes strive to be the best. Many elite athletes put themselves under enormous pressure to be the best, with most expecting to make a lot of money if they are successful. Apart from wanting to achieve personal goals, the overwhelming desire for fame and fortune is all that it takes for some to make the wrong decision. Because many athletes' careers are relatively short and they need to reach their peak performance quickly, some may seek alternative aids to help them to succeed.

There are a number of reasons why athletes choose to use ergogenic aids. One such reason is peer pressure and the pressure from other athletes to excel. Athletes use performance-enhancing substances for many reasons:

- improve performance and 'win'
- control appetite and lose weight
- manage an injury
- improve physical appearance
- improve recovery rate
- build confidence
- enhance self-esteem.

DRUG USE IN SPORT

If one athlete on an Olympic team is found guilty of using performance-enhancing drugs, the entire team may be disqualified and forced to return any medals that they may have won.

Source: http://sportsanddrugs.procon.org/view.resource.php?resourceID=002049

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CASE STUDY Ben Johnson

AT the 1988 Seoul Olympics, Ben Johnson ran the 100-metre race in 9.79 seconds, becoming the fastest man in the world. Only a few days later, he was stripped of his gold medal and new world record after testing positive for a banned steroid called stanozolol. The governing body of track and field athletics, the International Association of Athletics Federations (IAAF), banned Johnson for two years and he was sent back to Canada in disgrace. In 1993, after competing in a 50-metre race, Johnson was again found guilty of doping. Testing showed that he had excessive levels of testosterone in his system. This time, he received a lifetime ban from the IAAF. Johnson went from being a world-class, well-respected world-record-breaking athlete to a disgraced ex-champion.

Questions

1. Do you think doping is more common in power events such as sprinting?
2. Investigate the drugs stanozolol and testosterone. Discuss the advantages and disadvantages of taking each drug.
3. Do you think it would be worse to 'drop out' before a major competition without any explanation or to be caught using drugs?
4. What do you think is the most appropriate punishment for someone who is caught using illegal drugs to enhance their performance?
5. If your sports idol was caught doping, how would you feel?



AlamyLeo Mason sports photos

Ben Johnson in action at Seoul

Legal performance-enhancing drugs in sport

There are many different ways in which athletes can legally enhance their performance. Some legal substances and practices:

- bicarbonate of soda
- sports drinks
- caffeine
- creatine supplements
- sports gels
- carbohydrate loading.

WORKBOOK>>
Worksheet 1.26



Dlibrary

Some of the supplements readily available to athletes to enhance sporting performance

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It is not necessary to 'cheat' to enhance sporting performance. Many of these legal performance-enhancing products are found on supermarket shelves. However, each legal ergogenic aid has its own advantages and disadvantages, as seen in Table 1.4.

TABLE 1.4 Advantages and disadvantages of legal ergogenic aids

Drug	Advantages	Disadvantages	Sports most associated with its use
Sodium bicarbonate	Creates a buffer against the build-up of lactate in the muscle, delaying muscle fatigue	Vomiting Stomach problems Diarrhoea	Sprint cycling Rowing
Sports drinks (e.g. Powerade/Gatorade)	Rehydration Immediate source of energy	No known problems associated with the consumption of sports drinks	All sporting activities
Caffeine (coffee/energy drinks)	Increases alertness, reaction times and arousal levels	Increased urine production Irritability Lack of sleep	Tennis Volleyball
Creatine supplements	Increased training volume and decreased recovery time	Stomach problems Muscle cramping Increased water retention	Sprinters Javelin/shot put
Sports gels	Concentrated form of carbohydrates for energy production Easy to carry	Stomach problems Psychological dependency	Endurance athletes
Carbohydrate loading (e.g. pasta/rice)	Diet of starchy foods designed to increase carbohydrate reserves in muscles	Increases water absorption, leading to weight gain	Endurance athletes





ERGOGENIC AIDS

Ergogenic aids used to enhance performance can be mechanical (practical); pharmacological (drugs); nutritional (diet) and psychological. Go to http://ffl78vic.nelsonnet.com.au and choose three ergogenic aids under each title (mechanical; pharmacological; nutritional and psychological). For each aid, outline one advantage and one disadvantage. You may need to do some extra research.

How does the media influence drug use?

Have you ever tried to model yourself on your favourite sportsperson? The media plays an important role in creating what is considered to be the 'desirable' **body image** for a man or woman. Television, the internet, magazines, movies and newspapers are all influential in creating perceptions of the 'ideal' man or woman. Many famous athletes have used their bodies to advertise well-known products. Can you think of any athletes and the products that they advertise?

body image
the way a person feels about their own body

ISBN 9780170376181



AAP Images/AFP/Daniel Garcia

Sportspeople, such as Olympic beach volleyballers Becchara Palmer and Louise Bawden, are regarded by many as role models and idols

Unfortunately, many people resort to exercise and dieting in order to transform themselves into what they perceive to be the ideal athletic man or woman. Eating disorders are very common among female athletes, especially those in competitive sports. Some sports such as gymnastics, trampoline, beach volleyball and diving require perfect body presentation. Unfortunately, some female athletes resort to taking appetite suppressants to keep their weight under control.

THE DANGERS OF APPETITE SUPPRESSANTS

- Increased risk of heart attack or stroke. Diet pills are stimulants, known to increase the risk of heart-related problems or blood clotting.
- Dependency. Diet pills often contain a cocktail of highly addictive drugs, including amphetamines, anti-anxiety drugs and anti-depressants.
- Multiple side effects include constipation, headaches, stomach upsets, mood swings.
- Misleading claims. All too often, claims that diet pills promote weight loss are misleading. Many diet pills contain a combination of caffeine, a stimulant, and a diuretic, which promotes fluid loss. You may seem slimmer on the scales, but it is only water loss, not fat loss.

Appetite suppressants

Appetite suppressants (or diet pills), are readily available in Australia from a doctor or pharmacy. These drugs, as their name suggests, are used to reduce feelings of hunger, but their dangers far outweigh the benefits of any potential weight loss.

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Healthy performance-enhancing strategies

Here are a few tips to help you improve your performance and give you that 'winning edge' without using performance-enhancing supplements.

- Eat a nutritious, balanced diet, including carbohydrates, protein, fruit and vegetables.
- Include protein for recovery. Protein is needed for growth and muscle repair. Sources of protein include fish, red meat, chicken and beans.
- Include aerobic exercise, such as running, walking, swimming or any active sport as part of your fitness routine.
- Avoid power lifting. Lifting weights at a young age can cause problems in your development. Wait until you are at least 16 years of age before commencing a weight-training program.
- Avoid overtraining: exercising too much can cause injury.

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face 2 face

HOW TO IMPROVE YOUR FRIEND'S SPORTING PERFORMANCE

Imagine you have a friend who is playing in a major sporting tournament this weekend. Your friend is keen to get advice on ergogenic aids and supplements that may improve their performance. What advice would you give your friend and why?

ISBN 9780170376181

CHAPTER REVIEW

WORKBOOK>>
Worksheet 1.27
Worksheet 1.28
Worksheet 1.29
Worksheet 1.30

1 What is the meaning of the term 'drug abuse'?
2 What is the difference between over-the-counter drugs and prescription medication?
3 Why is it dangerous to take a prescription drug for any reason other than its intended purpose?
4 What is meant by the term 'bush medicine'?
5 Explain the three main classifications of drugs.
6 Name three short-term and three long-term effects of alcohol on the body.
7 How many grams of alcohol are there in a standard drink and why is it important that you are aware of the alcoholic content of a standard drink?
8 Why is tobacco considered to be so harmful to your health?
9 Name three short-term and three long-term effects of smoking on the body.
10 Alcohol is considered to be the most harmful legal drug available. Explain five reasons why this is the case.
11 Energy drinks can be potentially dangerous when consumed in large quantities. Identify the main drug found in these drinks and list five common side effects of the over-consumption of energy drinks.
12 Discuss the dangers of ecstasy use.
13 Explain the social factors that could influence a person's decision to use drugs.
14 In Australia, the harm caused by drug use in communities can be very costly. In what ways does drug use affect Australian communities?
15 Discuss the meaning of being assertive. Do you think someone who lacks confidence or is shy can still be assertive? Explain your answer.
16 The Australian Government has released many confronting campaigns that are designed to 'shock' people into breaking a habit that may have a deadly effect on their health. Identify one such campaign and explain how it aims to raise awareness among the Australian population.
17 You find your friend on the floor, unconscious but breathing. What would you do?
18 There are a number of proven methods of enhancing sporting performance without resorting to banned substances. Discuss the various legal aids that are available to enhance performance.

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EAT WELL, LIVE WELL



ISBN 9780170376181



In this chapter **you will learn about the importance of good nutrition at all stages of your life.**

By the end of this chapter, you should be able to:

- ➜ understand energy and nutrition requirements for healthy living and performance
- ➜ identify and manage factors that influence eating habits
- ➜ make informed decisions about eating
- ➜ analyse eating habits and propose strategies for improvement
- ➜ understand the trends and consequences of eating habits in Australia and the cultural and contextual factors that shape these trends

Food groups and recommendations for healthy eating	**50**
Understanding nutritional requirements and dietary needs	**59**
A healthy, balanced diet	**72**
Personal, social, economic and cultural influences	**76**
Food labelling and packaging	**80**
Food advertising	**83**
Sustainable food choices	**86**

dLibrary

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FOOD GROUPS AND RECOMMENDATIONS FOR HEALTHY EATING

diet
the usual food and drink consumed by a person. Not to be confused with 'dieting', which is the practice of eating food according to a regulated or restricted system to cause a change in body weight.

When considering **diet**, nutrition, food choices and eating habits, it is important to find the most appropriate and relevant information, from the most trusted sources available. This isn't always easy, as increasingly, 'advice' about diet comes from many different sources, and not all of these sources have your health interests at heart.

WORKBOOK>>
Worksheet 2.1



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How to stay informed about your eating decisions

How do you find information you can trust? You can usually rely on well-researched, credible information from government or educational organisations such as the Department of Health and Ageing or the National Health and Medical Research Council (NHMRC). Organisations such as these are the leading experts in health research, promotion and standards, and perhaps most importantly, aren't trying to make profits by selling food or drinks.

Fortunately, there is a lot of clear and easy to understand dietary and nutritional information, advice and support available to the Australian community. That information is the focus of this chapter.

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NUTRITION

face 2 face

1 What does 'nutrition' mean to you? Provide a definition based on your own understanding.
2 Share your definition with your classmates. You may notice some similarities and differences between definitions. Write down two differences that you noticed between your definition of nutrition and your classmates' definitions.
3 How do people develop different ideas about what nutrition means? What influences people to have these different ideas?
4 Compare your definition of nutrition to the dictionary definition (you may need your teacher to help with this, or perhaps search online). How close was your definition of nutrition to the one in the dictionary?

WORKBOOK>>
Worksheet 2.2

Nutrition is the process of obtaining the food necessary for health and growth. There are two documents that should be used by all Australians to guide daily food and drink choices: the Australian Guide to Healthy Eating and the Australian Dietary Guidelines. There are five guidelines in the Australian Dietary Guidelines, but this chapter will focus only on the first three. The fourth and fifth guidelines refer to breastfeeding infants and the preparation and storage of food.

The Australian Guide to Healthy Eating

You may have seen diagrams or models that provide guidance on how much you should eat from each of the food groups. The Australian Guide to Healthy Eating separates food into five main groups:

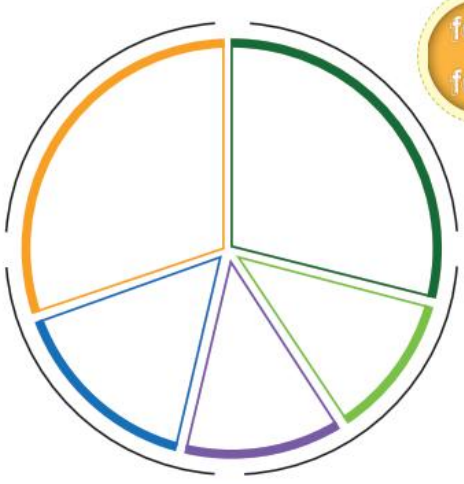
- grain foods
- vegetable and **legumes**/beans
- milk, yoghurt and cheese
- fruit
- meat, fish, eggs and nuts.

legume
seed or pod that is eaten in either green immature form (e.g. peas and beans) or the mature form as dried peas, beans, lentils and chickpeas

WHAT DO YOU ALREADY KNOW?

face 2 face

Before looking at the Australian Guide to Healthy Eating, what do you already know about food groups? Using the five groups listed, try to match them to the five segments in this diagram. You can do this in your workbook or online. Note how the segments differ in size. This is used to represent how much of each food group should be eaten. The larger segments represent the food groups you should eat more of. Decide which food groups you think are the most important part of a healthy diet, and assign them to the largest segments. Once you have matched all five, check with a classmate and compare similarities and differences.



SCAFFOLD>>
Australian Guide to Healthy Eating

ISBN 9780170376181

After completing the activity, look at the actual Australian Guide to Healthy Eating and see how close you came to matching the food groups to the correct segments. Correct your answers if you need to.



Australian Guide to Healthy Eating

ISBN 9780170376181

There are several other pieces of information included in the Australian Guide to Healthy Eating that should guide you in your daily food choices. You already know that the food groups in the larger segments, such as the vegetable and legumes or the grains food groups, should make up more of your daily food intake than the smaller food groups such as fruit, milk, yoghurt and cheese, and meat, fish, eggs and nuts. What else can you learn from the diagram?

- The examples of foods in each segment are healthy choices, e.g. lean meats, wholegrain breads, high-fibre cereals.
- There is a large variety of foods in each food group. Eating a wide range of vegetables provides a better balance of nutrients than eating the same few vegetables. This applies to other food groups such as meats, grains, fruit and dairy products.
- Plenty of water should be consumed.
- Oils are included, but should only be consumed in small amounts.
- **Discretionary foods**, which are those high in sugar and fat, and highly processed foods and drinks, should be consumed in small amounts, and only occasionally.

discretionary foods
foods and drinks that do not fit into the five food groups because they are not necessary for a healthy diet. These foods can be too high in saturated fat and/or added sugars, added salt or alcohol, low in fibre and contain too many kilojoules (energy). Many tend to have low levels of essential nutrients so are often referred to as 'energy-dense' but 'nutrient-poor' foods.

critical + creative thinking

HOT

YESTERDAY I ATE ...

How well do your daily eating choices match up with the Australian Guide to Healthy Eating? You can complete this activity in your workbook or online. Using the blank template, draw in all of the food and drinks you consumed yesterday. Make sure you list all ingredients in each meal. For example, if you had a chicken and salad sandwich for lunch, depending on the exact ingredients, you would need to illustrate chicken, margarine, bread and the various salad ingredients. Draw in the approximate amount of glasses of water (or other drinks consumed), as well as any discretionary foods. Once you have completed your diagram, answer the questions.

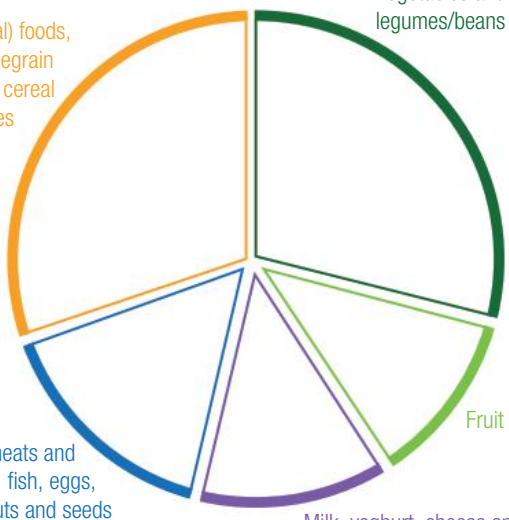
Questions

1 Do you have the right proportions of foods in each segment? You should have more drawings of foods you have eaten in the grains and vegetables segments than any of the others.



Vegetables and legumes/beans

Grain (cereal) foods, mostly wholegrain and/or high cereal fibre varieties



Fruit

Lean meats and poultry, fish, eggs, tofu, nuts and seeds and legumes/beans

Milk, yoghurt, cheese and/or alternatives, mostly reduced fat

Use small amounts of

Only sometimes and in small amounts

SCAFFOLD>>
Australian Guide to Healthy Eating

ISBN 9780170376181

Write down any segments that you think had too many food items in it, and also the segments that didn't have enough.

Segments with too many food items	Segments with too few food items

2 When it comes to discretionary foods, you should aim to have as few as possible. How many did you have? Do you think this amount is OK or too much?

3 Think about the variety of foods you included in your diagram. Comment on the range of different meats, vegetables, fruits and sources of dairy, grains and cereals you have. More is better! How could you try to include more variety in your daily diet?

Eating isn't just about energy

People really only eat and drink for two reasons:

1 to obtain the energy needed to survive, grow and function properly

2 to obtain the nutrients needed to survive, grow and function properly.

satiety
the feeling of being well fed, full and gratified, after a satisfying meal

There are other more complex reasons why people eat, such as **satiety** or satisfaction, cultural or religious occasions, emotional fulfilment or as a part of socialising. Some of these will be explored in detail later in the chapter.

Everything you eat has large or small amounts of energy and large or small amounts of various nutrients. These are the nutrients your body needs on a regular basis:

- vitamins
- minerals
- fibre
- water
- protein
- fats
- carbohydrates.



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Your top priority should always be providing your body with what it needs to function at its best. Unfortunately, many people believe this means consuming large amounts of energy-rich food and drinks. A factor that contributes to this belief is the marketing of high-energy foods and drinks, which encourages people to include more of these products in their diet. This energy-driven focus usually comes at the expense of ensuring a complete range of nutrients is consumed, such as vitamins, minerals, fibre and water. As outlined in the next section, it is not hard to make sure your body receives all of the nutrients it needs to perform well and still have good levels of energy.

Variety, balance and moderation

The Australian Guide to Healthy Eating shows the wide range of food the body needs to ensure it receives all of the nutrients required to function properly.

No single food item can provide the body with all of the required nutrients. This even applies to items of food that are normally considered 'healthy', such as broccoli or bananas. Most food items provide a few nutrients, but very little or none of others. That is why it's important to try to consume as wide a variety of foods as possible, to make sure you get the nutrients you need. Some foods have very few of the necessary nutrients, but high amounts of 'energy', often in the form of simple sugars. Eating too much or not enough of any food (whether you consider it a 'health food' or 'junk food') can be harmful to your health.

Some nutrients are actually harmful if consumed in the wrong quantity or if the body is not able to store them. This means that you can't really get away with eating large amounts of food rich in a certain nutrient on one day, such as broccoli and oranges for vitamin C, and not worry about getting any vitamin C for the rest of the week. You need a supply of small amounts of each and every nutrient, every day. Perhaps the only exception to this rule is energy, which your body can store for long periods of time.



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In terms of variety, balance and moderation, the best advice is to eat a little bit of a wide range of different types of nutrient-rich foods every day. Try to avoid energy-dense, nutrient-poor foods. These are usually 'discretionary foods', which yield high amounts of energy and few nutrients. Most often this surplus energy is stored as dangerous body fat, which stops your body functioning properly and causes a wide range of diseases and health conditions. The higher levels of kilojoules, saturated fat, added sugars and salt that high-energy foods contain can increase the risk of obesity and chronic disease such as heart disease, stroke, type 2 diabetes and some forms of cancer.

HEALTHY EATING

Eat a little bit of a wide range of different types of nutrient-rich foods every day.



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EXTRA ACTIVITY>>
Family ties

review & reflect

VARIETY, BALANCE, MODERATION

Describe what the terms variety, balance and moderation mean to you and your diet, and how you will use these principles to guide your daily food choices.

How much is enough?

Every day, from the moment you wake up in the morning through to the time you go to bed, you are faced with many decisions around what to eat and drink. Some people even interrupt their sleep to eat or drink! Because eating and drinking are things that are done often each and every day, it is no wonder that the decisions people make, and more importantly the habits that are established, can have a dramatic effect on health (both short term and long term), and influence how well people cope with daily life.

Here are some of the daily decisions faced around eating and drinking:

- what to eat or drink
- how much to eat or drink
- when to eat or drink
- how often to eat or drink.

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The Australian Guide to Healthy Eating is clear about the proportion of daily food and drink required from the five main food groups, relative to the other food groups, as well as oils and discretionary foods. But exactly how much food is that?

Food intake is planned and measured using '**serves**' and '**portions**'. You will see the word 'serves' or 'serving size' in lots of different types of nutritional advice, including on the labels of packaged food (see page 81). Portions are the amount of food you actually eat, for instance a tall man who is very active will probably have more food on his plate compared to a small woman, even if she is also somewhat active. If you choose to eat portions that are smaller than the recommended 'serve size', you won't be getting the recommended amount of the particular food groups that you are eating at the time, so you may need to eat from those food groups more often. If you eat portion sizes that are larger than the 'serve size' you will need to eat from that food group less often.

serve
the recommended set amount that doesn't change. It should be used along with the 'serves per day' information to work out the total daily amount of food required by individuals from each of the five food groups.

portion
the amount individuals actually eat, depending on energy requirements and level of hunger

INTERPRETING DATA

critical + creative thinking

Table 2.1 shows the recommended average daily number of serves of each of the food groups. There are a few missing from the table. Using the rest of the information in the table, you may notice some patterns that will enable you to fill in the missing numbers. Complete this in your workbook or online.

SCAFFOLD>>
Table 2.1

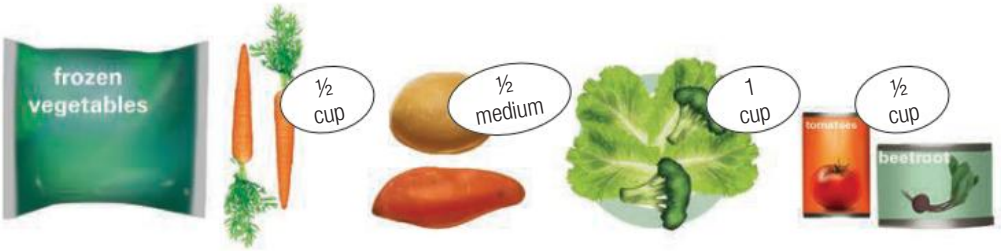
TABLE 2.1 Recommended average daily serves from each of the five food groups

	Vegetables and legumes/beans	Fruit	Grain or cereal foods	Lean meat, poultry, fish, eggs, nuts and seeds	Milk, yoghurt and cheese	Approx. number of additional serves from the five food groups or discretionary choices
Toddlers						
1–2	2–3	½	4	1	1–1½	
Boys						
2–3	2½	1	4	1	1½	0–1
4–8	4½	1½	4	1½		0–2½
9–11		2	5	2½	2½	0–3
12–13	5½				3½	0–3
14–18	5½	2	7	2½	3½	0–5
Girls						
2–3	2½	1	4	1	1½	0–1
4–8	4½	1½		1½	1½	0–1
9–11	5	2	4	2½	3	0–3
12–13			5			0–2½
14–18	5	2	7	2½	3½	0–2½

WORKBOOK>>
Worksheet 2.3

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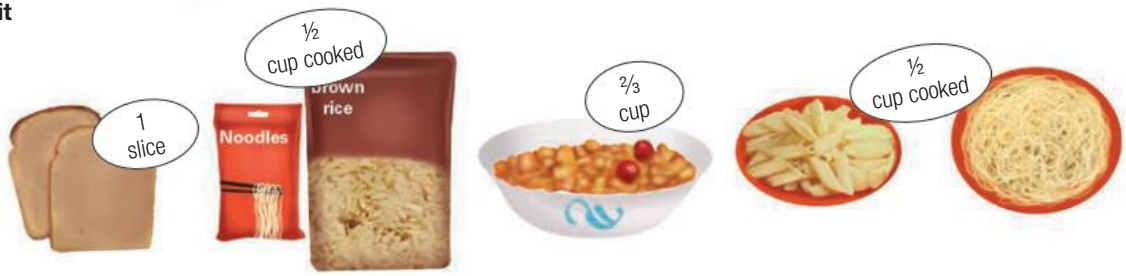
Standard serving sizes of foods from the five food groups



Vegetables and legumes/beans



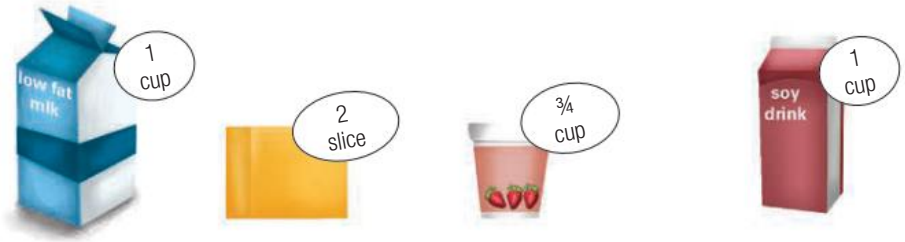
Fruit



Grain (cereal) foods, mostly wholegrain and/or high cereal fibre varieties



Lean meat and poultry, fish, eggs, tofu, nuts and seeds, and legumes/beans



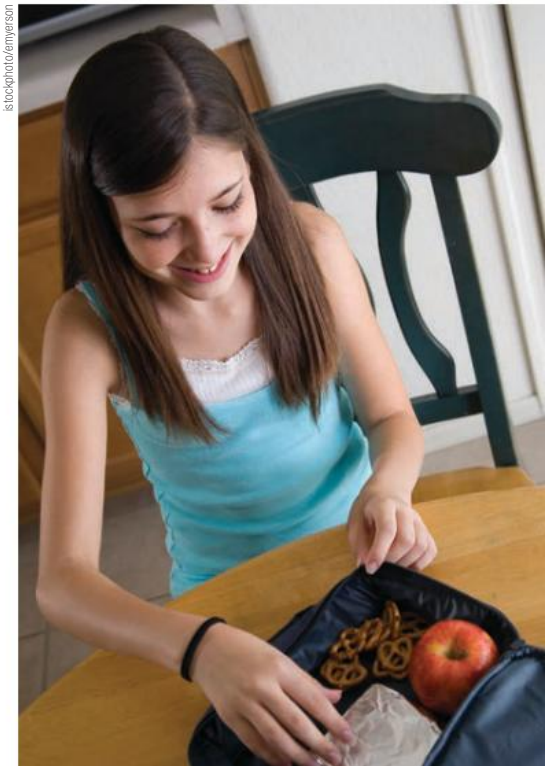
Milk, yoghurt, cheese and/or alternatives, mostly reduced fat

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TABLE 2.2 A standard serve

Vegetables (75 g or 100–350 kJ)		Fruit (150 g or 350 kJ)		Grains or cereals (500 kJ)		Meat, eggs, nuts, seeds (500–600 kJ)		Dairy (500–600 kJ)	
½ cup	Cooked green or orange vegetables	1 medium	Apple, banana, orange or pear	1 slice	Bread	65 g	Cooked lean meats	1 cup	Fresh or long-life milk
½ cup	Cooked, dried or canned beans, peas or lentils	2 small	Apricots, kiwi fruits or plums	½ medium	Roll or flat bread	80 g	Cooked lean poultry	½ cup	Evaporated milk
1 cup	Green leafy or raw salad	1 cup	Diced or canned fruit	½ cup	Cooked rice, pasta, barley, noodles, polenta, bulgur or quinoa	100 g	Cooked fish fillets	2 slices	Hard cheese
½ cup	Sweet corn	*Or only occasionally:*		½ cup	Cooked porridge	2 large	Eggs	½ cup	Ricotta
½ medium	Potato	125 mL	Fruit juice	⅔ cup	Wheat cereal flakes	1 cup	Cooked or canned legumes	¾ cup	Yoghurt
½ medium	Tomato	30 g	Dried fruit	¼ cup	Muesli	170 g	Tofu	1 cup	Soy or rice milk
				3	Crispbreads	30 g	Nuts, seeds or peanut butter		
				1	Crumpet				
				1 small	English muffin or scone				

UNDERSTANDING NUTRITIONAL REQUIREMENTS AND DIETARY NEEDS



istockphoto/emyerson

You may have heard the phrase 'You are what you eat'. While you may not turn into a cabbage or a hotdog any time soon, the foods that you eat do dictate how well you can function, whether out on the sporting field, concentrating hard in the classroom, leading a long and productive life, or just getting through the day successfully. So what does it mean to make healthy choices regarding food and nutrition?

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What do you need, and what happens when you don't get it?

The five food groups promote the consumption of foods that provide your body with a wide range of nutrients. Remember that your body cannot store many of these nutrients, so you need to be getting small amounts of each nutrient every day. Each of these nutrients has an important role in the way your body functions.

TABLE 2.3 Nutrients in the five food groups

	Grain or cereal foods	Vegetables and legumes/beans	Fruit	Milk, yoghurt or cheese	Lean meat, poultry, eggs, nuts and seeds
Main nutrients	carbohydrate protein iron dietary fibre thiamine folate iodine	beta-carotene and other carotenoids vitamin C folate dietary fibre	vitamin C dietary fibre	calcium protein riboflavin vitamin B_{12}	protein iron zinc vitamin B_{12} (animal foods only) omega-3 fatty acids
Other important nutrients	energy magnesium zinc riboflavin niacin vitamin E	carbohydrate magnesium iron potassium	carbohydrate folate beta-carotene potassium	energy fat carbohydrate magnesium zinc potassium	dietary fibre (plant foods only) energy essential fatty acids niacin vitamin E (seeds, nuts)



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Carbohydrates

The primary (and the body's preferred) source of fuel. Simple carbohydrates (sugars) are used more quickly for energy than complex carbohydrates (starches), but they don't last as long.



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Protein

Protein provides the building blocks for all the cells in the body. Bodies are constantly breaking down and making new tissues such as blood cells, muscle fibres, enzymes, hormones, skin and hair, so daily intake of protein is essential. It can also be used as an energy source in extreme circumstances.

ISBN 9780170376181

Vitamins and minerals

There are many different vitamins and minerals, and the functions they perform are also many and varied. Generally, they support the body's biochemical processes and regulate metabolism. Examples of vitamins include A, C, niacin and folate. Minerals include calcium, iron and potassium.


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Dietary fibre

Dietary fibre is technically classed as a carbohydrate. Because it can't be completely broken down, your body doesn't extract the same amount of energy as sugars and starches from fibre. The primary benefit of fibre is the effect it has on the contents of your digestive system. It aids in digestion and helps prevent gastrointestinal problems.


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Fats

Some vitamins, such as A, E, D and K are fat soluble, which means they can't be contained or transported around the body in water like most other nutrients. Fat cells can be an insulating and protective barrier around internal organs. Fats contribute to the function of cell membranes and the immune system and can also be a source of energy. There are 'good' and 'bad' fats. Bad fats are saturated fats and trans fatty acids, which are known to contribute to cardiovascular disease and should be avoided as much as possible. They are normally found in highly processed or manufactured foods, particularly deep-fried takeaway foods and commercially baked goods (biscuits, pastries, pies). Good fats are monosaturated and polyunsaturated fats, including omega-3 and omega-6, which are healthier fats, and small amounts are essential in your diet.


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Water

Water is the most essential nutrient of all because you wouldn't survive much longer than a few days without it. Water is present in all of the cells in all organs of the body; it helps to regulate body temperature and transport nutrients, hormones and waste products around the body. You constantly use and lose water, due to chemical processes inside your body, using the toilet, sweating and even exhaling. That water must be constantly replaced. There is a wide range of advice on the ideal amount to consume daily, but you should aim to drink around 2 litres per day, with more on days when you are very active or the weather is hot. If your urine is clear, light in colour and regular, and you aren't thirsty, you are probably drinking enough.

WORKBOOK>>
Worksheet 2.4

Does my weight matter?

Is it a big deal if you aren't making sure you are eating a healthy diet? Read the following statements and take some time to think about them:

EXTRA ACTIVITY>>
Weigh to go

> 'The majority of disease due to poor nutrition in Australia is associated with excessive intake of energy-dense and relatively nutrient-poor foods high in energy, saturated fat, added sugars or salt, and an inadequate intake of nutrient-dense foods.'
>
> **Source**: *Australia: the healthiest country by 2020 – National Preventative Health strategy – the roadmap for action,* National Preventative Health taskforce, Canberra, Commonwealth of Australia, 2009

> 'More than one-third of all premature deaths in Australia are the result of chronic diseases (cardiovascular disease, cancers and type 2 diabetes) that could have been prevented.'
>
> **Source**: 'Premature mortality from chronic disease', *AIHW Bulletin*, no. 84. cat. no. Aus 133, Australian Institute of Health and Welfare, Canberra, 2010

> 'Diet is … the single most important behavioural risk factor that can be improved and have a significant impact on health.'
>
> **Source**: *Eat well Australia: an agenda for action for public health nutrition, 2000–2010,* National Public Health Partnership, Canberra, 2001

Obesity

Making sure you are getting all of the nutrients you need and consuming an appropriate amount of energy to match your daily needs is critical for good health. Obesity is now the leading cause of premature death and illness in Australia, and

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if current weight gain trends continue, by 2025 80 per cent of Australian adults and 30 per cent of Australian children will be **overweight** or **obese**. Obesity is usually accompanied by many health disorders, such as cardiovascular disease, type 2 diabetes and some cancers.

overweight
adults with a BMI from 25 to 30

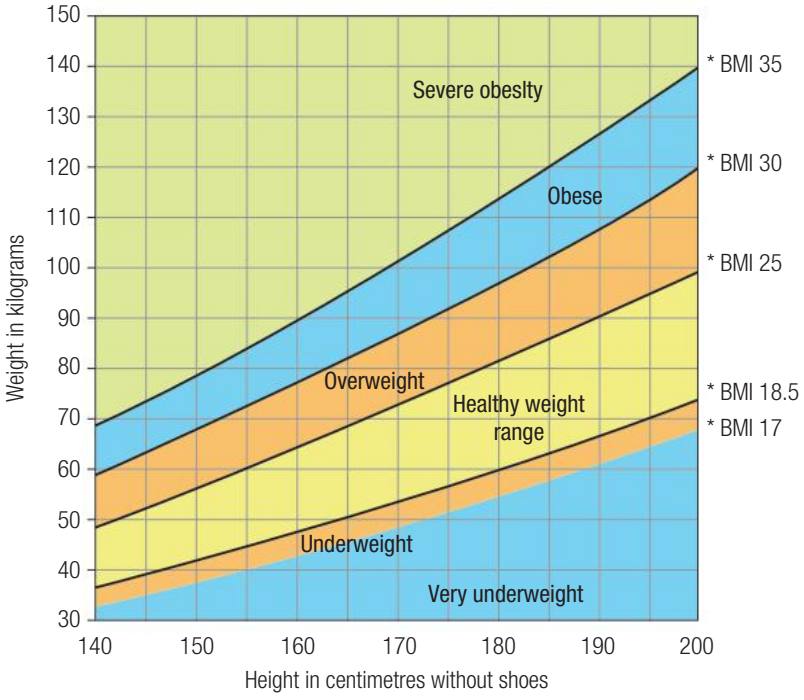
obese
adults with a BMI 30 or higher

Healthy body weight can be estimated using three different methods. These are Body Mass Index (BMI), waist measurement and waist-to-hip ratio (WHR).

Body Mass Index (BMI)

BMI is a method used to estimate total body fat. This helps to determine if your weight is within the normal range or if you are underweight or overweight. BMI must be compared against charts referring to a specific age and sex. Differences in BMI between people of the same age and sex are usually due to body fat. However, there are exceptions to this rule, such as elite athletes with large muscle mass, which means a BMI figure may not be accurate. BMI is calculated using the following formula: weight (kg) divided by height^2 (m).

The chart below makes it easy to look up which weight range you are in, without having to do any calculations. Just find your weight along the *y*-axis (left side) and your height on the *x*-axis (bottom) and find where these two meet.



$$* \text{Body Mass Index (BMI)} = \frac{\text{Weight (kg)}}{\text{Height}^2 \text{ (m)}}$$

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Waist measurement

This method is suitable for adults only. Using a tape measure, measure the width of an adult's body at their waist (about level with their belly button). The tape should be above their hip bones and below their rib bones. Compare the measurement with Table 2.4:

TABLE 2.4 What waist measurement means for health

Waist measurement	Weight-related health risk
Men less than 94 cm Women less than 80 cm	Low risk
Men 92–104 cm Women 80–88 cm	Increased risk, especially if their BMI is more than 25
Men more than 102 cm Women more than 88 cm	High risk

Waist-to-hip ratio (WHR)

This also applies only to adults. The waist-to-hip ratio requires a measurement of the width of an adult's body at their waist (same as waist measurement) and also of their hips. The width of the hips is measured by passing the tape measure around the body, level with the big bony parts of the hips. Waist-to-hip ratio is then calculated by dividing the waist measurement by the hip measurement.

A WHR greater than 0.9 for men and 0.8 for women indicates an increased health risk.

The Australian Dietary Guidelines

The Australian Dietary Guidelines were created by the National Health and Medical Research Council, an Australian Government body that develops guidelines on health-related matters for Australians. The Australian Dietary Guidelines provide information on the types and amounts of food required to promote health and wellbeing, reduce the risk of diet-related conditions and reduce chronic disease in the Australian population.

Guideline 1: To achieve and maintain a healthy weight, be physically active and choose amounts of nutritious food and drinks to meet your energy needs.

Guideline 2: Enjoy a wide variety of nutritious foods from the five main food groups every day, and drink plenty of water.

Guideline 3: Limit intake of foods containing saturated fat, added salt, added sugars and alcohol.

These three guidelines will be explored in further detail within this chapter. First, it's important to understand the role of energy.

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THINK, PAIR, SHARE

review & reflect

As you can see, there are several elements of these three guidelines that fit quite nicely with what you already know from studying the Australian Guide to Healthy Eating. See if you can find at least three similarities and compare them with a classmate. Be prepared to share with the class what you discovered as a pair.

Energy: intake versus expenditure

The energy you need to maintain a healthy, active lifestyle comes from the food and drink you consume. The more active you are every day, the more energy you need. In countries like Australia where food is plentiful and relatively cheap, it can be quite easy to consume too much energy. This is one of the main causes of the increase in obesity and health conditions such as cardiovascular disease, diabetes and many types of cancer. These types of **lifestyle diseases** are the main cause of death in Australia. Many people try **yo-yo dieting** programs to lose weight, but they can be expensive and don't work in the long term.

Most overweight or obese people have an imbalance between their energy intake and energy expenditure. Energy intake is the amount of energy you put into your body by eating and drinking, and energy expenditure is how much energy your body uses through the day. Getting this back into proper balance requires making sustainable changes to a person's whole lifestyle, not a drastic six-week weight-loss program.

lifestyle disease
a disease that potentially can be prevented by changes in diet, environment and lifestyle, such as heart disease, stroke, obesity and osteoporosis

yo-yo dieting
the practice of repeatedly losing weight by dieting and subsequently regaining it

BMR
the energy used when at rest, in order to maintain life (breathing, brain function, heart function, etc.)

Energy expenditure

There are three parts to energy expenditure:

1. Basal Metabolic Rate (**BMR**)
2. the amount of energy used in the process of eating and digesting food
3. physical activity.

The only one of these parts that you really have any control over is physical activity.

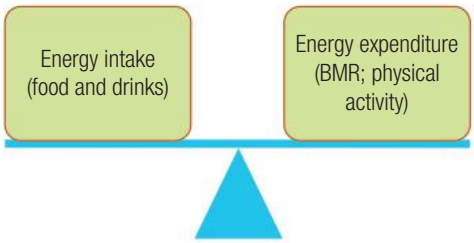
SCAFFOLD>>
Balancing act

BALANCING ACT

review & reflect

Draw two more scales like this one and fill in the missing words in the sentences below. Your diagrams need to reflect the imbalance of energy intake and energy expenditure.

1. In this example, the amount of energy consumed (intake) is less than the amount used (expenditure). Body weight would _____.
2. In this example, the amount of energy consumed (intake) is higher than the amount used (expenditure). Body weight would _____.



In this example, the amount of energy consumed (intake) is evenly matched by how much is used (expenditure). Body weight would be stable.

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Then and now


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Early in the 20th century, hard, physical work was common, especially around the home. People chopped firewood, scrubbed clothes by hand, grew their own vegetables and fruit, pumped or carried water by hand, and walked or rode horses or cycled everywhere. There were no 24-hour gyms, treadmills, personal trainers, aerobics classes or drastic weight-loss diets. All of these physical chores and duties were done without 'energy drinks' or 'energy snacks'. Very few people were overweight.

In the past 20 years, 'energy drinks' and 'energy snacks' have become popular, and the companies that make and sell them have made billions of dollars worldwide. The advertising says they will provide the 'boost of energy' needed to be able to work, play sports or party with friends.

sedentary
a type of activity that does not use much energy, such as sitting

At the same time, advances in technology have made life much easier, more relaxing and more convenient. Despite all of the money, technology and time dedicated to making their lives physically easier, people are spending time and money to attend gyms or invest in personal trainers to undertake exercise to compensate for their more **sedentary** lifestyles.

FAST FACT
In Australia in 2013, 67 per cent of adults were obese or overweight.

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OUR MODERN LIFESTYLE

review & reflect

Take a few moments to read the two paragraphs comparing the early 20th century with the present day and reflect on what our modern lifestyle means to you. Write your response in your workbook. Share your response with a friend or the class. Try to complete at least a paragraph.

Extra food

When more energy is eaten than spent, the body tends to store the surplus energy in fat cells. This happens even if fat is not part of your diet, because your body can convert all forms of unused energy into fat. (Small amounts of healthy fats are actually recommended as part of a healthy diet.) Fat cells become a back-up fuel tank.

This is why it is so important to limit discretionary foods (high in energy, low in nutritional value) and make sure you are maintaining high levels of activity. Physical activity is not just sports, walking to school or helping with the gardening or housework all count too! This process works both ways. If you expend more energy than you consume in a day, your body can use those fat cells for energy, and this may reduce your body weight a little. One kilogram of body fat contains 37 000 kilojoules of energy, which is the average adult daily recommended energy intake for four days!

How much energy do you need?

Energy is not a nutrient but a fuel necessary for your body to function, every minute of every day. Energy is measured in either calories (Cal) or kilojoules (kJ). One kilojoule equals 0.2 calories, and 1 calorie equals 4.2 kilojoules. Kilojoules is the accepted standard in Australia.

It can be difficult to work out exactly how much energy a person needs, as age, sex, body size and shape, and daily activity levels all determine the amount of energy required. Children and adolescents, whose bodies are growing rapidly, require extra energy. Some teenagers with healthy body weight can get in the habit of having a lot of sugar or fat in their diets without gaining body fat, and this habit stays with them when (as adults) they are no longer growing and don't need the extra energy. You can imagine what happens when all that extra energy isn't being used to grow upwards: growth outwards!



Excess energy leads in only one direction!

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You can make a close estimate of your own daily energy needs, and then you can make small adjustments over time as necessary.

ESTIMATING DAILY ENERGY REQUIREMENTS

Here are two different methods for estimating daily energy requirements.

1 Online calculator

There are several versions available online, but be careful about using reliable sources and up-to-date information. It is best to find a site that uses kilojoules. This one is from the Australian Government's National Health and Medical Research Council and the Department of Health and Ageing: http://ffl78vic.nelsonnet.com.au.

This calculator requires your age, sex, weight and an estimate of your physical activity level (PAL). You can work out your PAL from the guide provided: it will be between 1.2 and 2.2. Most people who are reasonably active will probably be 1.6 to 1.8.

1.2: bed-ridden

1.4: very sedentary, no physical activity

1.6: light activity, such as walking, no strenuous activity

1.8: moderate activity, little sitting down

2.0: heavy activity, such as manual labour or strenuous activity

2.2: vigorous activity, such as elite athletes

variable
a factor that can change

Enter your own information and see the estimated energy intake you should be aiming for. Record that in your workbook or on the online scaffold. Now experiment by changing the **variables** (e.g. age) and seeing how the answers differ. Make sure you only change one variable at a time, and change it back to your original input before changing something else.

SCAFFOLD>>
Estimated energy requirements

Your estimated energy requirements: _____ kJ

Changing the _____ to _____ changes the energy estimate to: _____

Changing the _____ to _____ changes the energy estimate to: _____

Changing the _____ to _____ changes the energy estimate to: _____

2 Table method

The Australian Government's 'Nutrient Reference Values for Australia and New Zealand' (http://ffl78vic.nelsonnet.com.au) is reproduced here. Estimate your Physical Activity Level (PAL), and then note your energy requirements (in kilojoules).

Is it the same as the value you calculated using the online method?

TABLE 2.5 Estimated energy requirements for children and adolescents (kJ/day)

Age guide (years)	Reference weight (kg)	Reference height (m)	PAL 1.2 (kJ)	PAL 1.4 (kJ)	PAL 1.6 (kJ)	PAL 1.8 (kJ)	PAL 2 (kJ)	PAL 2.2 (kJ)
Boys								
3	14.3	0.95	4200	4900	5600	6300	6900	7600
4	16.2	1.02	4400	5200	5900	6600	7300	8100
5	18.4	1.09	4700	5500	6200	7000	7800	8500
6	20.7	1.15	5000	5800	6600	7400	8200	9000
7	23.1	1.22	5200	6100	7000	7800	8700	9500
8	25.6	1.28	5500	6400	7300	8200	9200	10 100
9	28.6	1.34	5900	6800	7800	8800	9700	10 700
10	31.9	1.39	6300	7300	8300	9300	10 400	11 400
11	35.9	1.44	6600	7700	8800	9900	11 000	12 000

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TABLE 2.5 Estimated energy requirements for children and adolescents (kJ/day) (continued)

Age guide (years)	Reference weight (kg)	Reference height (m)	PAL 1.2 (kJ)	PAL 1.4 (kJ)	PAL 1.6 (kJ)	PAL 1.8 (kJ)	PAL 2 (kJ)	PAL 2.2 (kJ)
12	40.5	1.49	7000	8200	9300	10 500	11 600	12 800
13	45.6	1.56	7500	8700	10 000	11 200	12 400	13 600
14	51	1.64	8000	9300	10 600	11 900	13 200	14 600
15	56.3	1.7	8500	9900	11 200	12 600	14 000	15 400
16	60.9	1.74	8900	10 300	11 800	13 200	14 700	16 200
17	64.6	1.75	9200	10 700	12 200	13 700	15 200	16 700
18	67.2	1.76	9400	10 900	12 500	14 000	15 600	17 100
Girls								
3	13.9	0.94	3900	4500	5300	5800	6400	7100
4	15.8	1.01	4100	4800	5500	6100	6800	7500
5	17.9	1.08	4400	5100	5700	6500	7200	7900
6	20.2	1.15	4600	5400	6100	6900	7600	8400
7	22.8	1.21	4900	5700	6500	7300	8100	8900
8	25.6	1.28	5200	6000	6900	7700	8600	9400
9	29	1.33	5500	6400	7300	8200	9100	10 000
10	32.9	1.38	5700	6700	7600	8500	9500	10 400
11	37.2	1.44	6000	7000	8000	9000	10 000	11 000
12	41.6	1.51	6400	7400	8500	9500	10 600	11 600
13	45.8	1.57	6700	7800	8900	10 000	11 100	12 200
14	49.4	1.6	6900	8100	9200	10 300	11 500	12 600
15	52	1.62	7100	8200	9400	10 600	11 700	12 900
16	53.9	1.63	7200	8400	9500	10 700	11 900	13 100
17	55.1	1.63	7200	8400	9600	10 800	12 000	13 200
18	56.2	1.63	7300	8500	9700	10 900	12 100	13 300

The best sources of energy

The total amount of energy you receive is the result of several factors:

- how often you eat (the number of snacks, meals and drinks other than water)
- how much you eat (the size of drinks, meals and drinks other than water)
- the type of foods you eat (foods with higher sugar or fat content will yield more energy).

Energy comes from most of the things you eat and drink, except from water. All foods and drinks contain a combination of carbohydrates (sugars and starches), protein or fat, and these three nutrients are your body's only sources of energy.

Carbohydrates and protein give 16 to 17 kJ of energy per gram, but fat gives 37 kJ of energy per gram, more than double!

Of these three sources of energy (carbohydrates, protein and fat), your body's preferred fuel supply is carbohydrates, particularly if you are performing physical activity.

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But wherever your energy comes from, if the total amount of energy intake is higher than your expenditure, the extra energy is stored as body fat.

The recommended balance of energy sources is shown in the table:

Energy source	Percentage of daily energy allowance
Protein	15–25
Carbohydrates	45–65
Saturated fats	20–30



Alamy/Foodcollection.com

If you follow variety, balance and moderation, and the right amount of serves of the five main food groups, you are probably already meeting this balance of energy sources!

Despite the messages from advertisements and other persuasive marketing campaigns, most people don't need to eat foods with large amounts of energy. Even elite athletes, who train and compete much more than the average person, can usually meet their energy needs from a regular healthy diet, without needing special energy drinks or snacks. There are some exceptions, which are discussed later.

Ask yourself, 'what else am I providing my body with when I consume this energy-rich food?' Food or drink with a range of vitamins and minerals as well as energy is much healthier than food or drink with lots of energy but almost no other nutrients.

What do athletes need?

Table 2.6, from the Australian Institute of Sport, shows the best sources of carbohydrates for very active people.

TABLE 2.6 Best sources of carbohydrates

Category	Examples	Use for athletes
Nutrient-dense carbohydrate	Breads and cereals, grains (e.g. pasta, rice), fruit, starchy vegetables (e.g. potato, corn), legumes and low-fat dairy products	Everyday food that should form the base of an athlete's diet. Helps to meet other nutrient targets.
Nutrient-poor carbohydrate	Soft drink, energy drinks, lollies, carbohydrate gels, sports drink and cordial	Shouldn't be a major part of the everyday diet but may provide a compact carbohydrate source around training.
High-fat carbohydrate	Pastries, cakes, chips (hot and crisps) and chocolate	'Sometimes' foods, best not consumed around training sessions.

Source: www.ausport.gov.au/ais/nutrition/factsheets/basics/carbohydrate__how_much

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Carbohydrates are the preferred fuel to provide the energy required for vigorous exercise, while protein and fat are used to provide energy to the muscles during rest and lower intensity exercise. The body can store carbohydrates in the form of **glycogen** in the muscles and liver, but this storage capacity is limited. If vigorous physical activity lasts longer than an hour, extra carbohydrates are needed. (A football player may eat fruit during half-time of a game that lasts about 90 minutes). Sometimes a small energy-rich snack should be eaten just prior to a game or competition, to 'top-up' glycogen reserves. (This strategy should be used with a healthy regular diet, not instead of it.)

glycogen
the substance that is the main form of stored carbohydrates



Corbis/© Ocean

After vigorous sport, immediately give your body the fuel and nutrients it needs to recover so that you will be ready for more activity in the following days. Usually the best strategy is a small snack of carbohydrates and protein, such as a small flavoured milk drink. This should not replace your regular healthy meals and snacks.

Hydration is also vital for good physical activity. You only need to lose 2 per cent of your normal fluid stores to lose physical and mental energy. On top of your daily needs, extra water is needed when exercising, particularly over long activity or in hot conditions. Planning ahead is the key! Ensure your body is already hydrated before game day, and bring along a water bottle. Try to drink small amounts early and often during your activity. Replace any fluids you lose during activity by drinking water for a period after you have stopped playing or training. If you have lost weight while exercising, you must replace this fluid. If you have been replacing lost water properly, your body weight should return to its pre-exercise level by the following morning. Your urine should be regular and a light colour!

hydration
combination with or absorption of water

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Sports drinks

You may be tempted to use 'sports drinks', which have a range of additives such as sugar, salt, electrolytes or other minerals, and even protein or caffeine. These drinks are sometimes useful for athletes who are doing many hours of vigorous activity each week, but most people don't need them. Essentially they aren't that much different from cordial or even soft drink.



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WORKBOOK>>
Worksheet 2.5



SCHOOL CARNIVAL

Consider the following scenario. Tomorrow is your school athletics carnival. You have been attending training and working hard on improving your results. Your Physical Education teacher thinks you might go close to being champion for your age group this year. Last year you were on track to becoming champion, but with so many events to compete in and the weather being warm, your performances faded over the course of the day. You remember feeling weak and light-headed, and you had trouble focusing. By the end of the day you weren't even getting close to the personal bests you had achieved at training.

But that's not going to happen this year! To assist your performances, you have decided to take advice from your Physical Education teacher, and you want to be as prepared as possible for the big day tomorrow. Apparently what you eat and drink the day before is important, and you are going to make sure to pack a lunch, snacks and drinks for tomorrow.

Write some ideas for the days leading into the event and for the day of the event. Consider the types and quantity of foods and drinks to assist you to reach optimal performance levels.

A HEALTHY, BALANCED DIET

There is a lot of official advice and many guidelines and recommendations about what makes a healthy diet and why you should be trying to eat healthily. But it can be difficult managing all this information from day to day!

Making decisions about food

Here are some quick and easy tips and tricks to use whenever you need to decide about what food and drinks to choose.

- Use low-fat versions of dairy products.
- Choose unsaturated fats over saturated fats. This information is included on all food packaging.

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- Eat a nutritious breakfast, as you will be less likely to snack on unhealthy foods later in the day.
- Choose bread-based foods such as wraps, sandwiches or kebabs instead of pastry or deep-fried options if having fast food for a meal. Limit your use of sauces, and only 'upsize' if it is a salad option.
- Choose lean meats, not over-processed or **cured** meats.



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cured
food that has been preserved by salting, drying or smoking

- Trim skin and fat from meat and poultry.
- Sip water throughout the day, and have water before and during your main meals.
- Choose a range of different coloured vegetables, for a variety of vitamins and minerals.
- Choose wholemeal bread and wholegrain cereals.
- Choose regulated sizes when snacking on discretionary foods. For example, have an ice-cream on a stick instead of dishing up a bowl of ice-cream out of a tub.



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WORKBOOK>>
Worksheet 2.6



Shutterstock.com/Robyn Mackenzie

- Eat slowly, without distractions like TV, and give your body time to respond. Put your cutlery down between mouthfuls when you're chewing, and sip water in between bites of food to slow your pace. Concentrate on how your meal looks, smells, tastes and feels in your mouth before you swallow. You will enjoy food more and end up eating smaller portions.

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SWAP IT!

Visit the Nutrition Australia and ShapeUp websites, via http://ffl78vic.nelsonnet.com.au, for some tasty and healthy food suggestions.

Healthy options

In this section you'll find some good examples of meals and snacks, and then you will have an opportunity to plan your own meals.

Sample meal plans and snack ideas

Table 2.7 contains samples of healthy meals and snacks for an adult. Remember, you should be eating less than these adult serves.

TABLE 2.7 Suggested healthy menu for an adult for one day

Breakfast	Wholegrain breakfast cereal with reduced-fat milk OR Wholemeal toast with baked beans and grilled tomato Glass of milk OR reduced-fat yoghurt	 Shutterstock.com/ MaraZe;Shutterstock. com/Joe Gough
Morning break	Apple Coffee with milk	 Shutterstock.com/ Ramon L. Fainos
Lunch	Sandwich with salad and chicken OR Roast beef, salad and cheese sandwich	 Shutterstock.com/Yeko Photo Studio
Afternoon break	Coffee with milk Unsalted mixed nuts	 iStockphoto/Kaan Ates
Evening meal	Pasta with lean beef mince and red kidney beans Green salad with olive oil and vinegar dressing OR Grilled fish on rice with lemon juice and vegetables	 Shutterstock.com/jabiru; Shutterstock.com/tarbled
Evening snack	Fruit salad and reduced-fat yoghurt	 Shutterstock.com/ ElenaGaak
Drink plenty of water throughout the day		

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EAT FOR HEALTH



1. More good ideas can be found on the Eat for Health website (http://ffl78vic.nelsonnet.com.au). The Eat for Health website can automatically generate a range of meal options based on the amount of energy you think you need for the day. You will need to convert kilojoules to calories first.
2. The Eat this much website (http://ffl78vic.nelsonnet.com.au) can help you experiment with different combinations and it may help you with the DIY catering activity too above.

DIY CATERING



Create a week's worth of school lunches and snacks (five days). There needs to be a snack for the morning and one for the afternoon. Take into account everything you know about what makes a healthy diet. Remember: variety, balance and moderation are the keys. Once you have created a meal and snack plan, make a shopping list for all the ingredients you will need.

SCAFFOLD>>
Meal and snack plan

GO SHOPPING



Now you can put your plan into action! Take your menu and shopping list home and negotiate with your parents about how you will complete the task. Join them on their next grocery-shopping trip, and make sure you don't forget anything. You might also need the help of a parent to prepare some of your lunches or snacks.

SCAFFOLD>>
Shopping list

ONE WEEK LATER ...



Complete these questions a week after your planning and shopping activities.

1. In what ways was your menu and snack plan different from your usual weekly eating habits?
2. Overall, were these differences healthier or less healthy? Why?
3. Did you notice any change in the way you felt and acted by the end of the week? Explain some possible reasons for this change in attitude and behaviour.
4. With your parents, compare the cost of the foods and drinks on your shopping list with what they normally spend on your school lunches and snacks for a week. Discuss any possible reasons for differences, if any, in cost.
5. Outline some reasons not to stick to a menu and snack plan such as this.

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PERSONAL, SOCIAL, ECONOMIC AND CULTURAL INFLUENCES

There are many factors that influence your eating decisions and habits. It is important to know how to recognise and manage them, particularly if they are influencing your decisions and habits in a negative way.

Factors that influence your eating habits

Each time you make a decision around food and eating, you make a justification, either consciously or subconsciously. An example could be, 'I don't think I will have any breakfast today because I ate so much last night before bed', or 'I'd better have a yoghurt and fruit snack after school today, as I have already had some chocolate with my lunch'.



iStockphoto.com/ClausAlwinVogel

face 2 face

WHAT FACTORS INFLUENCE ME?

Table 2.8 lists the factors that have been known to influence decisions people make about what, when, how much and how often they eat. Using the table, rank each of the influences, with '1' being the most influential to your decisions and habits about eating and drinking, and '16' the least influential. It may take you a few attempts. You can fill this in online or in your workbook. Then compare your results with the rest of the class.

SCAFFOLD>>
Ranking table

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TABLE 2.8 Knowing your influences

Most influential ↕ Least influential	My rank	Influence
		Taste
		Hunger cravings
		Cravings for a specific food
		Convenience – easy to prepare or eat
		Food availability – if food is there, eat it
		Parental influence
		Peer influence
		Health benefits
		Mood
		Body image
		Habit
		Cost
		Time considerations
		Media and advertising
		Cultural or lifestyle decisions such as being vegetarian, or observing religious or cultural practices
		Certain social settings – at a sporting event or going to the movies
My top three influences:		**Class top three influences:**
My bottom three influences:		**Class bottom three influences:**

Questions

1. Compare your rankings with your classmates: are there any trends?
2. Share your top three influences and bottom three influences with the class.
3. Create a class tally, on the whiteboard or in a spreadsheet.
4. You should now be able to see which influences from the list have the most and least impact on the class's decisions and habits about eating and drinking. What are some similarities and differences between your classmates' and your own 'influencing factors'?
5. Do your top three influences tend to make you eat healthily or unhealthily? Give an example.
6. Now that you have a good idea about 'influencing factors', how can you use this knowledge? Think of a way to maximise the times when you are influenced to eat healthily and minimise the times you are influenced to eat unhealthily.

WORKBOOK>>
Worksheet 2.7

Nutrition and society

Most Australians enjoy a high standard of food choices and nutritional health. There is also a lot of information available about healthy diets and food choices. However, many Australians do not eat enough vegetables, fruit, wholegrain cereals and healthy dairy products. Many people eat large amounts of fast food, even though they know it is unhealthy.

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Some people living in remote rural areas don't have the same access to healthy foods as those in cities and this is often reflected in their overall health. The availability and cost of fresh fruit and vegetables can be an issue for people living in remote locations.



Corbis/Katherine Seppings

socioeconomic status a measure of advantage or disadvantage of an individual or population group based on factors such as income, education and occupation

People on limited incomes may have trouble following nutritional guidelines, because the cheapest foods are often unhealthy choices. Low **socioeconomic** suburban areas have twice as many fast-food outlets as suburbs where families have a higher income.



Newspix.com/Gary Merrin

I don't always make good choices because ...

While Australians generally have access to an excellent range of healthy foods and plenty of exposure to excellent nutritional advice, there are billions of people around the world who do not.

Still, many Australians make bad decisions when it comes to their diet. They ignore advice about healthy eating, and they choose unhealthy foods and drinks over healthier options. Why?

Everyone is tempted occasionally by the prospect of a treat, even though it may not be a healthy choice. But it's important to remember that there can be a place for high sugar and

ISBN 9780170376181



Corbis/Topic Photo Agency

high fat treats in your diet, just not many of them, and not all the time. Learning to eat food in **moderation** will help you with your choices.



Shutterstock.com/Roman Samokhin

Sweet treats can be enjoyed, in moderation!

moderation being within a limit, not extreme or excessive

CHOICES, CHOICES ...

face 2 face

Think about some possible reasons for not always making a healthy dietary choice. For most people there will be several reasons. Share your answers with your class and see how many you can come up with. Try working in small groups to survey or interview people in your school or local community.

ISBN 9780170376181

FOOD LABELLING AND PACKAGING

What do you already know about food packaging? Generally, the less packaging food has, the better that food is for your body and the environment. Although some foods need packaging to retain their freshness, packaging is usually the main way foods and drinks are marketed, with visually appealing design and claims about taste, health and value for money.

What are you putting into your body?

Some information on food and drink packaging is reliable, but most of the information on packaging is not closely regulated. Food manufacturers can be creative with the words they use to encourage you to buy their products. The following are some of the techniques used.

- Stating obvious facts that make a food item sound healthier. For example, the label on a bottle of olive oil might state that it's 'cholesterol free'. But in fact, ALL plant-based foods have zero cholesterol, including canola, peanut or sunflower oil! While the statement is true, it is misleading.
- Making health-related claims using vague words such as 'support' or 'promote' instead of 'prevent' or 'protect'. An example is 'supports the immune system'. Using vague words means the statement doesn't have to be factually true.
- Using the terms 'light' or 'lite', which don't necessarily refer to amounts of fat, sugar or energy. They may refer to the taste, texture or colour of the food.
- Using terms such as 'natural', 'diet' and 'homemade' that all imply a higher level of nutrition, but there are no regulations on how these words can be used and what they represent. It is best to ignore them.
- Labelling something '90% fat-free', so it sounds quite healthy, but actually it means that the product is '10% fat', which is a large amount!



MYTHBUSTING

Use the internet to search, snap some photos in stores or look through some catalogues to see if you can find an example of each of the five common marketing strategies listed. You might even notice some strategies not mentioned. Discuss with your teacher how you will present them to the class.

ISBN 9780170376181

What's on the package?

The really useful information is often written in small print on the back or side of the packaging. The following are the most important items to check:

- 'use by' date – make sure your food is fresh
- nutrition information panel – this is required for all foods with packaging and is your main source of reliable information
- ingredients – listed in order of most to least by weight
- storage or preparation instructions – to make sure your food stays fresh and is prepared safely
- allergy advice – for those with allergies, even if the list of ingredients doesn't mention the item you are allergic to
- daily intake guide – shows the percentage of the recommended daily intake of energy or nutrients you would receive by consuming one serve of this food or drink.

Nutrition Information		
Servings per package – 16 Serving size – 30 g (2/3 cup)		
	Per serve	**Per 100 g**
Energy	**432 kJ**	**1441 kJ**
Protein	2.8 g	9.3 g
Fat		
Total	0.4 g	1.2 g
Saturated	0.1 g	0.3 g
Carbohydrate		
Total	18.9 g	62.9 g
Sugars	3.5 g	11.8 g
Fibre	6.4 g	21.2 g
Sodium	65 mg	215 mg
Ingredients: Cereals (76%) (wheat, oatbran, barley), psyllium husk (11%), sugar, rice, malt extract, honey, salt, vitamins.		



PER 60g SERVE

Daily intake guide for energy per serve

ISBN 9780170376181

TABLE 2.9 Tips for reading a nutrition information panel

Item on panel	What it means
Per 100 g column and serving size	If comparing nutrients in similar food products, use the per 100 g column. If calculating how much of a nutrient, or how many kilojoules you will actually eat, use the per serve column. But check whether your portion size is the same as the serving size.
Energy	Check how many kilojoules per serve. One serve of a discretionary food is the amount that contains 600 kJ.
Sugars	Avoiding sugar completely is not necessary, but try to avoid large amounts of added sugars. If sugar content per 100 g is more than 15 g, check that sugar is not listed high on the ingredients list. (Other names for added sugar: dextrose, fructose, glucose, golden syrup, honey, maple syrup, sucrose, malt, maltose, lactose, brown sugar, caster sugar, raw sugar.)
Sodium (salt)	Choose lower sodium options among similar foods. Foods with less than 400 mg per 100 g are good, and less than 120 mg per 100 g is best. (Other names for high salt ingredients: baking powder, celery salt, garlic salt, meat/yeast extract, monosodium glutamate (MSG), onion salt, rock salt, sea salt, sodium, sodium ascorbate, sodium bicarbonate, sodium nitrate/nitrite, stock cubes, vegetable salt.)
Ingredients	Listed from largest to smallest by weight. Use this to check the first three ingredients for items high in saturated fat, salt or added sugar.
Total fat	Generally choose foods with less than 10 g per 100 g. For milk, yoghurt and ice-cream, choose less than 2 g per 100 g. For cheese, choose less than 15 g per 100 g. (Other names for ingredients high in saturated fat: animal fat/oil, beef fat, butter, chocolate, milk solids, coconut, coconut oil/milk/cream, copha, cream, ghee, dripping, lard, suet, palm oil, sour cream, vegetable shortening.)
Saturated fat	Aim for the lowest amount per 100 g. Less than 3 g per 100 g is best.
Fibre	Not all labels include fibre. Choose breads and cereals with 3 g or more per serve.

Source: www.eatforhealth.gov.au/eating-well/how-understand-food-labels/food-labels-what-look



FOOD LABELS

Look closely at the tips for reading a nutrition information panel and then complete the following.

1. Think of four useful tips for reading labels, and describe how you would put them into practice on a daily basis.
2. Find the nutritional information panel on the packaging of an item of food from your home, cut it out and bring it to school in time for your next lesson. Hand it to your teacher, who will spread the panels out on a table at the front of the room. As a class, see if you can arrange them in order from least healthy to most healthy. You don't need to know what foods they come from, just what is in those foods. There are lots of things to consider, such as the ingredients and all of the different amounts of nutrients, so be prepared to discuss and justify your input. It is not always easy to agree on exactly what is healthy!
3. Of all of the labels, how many would you classify as coming from 'healthy foods'? Why?
4. Was there any particular aspect of a label(s) that caused a lot of debate or disagreement? Why?
5. What was the most difficult part of putting all of the labels in order?
6. How will you use nutritional information on labels to guide your food choices in the future?



SMART EATING

Go to the website of the Dietitians Association of Australia (or link direct via http://ff178vic.nelsonnet.com.au) and do the smart eating quiz. It will test your knowledge!

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Shutterstock.com/Aleph Studio

Get into the habit of reading the nutrition labels of food products

WORKBOOK>>
Worksheet 2.8

FOOD ADVERTISING

Advertisements for food and drink products are everywhere; you see them many times a day. In fact, sometimes you see so many advertisements that you aren't even aware of them. But your brain does take in a lot of information about brands and products without you thinking much about it and the people responsible for marketing foods know this. How much food and drink advertising do you think you are really exposed to?



AAP Image/Tony McDonough

ISBN 9780170376181



TALLY IT UP

There are three parts to this activity. It may take a week to complete them.

Part 1: Choose a day when you can carry a folded piece of paper or small notepad and a pen. Make a note every time you see or hear an advertisement for a food or drink product throughout the day. Note whether or not it was for a 'discretionary food' (low nutrient, high-fat or sugar snack or drink, fast food or junk food). At the end of the day, add up how many food or drink advertisements you saw and how many of those ads were for discretionary foods.

Part 2: Watch an hour of commercial free-to-air TV, during a show aimed at children or teenagers (often as soon as you get home from school). Record how many advertisements for food or drink you see, and note how many of the advertised foods would be classified as 'discretionary'.

Later the same day, watch another hour of commercial free-to-air TV, when the show is not just for children or teenagers. The news might be a good example. Don't pick a sport program (see part 3). Record how many advertisements for food or drink you see, and note how many of the foods would be classified as 'discretionary'.

Part 3: Watch your favourite sport, either on TV or by going to the game live. Again, record how many advertisements for food or drink you see, and note how many of the advertised foods would be classified as 'discretionary'.

You will now have three tables of data that you can analyse during your next Health lesson. Here are three examples:

SCAFFOLD>>
Tally it up

Part 1: daily travels	
Number of food or drink advertisements	Number of discretionary food or drink advertisements

Part 2: TV shows		
	Number of food or drink advertisements	Number of discretionary food or drink advertisements
TV show 1: _____		
TV show 2: _____		

	Part 3: sport	
	Number of food or drink advertisements	Number of discretionary food or drink advertisements
Sport: _____		

Create a graph(s) that will represent your data in a clear and logical way. You may choose to do this manually on paper or using spreadsheet software. Think carefully about the type and format of your graph(s).

1. Identify and discuss two trends you have noticed in your data.
2. Why do you think these trends exist? Is it a deliberate strategy or just a coincidence?
3. Considering the increases in obesity and lifestyle diseases in Australia, do you think current advertising strategies are appropriate?
4. If not, what do you think can be done about it?
5. Were you surprised by any of the results of the activity? If so, why?

ISBN 9780170376181

Who can you trust?







Images courtesy of The Advertising Archives

Food marketing and manufacturing companies exist to make profit, and they achieve this by encouraging you to believe whatever is necessary to make you buy their products and to keep buying more of them. At times, certain brands will fund or sponsor community events or junior sports programs. Most companies do this as a way to build up **goodwill** among their potential markets.

goodwill a good relationship, a friendly attitude

It gets even trickier when food companies or food industry bodies provide money for research into the benefits of their particular types of products. You will not be surprised to know that the results of this type of research are usually quite favourable for the company providing the money.

Advertising works, and it works very well. Food and drink manufacturers spend millions of dollars each year on marketing and advertising because they know it is effective in generating more sales and profits. They wouldn't do it otherwise.

Sometimes companies use messages that are directly relevant to what their product provides, such as an energy drink brand describing exactly how energetic you will feel after drinking their product. Other times, advertising campaigns just give you a vague, general perception that if you use their product, you will be cooler, more popular, more athletic, smarter or experience a better lifestyle, and that others will see you this way. They can get this perception across without explicitly saying or writing these things; in fact, some advertisements have no spoken or written words at all!

Certain brands also use the power of 'nagging'. In other words, they aim advertisements at children and rely on the child successfully nagging their parents to buy them the product. Toys, giveaways and links to movies or superheroes are common examples of this strategy. Remember, most food and drink advertisements are for items you don't really need, so companies must find ways to make you think otherwise!

ISBN 9780170376181

critical + creative thinking

ADVERTISING STRATEGIES

Using the internet or magazines and newspapers, gather a range of images that you can use to create a mural or poster. Your images need to represent as wide a range of advertising strategies as possible, from a range of different brands and products. You may even notice a few other tricks not mentioned!

1. Can you think of an occasion when you have been enticed into buying something, not necessarily because you really wanted or needed it, but because of the effectiveness of the advertising? What was the product, and what was the advertising strategy?
2. If faced with a similar situation in the future, what techniques could you use to help you resist temptation?
3. Look at the image. Describe why this particular company would use an image like this to try and sell more products. Who are they targeting and how are they doing it?



Alamy/Jeff Morgan 16



123RF/maxfx

SUSTAINABLE FOOD CHOICES

Most Australians have access to a wide range of nutritious foods and the means to buy these foods. While Australia as a whole produces more food than its population needs, growing food puts strain on the environment.

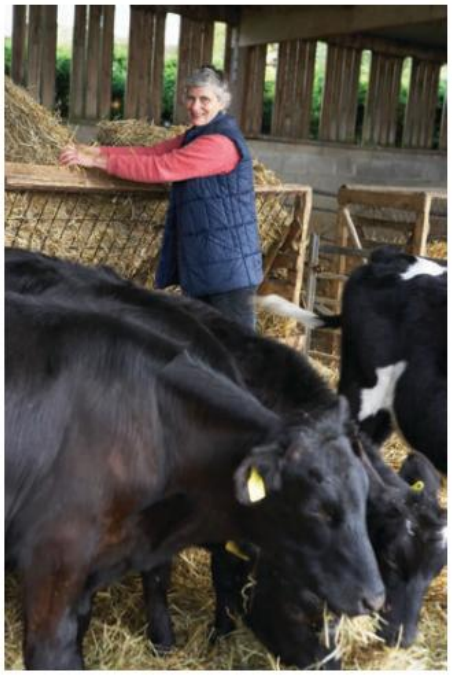
As the world's population continues to grow, producing enough food to feed everyone will become increasingly difficult, as there are limits as to how much raw food can be produced with the current resources, particularly nutrient-rich soil and water. There are a number of ways to make sustainable food choices; each of these choices makes a small contribution to helping conserve the natural environment.

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Organic food

Organic food is grown without using human-made chemicals such as fertilisers or pesticides, and it is free from **genetic modification** (GM). Organic foods can be plant based (fruit or vegetables) or animal products, including meat, eggs and honey. Organic food is sustainable, and also healthier, as organic foods are not exposed to chemicals.

Some people choose organic foods for ethical reasons, because animals raised on organic farms are usually treated more humanely. Often organic farming relies on more traditional and sustainable farming practices, such as conserving water, using renewable resources, rotating crops, and natural recycling of nutrients.



Alamy/MBI/Stockbroker

genetic modification changing the characteristics of an organism's DNA by scientific methods, often to make it resistant to disease or to produce larger crops

KITCHEN INSPECTION!

Have a look through your fridge and pantry at home, and see if you can find an organically produced food item. Take a photo or bring the label into school (check with your parent first). How many different items can your class collect in time for your next Health lesson?

UP + MOVING

Minimal travel, minimal production

There are several more ways to minimise environmental impact when making choices about food and drinks:

- buy food locally, by using farmers' markets and small local stores
- grow your own food: at home, at school or in a community garden
- choose foods that are less processed. The more effort that goes into manufacturing food, the bigger the impact on the environment.
- read the labels and try to buy foods manufactured or grown in Australia
- look for foods with minimal packaging
- try to minimise overeating and food wastage. Consuming more food than you need is



Shutterstock.com/Susan Montgomery

Farmers' markets are a great way to buy fresh food from your local area

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Shutterstock.com/Steshkin Yevgeniy

Wasted food ends up as landfill


Shutterstock.com/JP Chretien

Strawberries are a seasonal crop; buying them out of season means that they are not locally produced

WORKBOOK>>
Worksheet 2.9

bad for your health and puts extra stress on the environment. Food wastage in Australia is huge. About 3 million tonnes of food (worth about $5 billion dollars) ends up going to landfill per year.

- compost fresh food scraps (such as fruit and vegetables) at home to look after your own garden better and to save on landfill. Composting food scraps limits greenhouse gases compared to when they are added to landfill.
- be mindful of where your seafood is sourced. Some species of fish are at risk of being overfished. The Australian Marine Conservation Society has a handy online tool to help you choose seafood wisely (find it at http://ff178vic.nelsonnet.com.au). There are also smartphone apps available to help when your family is shopping for seafood.

It is difficult to buy local and/or organically grown foods when those foods aren't in season. For instance, strawberries don't grow in Tasmania during winter. So either you go without strawberries until closer to summer, or you buy strawberries that have been transported from somewhere else in Australia (or even overseas), which means you are no longer buying local. Some crops can be grown locally out of their normal season with the use of chemicals, but then they are no longer organic.

Tap water versus bottled water

Australia has one of the cleanest and safest drinking water supplies in the world. The water that comes out of the tap is as good as any bottled water. Despite claims about the special 'origins' and 'purity' of bottled water, the water isn't any purer than tap water.

Carry your own water bottle around with you, and refill it from the tap. You will save money and you will be saving the environment on many different levels.

FACTS ABOUT WATER

- Australians spend around $500 million dollars a year on bottled water. The $2.50 you might spend on one 600 mL bottle of water would be enough for you to pay to refill your own bottle every day for more than 8 years.
- Ninety per cent of the cost of a bottle of water is for the bottle, lid and label, not for the water.
- Petrol is cheaper per litre than bottled water, even though it comes from the other side of the world!
- The production, transport and storage of a water bottle uses 250 mL of oil and 3 to 5 litres of water.
- Between 300 and 400 million plastic water bottles end up as landfill or are discarded in natural environments.

Source: www.gotap.com.au

ISBN 9780170376181

ECOLOGICAL FOOTPRINT

critical + creative thinking

Ecological footprint is a measure of the impact people have on the environment. It factors in food production, but also timber and material production, and space for **infrastructure** and handling wastes. In 2007 the global ecological footprint was 18 billion hectares, but there were only 11.9 billion hectares available, meaning that people used 50 per cent more natural resources than could be regrown or replenished. Australians currently use 6.6 global hectares per person. If people in every other country consumed resources at the rate Australians do, it would take three 'Earths' to support them.

Have a go at calculating your own ecological footprint. You can find the tool at the World Wildlife Fund website: http://ffl78vic.nelsonnet.com.au.

infrastructure basic facilities and services needed for the functioning of a community or society, such as roads, transportation, power lines and schools

LOCAL PROJECTS

UP + MOVING

The best way to tackle large environmental problems is to start in your own backyard. As a class, see if you can get one of the following local projects up and running in your school.

1 Start a school vegie garden



Getty Images/Francesca Yorke

Many Australian schools are starting to include vegie gardens within their school grounds. There are many uses and benefits of vegie gardens. Does your school have one? How could you go about getting one started? Perhaps try investigating other schools that have one and find out how they started it.

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2 Canteen audit

How sustainable is your school canteen? Perhaps it is time to find out. Develop a checklist of things you'd like to see taking place in your canteen. Things to focus on include the type of meals and snacks, where the food comes from, how it is grown and processed, how much is wasted and recycled, and where the food scraps go. Offer some strategies for improvement.



Newspix/Katrina Tepper

3 Nude Food Day

National Nude Food Day is 16 October, but you can choose to promote this cause whenever you like. It is an event to encourage healthy, nutritious lunches that are environmentally friendly, by using only fresh foods and eliminating all unnecessary wrapping and packaging. Find out more at http://ffl78vic.nelsonnet.com.au.



Shutterstock.com/Jill Chen

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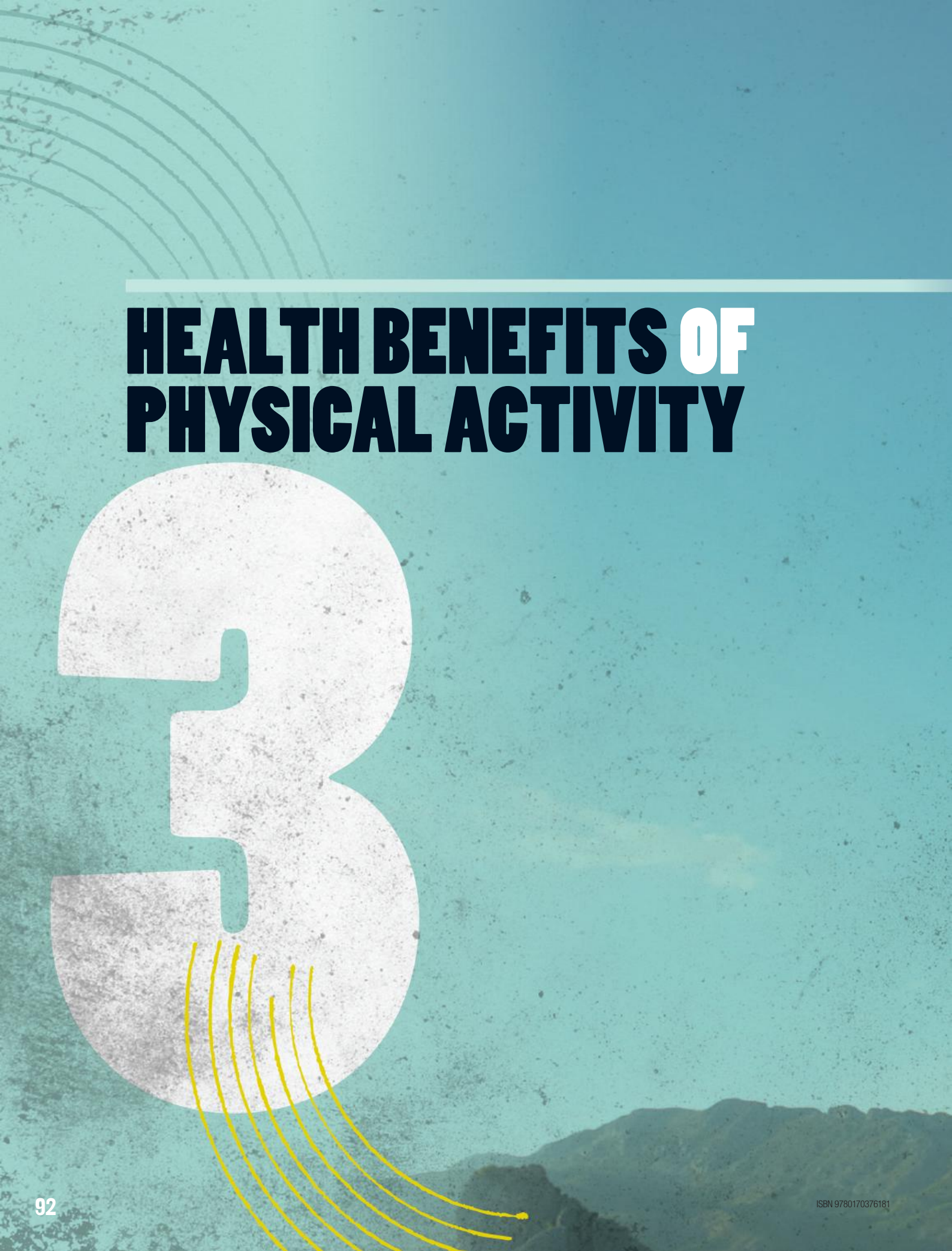
CHAPTER REVIEW

1. List the main five food groups in order of most recommended serves per day to least.
2. What are discretionary foods?
3. What is Australia's nutritional model?
4. What is the difference between energy intake and energy expenditure?
5. What are the key principles of a healthy diet? (Hint: they start with V, B and M.)
6. What are the three food sources of fuel for the body?
7. A recovery snack after exercise should include which two nutrients?
8. What function does fat play in the body?
9. What is the difference between a serving size and a portion size?
10. What is the difference between 'overweight' and 'obese'?
11. What is your ecological footprint?
12. List four different types of information that can be found on the nutritional information panel on food labels.
13. What percentage of Australian adults are overweight or obese?
14. In what order are the ingredients of food products listed on its packaging?
15. List six influences on eating or food choices.
16. List five tips or tricks for choosing healthy food options.
17. Describe two advantages of having a compost system in your backyard.

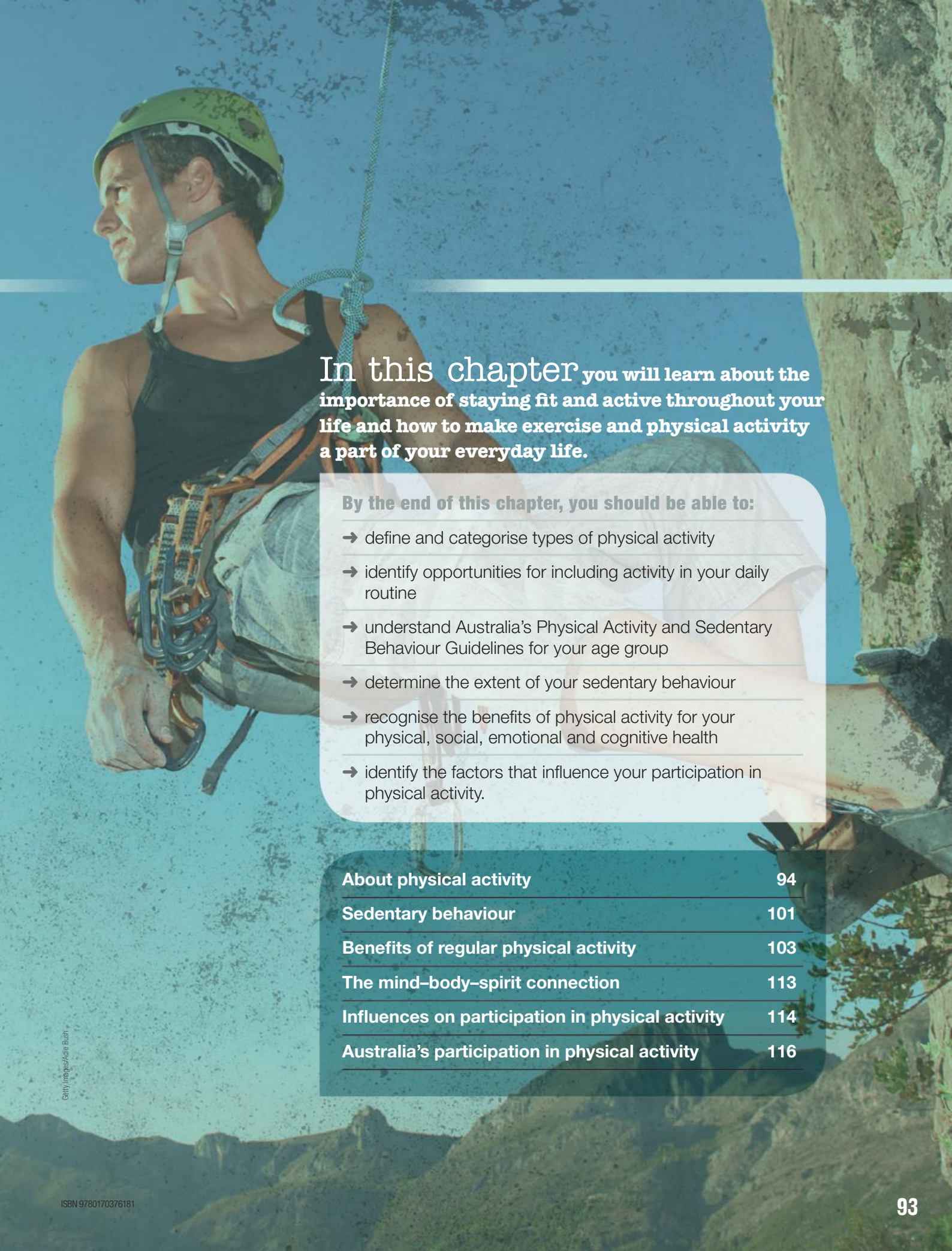
WORKBOOK>>
Worksheet 2.10
Worksheet 2.11
Worksheet 2.12

ISBN 9780170376181

3 HEALTH BENEFITS OF PHYSICAL ACTIVITY



ISBN 9780170376181



In this chapter **you will learn about the importance of staying fit and active throughout your life and how to make exercise and physical activity a part of your everyday life.**

By the end of this chapter, you should be able to:

- ➜ define and categorise types of physical activity
- ➜ identify opportunities for including activity in your daily routine
- ➜ understand Australia's Physical Activity and Sedentary Behaviour Guidelines for your age group
- ➜ determine the extent of your sedentary behaviour
- ➜ recognise the benefits of physical activity for your physical, social, emotional and cognitive health
- ➜ identify the factors that influence your participation in physical activity.

About physical activity	94
Sedentary behaviour	101
Benefits of regular physical activity	103
The mind–body–spirit connection	113
Influences on participation in physical activity	114
Australia's participation in physical activity	116

Getty Images/Adie Bush

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ABOUT PHYSICAL ACTIVITY

There is a lot in the news and the media generally about the benefits of regular **physical activity**. But what does physical activity mean? Is it walking the dog or going for a run? Is it hanging out at the skate park or training for netball? How often do you need to be active? Being active five or more days a week is considered to be regular physical activity, but it doesn't mean going for a run every day; there are many more ways to be active!

physical activity movement of large muscle groups that requires the use of energy

WORKBOOK>>
Worksheet 3.1

critical + creative thinking

BRAINSTORM

Make a list of all the things you can think of that you would consider to be physical activity.



Alamy/David Grossman



Alamy/Myrleen Pearson



123RF/Iakov Filimonov

ISBN 9780170376181

Types of physical activity


Newspix/Ben Swinnerton

All of the physical activities that you listed in the brainstorm activity can be sorted into two categories:

1 incidental physical activity
2 structured or planned physical activity.

Incidental physical activity

Incidental physical activity is unplanned activity that you do during the day, usually when you are doing something else. For example, if you catch the bus to school, you may have to walk to the bus stop. This walking is considered incidental physical activity. Incidental physical activity can happen in many different ways: walking up and down the stairs in your home or walking around the shops are just two ways to be active without even realising it. Other types of incidental activity are shown in Table 3.1.

TABLE 3.1 Types of incidental physical activity

Type of incidental physical activity	Description	Examples
Household jobs and gardening	Completing household jobs that use energy	Mopping the floors, mowing the lawn, scrubbing the bathroom
Active transport	Travel to a place using physical activity	Riding a bicycle to school/work, riding a scooter to the shops
Occupational activity	Work-related tasks that result in energy expenditure	Digging a trench, wheelbarrowing soil, riding a bicycle to deliver advertising material
Play	Non-structured, informal, fun activity	Playing at the park, playing tag, climbing on playground equipment

Structured physical activity

Structured physical activity is the type of activity that is planned. Exercise, recreational and leisure activities and organised sport are types of structured physical activity. There are many examples of structured physical activity: organised sport, going to the gym, doing a spin or dance class, skateboarding and bushwalking are just a few!

Domains of physical activity

There are many types of physical activity and it is not difficult to fit these into your daily routine. Think about all the times through the day when you could be active. There are many places to be active: at home, at school, in the workplace and while getting yourself from one place to another. The places where you are active are called domains. There are four domains in which all activities take place:

- leisure-time activity domain
- household/gardening domain
- **occupational domain**
- active transport domain.

occupational domain
activity as a result of the work or job that you do

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Leisure-time activity

This is what you do in your spare time. You choose the activity you would like to do and you do it for your own enjoyment.

Household/gardening activity

This activity refers to the things you do around the house and garden. Vacuuming, sweeping the floor, carrying the washing, weeding the garden and raking the leaves are all examples of physical activity in the household and gardening domain.

Occupational activity

sedentary
a type of activity that does not use much energy, such as sitting

This activity is done as part of your job or work. Some jobs are highly **sedentary** and involve sitting at a desk all day, while others involve different amounts of activity. Labourers, cleaners, physical education teachers and tradespeople are examples of people who are likely to be very active as a result of their jobs.

Active transport

This is physical activity that results in reaching a destination. Walking, cycling, scootering and skating are all forms of active transport.

Walking to the bus stop is also a type of active transport. What other forms of active transport can you think of? Apart from the physical benefits for the person being active, what benefits are there for the community?

Swapping between sitting and standing at desks is good for heart health

By Grant McArthur, *Herald Sun*, 13 May 2013

OFFICE workers need to take a stand against lazy work habits to save themselves from heart disease and other conditions, research has found.

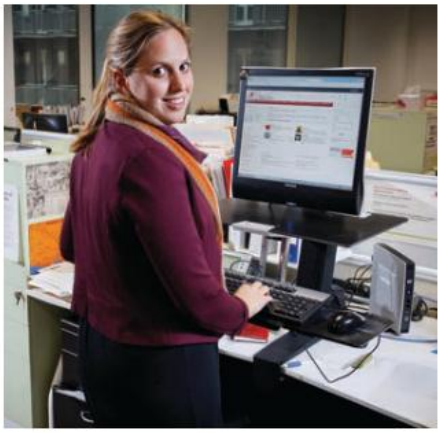
A Melbourne study has found swapping between sitting and standing at desks each half-hour during an office working week can equal 45 minutes' exercise.

With Australians now sitting for about 80 per cent of their working days, Professor David Dunstan, of the Baker IDI Heart and Diabetes Institute, said height-adjustable desks could make a significant impact.

'If you can replace four hours of the work day sitting with standing, across a five-day working week, the net gain could be equivalent to a 45-minute brisk walk,' he said.

'It sounds small, but everybody is trying to arrest the situation of weight gain, and this is another way of making a small impact.'

Backed by the Heart Foundation, researchers simulated a work space at the Baker's laboratory and examined 20 office staff working with regular periods standing up. Workers burnt 13 per cent more energy than when seated all day.



Newspix/Jake Nowakowski

The Heart Foundation's Kate Bolaffi standing at her computer

Source: www.heraldsun.com.au/business/worklife/swapping-between-sitting-and-standing-at-desks-is-good-for-heart-health/story

WORKBOOK>>
Worksheet 3.2

review & reflect

BRAINSTORM

Using all of the activities that you brainstormed (page 94), draw a diagram to show your understanding of how physical activity can be categorised. Your diagram must describe the physical activity as incidental or structured and each activity type can then be further classified into its domain.

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Physical Activity and Sedentary Behaviour Guidelines

To help understand how much activity is necessary, and how often to do it, the Australian Government created Australia's Physical Activity and Sedentary Behaviour Guidelines. These guidelines outline the minimum levels of physical activity that people should do to gain a health benefit and suggest ways to be more active in everyday life. The guidelines for children, teens and adults are shown in Table 3.2.

TABLE 3.2 Australia's Physical Activity and Sedentary Behaviour Guidelines

Age group	Physical activity guidelines	Sedentary behaviour guidelines

Children 5–12 years	• For health benefits, children aged 5–12 years should accumulate at least 60 minutes of moderate to vigorous intensity physical activity every day.
	• Children's physical activity should include a variety of aerobic activities, including some vigorous intensity activity.
	• On at least three days per week, children should engage in activities that strengthen muscle and bone.
	• To achieve additional health benefits, children should engage in more activity – up to several hours per day.
		• To reduce health risks, children aged 5–12 years should minimise the time they spend being sedentary every day. To achieve this:
		  • Limit use of electronic media for entertainment (e.g. television, seated electronic games and computer use) to no more than two hours a day – lower levels are associated with reduced health risks.
		  • Break up long periods of sitting as often as possible.

Young people 13–17 years	• For health benefits, young people aged 13–17 years should accumulate at least 60 minutes of moderate to vigorous intensity physical activity every day.
	• Young peoples' physical activity should include a variety of aerobic activities, including some vigorous intensity activity.
	• On at least three days per week, young people should engage in activities that strengthen muscle and bone.
	• To achieve additional health benefits, young people should engage in more activity – up to several hours per day.
		• To reduce health risks, young people aged 13–17 years should minimise the time they spend being sedentary every day. To achieve this:
		  • Limit use of electronic media for entertainment (e.g. television, seated electronic games and computer use) to no more than two hours a day – lower levels are associated with reduced health risks.
		  • Break up long periods of sitting as often as possible.

Adults 18–64 years	• Doing any physical activity is better than doing none. If you currently do no physical activity, start by doing some, and gradually build up to the recommended amount. • Be active on most, preferably all, days every week. • Accumulate 150 to 300 minutes (2½ to 5 hours) of moderate intensity physical activity or 75 to 150 minutes (1¼ to 2½ hours) of vigorous intensity physical activity, or an equivalent combination of both moderate and vigorous activities, each week. • Do muscle strengthening activities on at least two days each week.	• Minimise the amount of time spent in prolonged sitting. • Break up long periods of sitting as often as possible.

Source: Australian Government, Department of Health

Dimensions of physical activity

The three **dimensions** of physical activity in the national physical activity guidelines are known as the FIT formula:

F = frequency: how often people need to be active

I = intensity: how hard the activity needs to be

T = time: how long the activity should be done for.

dimensions
the parts or features that make up a situation, problem or thing

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Frequency

The frequency of physical activity required for children and youth is easy! You need to be active every day.

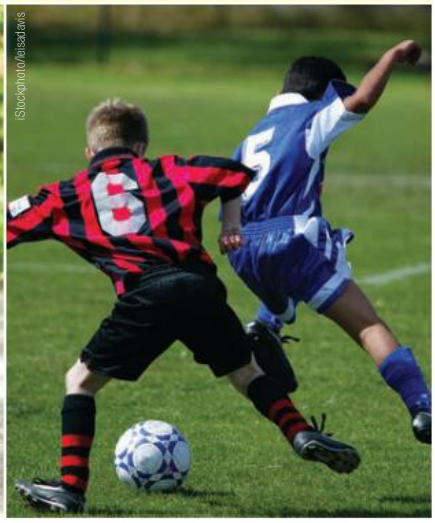
Intensity

energy expenditure the amount of energy used to complete an activity, measured in kilojoules

Intensity is a little more difficult to understand. Intensity is a measure of how hard the activity is, or how much energy is needed to do it (**energy expenditure**). Intensity can be classified as light, moderate (medium) or vigorous (hard), depending on how much energy is used. Some examples of light, moderate and vigorous activity are shown in Table 3.3.

WORKBOOK>>
Worksheet 3.3

TABLE 3.3 Examples of light, moderate and vigorous activity

Light intensity	Moderate intensity	Vigorous intensity
Will not leave you out of breath. Example: washing the dishes.	Will leave you feeling warm and slightly out of breath. Example: bike riding.	Will make you 'huff and puff' and raise your heart rate. Example: playing soccer.
 Shutterstock.com/Denizo71	 123RF/Jacek Chabraszewski	 iStockphoto/elisadaws

There are a number of ways to work out the intensity level of activity. Some, such as heart rate monitoring and **metabolic equivalent** (MET) require some equipment and often calculations, but others are simple to use. The talk test is an example of a simple method. If you can continue to talk comfortably while being active, then you are working at a light or moderate intensity. There are also a number of devices and smartphone apps that can be used to calculate how hard you are working during exercise.

metabolic equivalent (MET) a measure of the energy used during a physical activity. One MET equals the energy used by the body at rest; 3 METs is three times the amount of energy used at rest

Another method that can be used is **perceived exertion**. Using a scale, you estimate how hard you think you are working, based on how you feel. Table 3.4 shows a modified version of the Borg Rating of Perceived Exertion (RPE) scale.

perceived exertion a measure of how hard you think your body is working

Time

The amount of time you need to spend is simple too: you need to be active for at least an hour a day. This hour can be made up of a number of shorter periods of time, so long as they all add up to 60 minutes.

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GET UP AND GET ACTIVE!

Use the modified rating of perceived exertion (RPE) in Table 3.4 to determine how hard you are working when performing the following activities:

- walking two laps of the oval
- doing 10 burpees
- sprinting 100 metres
- climbing up a set of stairs quickly.

Record your RPE for each activity. Compare your results with those of others in your class, looking for similarities and differences in your results. Discuss reasons why the RPE for the same activity might be different for different individuals.

TABLE 3.4 Modified rating of perceived exertion (RPE)

1	This is easy! No effort at all.	6	I am slightly breathless, but I can still answer you if you talk to me.
2	I can do this all day.	7	I am puffing quite a bit now and even though I can talk to you, I don't want to.
3	I'm breathing a bit faster but still doing it easy.	8	I can't keep this pace up for long! I can just answer you, but I don't want to.
4	Starting to warm up now. I'm sweating a bit, but I can still chat while I exercise.	9	This is extremely hard and I can't do much more.
5	This is getting a little bit harder, but I am comfortable and happy to chat.	10	I am working as hard I can and can't go on any longer.

Type

The type of activity determines the type of benefits that are gained from being active. Type (T) can be added to the FIT formula to make FITT:

F = frequency

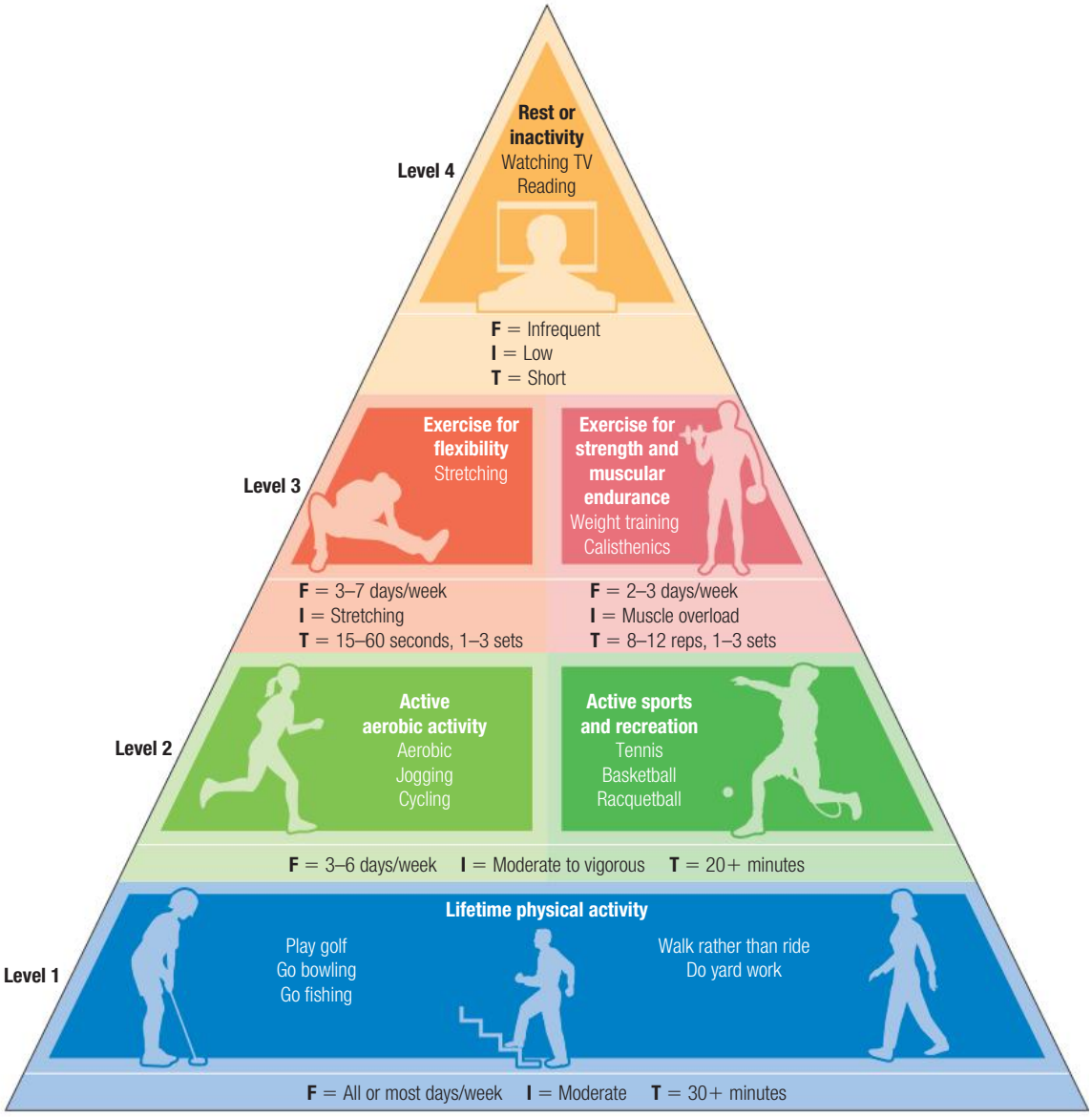
I = intensity

T = time

T = type.

Earlier in this chapter you looked at different types of physical activity and how to classify them. The type of activity you do is usually chosen for a purpose. Household activity is done to get chores done, active transport is done to reach a destination, occupational activity is part of a person's job and leisure-time activity is done for enjoyment. The type of activity can also be chosen for a certain purpose. For example you might want to improve your fitness, strength or sporting ability. This will determine the activities you choose. The physical activity pyramid categorises physical activity based on the FITT formula of frequency, intensity, time and type. When including physical activity in your daily routine, lifetime physical activities (the bottom layer of the pyramid) should be the physical activity that you do most.

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Physical activity pyramid

review & reflect

INTERPRETING DATA

Read each of the three cases. Using a table, arrange the information given for each person into the dimensions (frequency, intensity, time and type) of the Physical Activity and Sedentary Behaviour Guidelines. Refer to the guidelines to work out if each person is meeting the recommendations.

- **Case 1**: Emma, aged 12, walks 10 minutes to and from school each day with her friends. She also does athletics and trains for an hour and a half twice a week. She competes on Saturdays for three hours.
- **Case 2**: Charlie, aged 13, catches the bus to and from school each day. Every lunchtime, he plays basketball with his mates and is often hot and sweaty by the time he has to go back to class. At home, Charlie has to walk the dog for half an hour every day, and they usually end up playing fetch and running around chasing a ball together.
- **Case 3**: Jezreel, aged 11, is driven to school by his mum, who also picks him up. Jezreel loves to play on his iPad and spends most afternoons after school playing computer games. He plays football on the weekend in winter; the games go for 90 minutes.

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review & reflect

INTERPRETING DATA

Ask an adult, perhaps a parent or a grandparent, to list all of the physical activity they did for one weekday and one weekend day in the last week. You may need to remind them to think about the activity they did in each of the domains (leisure-time activity, household and gardening, occupational and active transport). Ask them to also write down how much time they spent doing each activity and the intensity (use light, moderate or vigorous to rank the intensity). Also record what you did on one weekday and one weekend day last week.

1. Make a table to present the data you have collected. Include the frequency, intensity, the time and the type (FITT) of activity done.
2. Did you and the adult you asked complete activities in each level of the pyramid? Were there any levels in which you didn't do any activity? If so, give reasons why both you and the adult didn't perform any activity in those levels.
3. Why do you think the Level 1 activities are at the bottom of the pyramid?
4. Did you and the adult you asked meet the Physical Activity and Sedentary Behaviour Guidelines? Use the information you collected to justify your answer.
5. Research the Physical Activity and Sedentary Behaviour Guidelines for older adults (65+ years) and children 0–5 years (http://ff178vic.nelsonnet.com.au). Compare them to the guidelines for adults and your age group. What are the similarities and differences? Present your information in a Venn diagram.

WEB

HOT

SCAFFOLD>>
Venn diagram

SEDENTARY BEHAVIOUR

You will also notice that the Physical Activity and Sedentary Behaviour Guidelines make recommendations for the amount of time spent in sedentary behaviour.

Sedentary behaviour involves sitting or staying in one place for long periods of time, where small amounts of energy are used. You spend a lot of time sitting throughout the day, not only when you are using electronic devices! Think about when you sit: in the car, in front of the television or in class. Even people who meet the guidelines spend much of their day sitting, so don't meet the sedentary behaviour guidelines. There are positive health outcomes for children and young people who spend less time sitting, so sit less, move more!

Minimising the amount of sedentary behaviour in your day is important for your health and **wellbeing**. There are many different ways to increase the physical activity in your daily routines and to reduce time being sedentary. Some small changes you could make include using the stairs rather than the lift or escalator; getting dropped off for school further away so you have to walk further; and putting the remote away so you stand up and move to change the channel on the television.

wellbeing
an overall feeling of wellness that combines physical, mental, social, emotional, cognitive and spiritual health

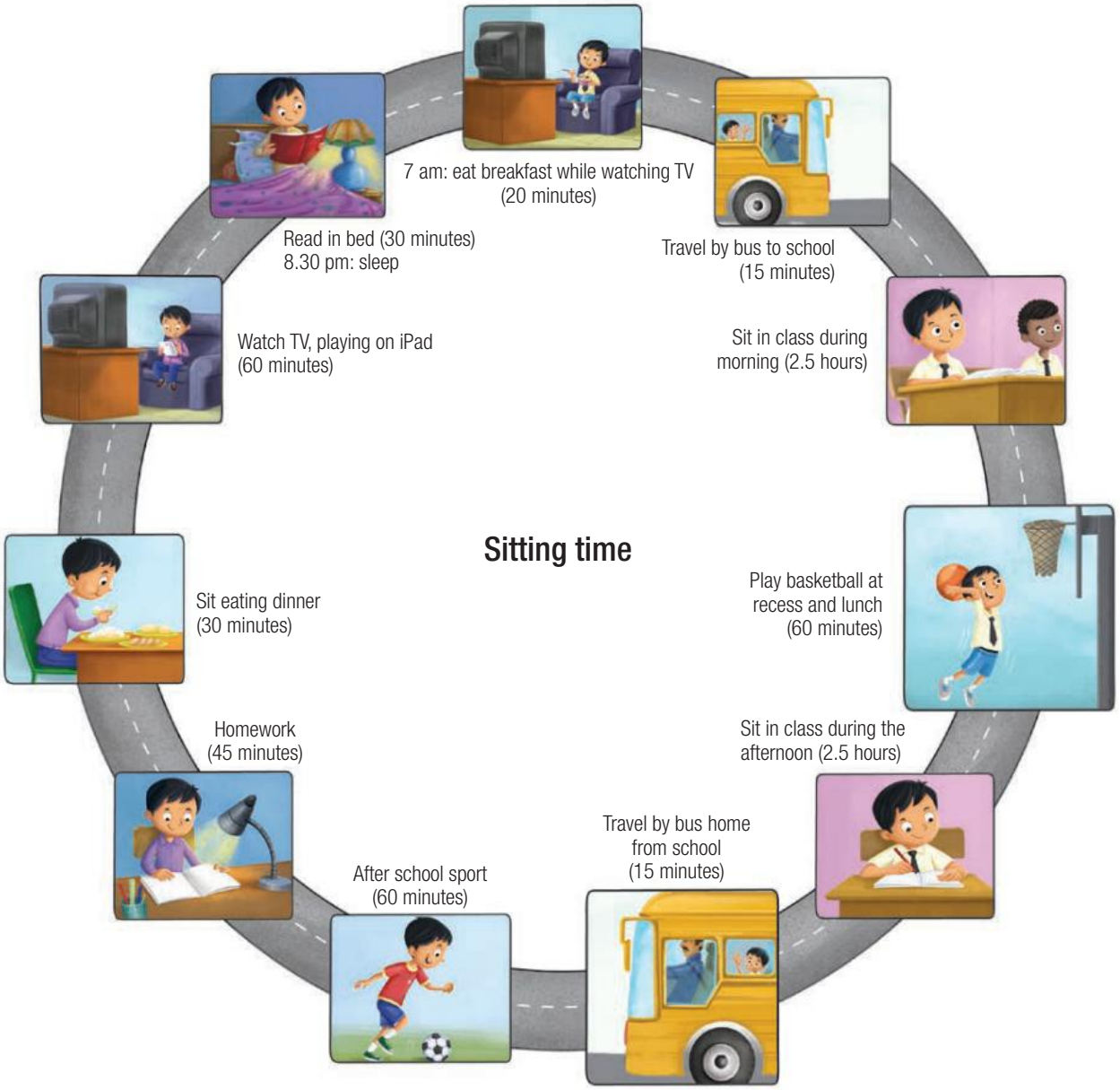
WORKBOOK>>
Worksheet 3.4

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review & reflect

A ROAD MAP OF YOUR SITTING TIME

Construct a 'road map' of your sitting time for a typical school day. Include the periods of time when you are active and when you are sedentary. Add up the total time you spent sitting for the day. You can model yours on the diagram or create another.



review & reflect

DEBATE

As a class, debate the statement, 'Advances in technology are making people lazy'.

Research your point of view to find examples to support or argue against the statement. Include all labour-saving devices (for example, cars, dishwashers, TV remote controls) in your interpretation of 'technology' in this task.

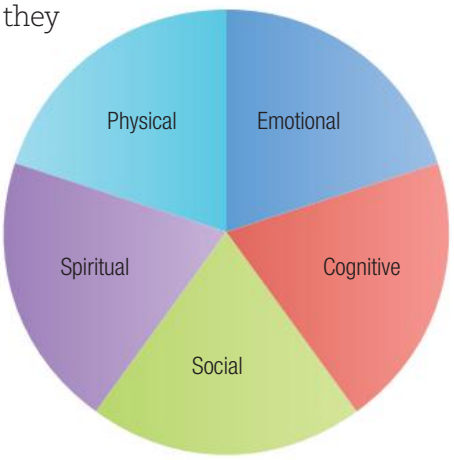
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BENEFITS OF REGULAR PHYSICAL ACTIVITY

Physical activity has many physical, social, emotional and **cognitive** benefits. These benefits affect you as a person and the community in which you live. When considering the benefits of being physically active, words like 'fit' and 'healthy' are often used to mean the same thing, but while they are related, they are different aspects of overall wellbeing.

cognitive relating to your ability to think, learn and remember

Wellbeing is how a person feels about life and how effectively they can function. A person who is 'well' is satisfied at school or work, is spiritually fulfilled (can find peace and purpose in life), enjoys leisure time, is physically fit, is socially involved (has friends) and has a positive emotional outlook (is mostly happy). Physical, emotional, cognitive, social and spiritual health are all parts of wellness. The World Health Organization defines health as 'a state of complete physical, mental and social wellbeing and not merely the absence of disease'. Fitness can be defined as 'the ability to carry out daily tasks with vigour and alertness, without undue fatigue, and ample energy to enjoy leisure time pursuits and meet unforseen emergencies'.



Dimensions of health and wellbeing

Physical benefits of regular physical activity

Fitness is specific to each person. Your daily tasks might not involve using much energy at all so your ability to carry out your daily tasks wouldn't require the same level of fitness as an athlete who runs 10 to 15 kilometres every day! The many parts to fitness are called the components of fitness. Health-related fitness components are those that are important to your health and reduce the risk of disease. Skill-related components are those that are important to your performance in motor skills and sport. The physical benefits of participating in regular physical activity can be health-related and/or skill-related. Table 3.5 lists some of the components of fitness.

TABLE 3.5 Health- and skill-related fitness components

Health-related fitness	Skill-related fitness
Aerobic capacity	Balance
Anaerobic capacity	Reaction time
Body composition	Coordination
Muscular strength	Agility
Muscular endurance	Speed
Flexibility	Muscular power

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The benefit of physical activity depends on the frequency, intensity and type of activity. If you look at the physical activity pyramid again (page 100) you will see that the different levels of activity and the frequency, intensity, time and type of activity are specific to the outcome of the activity. For example, the exercise frequency, intensity and time that you need to achieve flexibility is different from that required to improve your strength. Exercise programs and activities to improve different components of fitness are examined in more detail in Chapter 9 (pages 310–23).

cardiorespiratory system the functioning of the heart and lungs

cardiovascular relating to the heart and circulatory systems

circulatory system the system that circulates blood around the body, including the heart, blood and blood vessels

hypertension abnormally high pressure of blood in the blood vessels

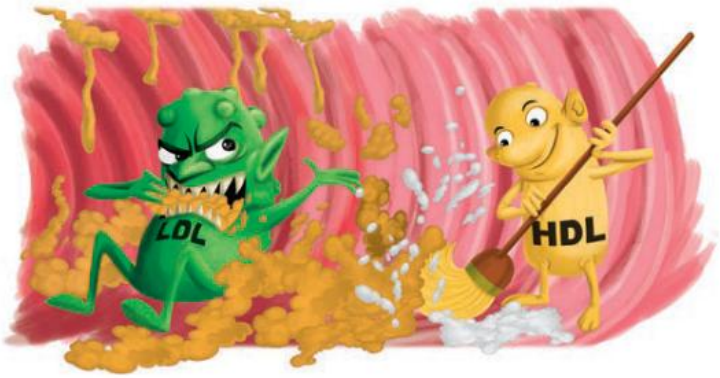
cholesterol a fatty substance produced naturally by the body and found in blood

Benefits for the heart

Regular physical activity has many benefits for the heart and **cardiorespiratory system**. It can increase the size and strength of the heart so that it can pump more blood with each beat and doesn't have to work as hard to deliver the blood to all parts of the body. Regular physical activity also helps keep blood vessels healthy and free from blockages, which improves the circulation of blood around the body. Having healthy **cardiovascular** and **circulatory systems** means less chance of heart disease, high blood pressure (**hypertension**), high **cholesterol**, heart attacks and heart failure.

CHOLESTEROL

Did you know there are two types of cholesterol or fatty substances in your blood? One is good and has protective properties and the other, when there is too much of it in your blood, is bad because it can block your blood vessels so the blood can't flow easily. Regular physical activity helps to reduce the amount of the 'bad' cholesterol, the low-density lipids (or LDLs) and increase the 'good' cholesterol, the high-density lipids (or HDLs).



WORKBOOK>>
Worksheet 3.5

weight-bearing exercise that requires the bones to support the weight of the body

bone density the amount of calcium and other minerals in bones, which is used to indicate how strong they are

osteoporosis a disease where bones lose their density and become fragile and brittle, leading to a higher risk of broken bones

arthritis a disease that causes joints to become stiff, swollen and painful

CHOLESTEROL AND CORONARY HEART DISEASE

Go to the American Heart Association website and watch a series of illustrations showing how a build up of cholesterol can lead to a heart attack: http://ffl78vic.nelsonnet.com.au. Search for 'cholesterol', then 'cholesterol and CHD'.

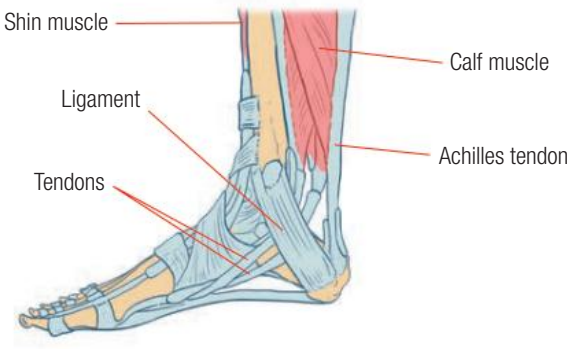
Benefits for the bones

Strong bones are important because they provide the framework of the body and, much like the frame of a house, they hold you up! Physical activity in childhood can make bones stronger and also helps to stop bones becoming weaker as people get older. **Weight-bearing** exercise has also been shown to increase **bone density**, reduce the risk of **osteoporosis** and can help manage joint-related diseases such as **arthritis**.

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Benefits for the muscles

Regular physical activity can increase the strength, endurance and flexibility of muscles, **ligaments** and **tendons**. Increased strength allows muscles to work more efficiently, reduces the risk of muscular and joint injury, and as you get older, allows you to stay more mobile and independent.



Ligaments and tendons of the ankle

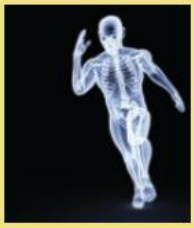
ligament
a strong structure that connects bones to other bones, such as at the knee, ankle and shoulder

tendon
a flexible but inelastic cord-like tissue that connects muscles to bones

There are many other physical benefits of being physically active. Some of these are summarised in Table 3.6

LIGAMENTS AND TENDONS
Ligaments join bone to bone and tendons join muscle to bone.

TABLE 3.6 Physical benefits of regular physical activity

Healthy heart	
 Shutterstock.com/Fabio Berti	Less risk of high blood pressure Less risk of cardiovascular disease (CVD) Lower 'bad' cholesterol
Healthy bones	
 Shutterstock.com/Dim Dimich	Stronger bones Decreased loss of bone density Stronger and healthier bones and joints May help arthritis sufferers
Healthy muscles	
 Shutterstock.com/Vita Khorzhevska	More strength Bigger muscles Greater flexibility Less chance of muscle injury
Healthy body	
 Shutterstock.com/michaeljung	Less body fat and risk of obesity Less risk of type 2 diabetes Less risk of bowel and breast cancer and other cancers Longer life Delayed physical effects of ageing Increased energy levels (takes longer to get tired) Improved immune system (don't catch colds often) Improved posture

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review & reflect

PHYSICAL HEALTH BENEFITS

Using Table 3.6, state the likely physical health benefits of the activities undertaken by these teenagers:

- Michael, aged 13, loves to run. He goes running with his dad three to four times a week for 30 to 40 minutes and he is usually really puffed at the end of his run.
- Holly, aged 12, doesn't really like sport but she loves to walk her dog, Jett. Holly walks Jett every day for 30 minutes and enjoys being outside in the fresh air.
- Zach, aged 14, does gymnastics twice a week. He does lots of strength-based activities where he has to lift or support his own body weight.

WEB

HEART FOUNDATION

Go to the Heart Foundation website (or link direct via http://ffl78vic.nelsonnet.com.au). Click on 'Data and statistics' and find some of the statistics about cardiovascular disease (CVD). Use the statistics to answer the following questions.

1. How many people does CVD affect each year?
2. What is the leading cause of death in Australia?
3. What are 'modifiable' risk factors?
4. How does physical activity fit in to the prevention of CVD?

critical + creative thinking

review & reflect

HEALTH PROMOTION CAMPAIGN

Part 1

Investigate the preventative health practices available in your community that involve physical activity. Which of those programs are relevant to young people?

Part 2

Using the information you have found, design a health promotion campaign for these preventative health practices. Present your campaign in one of the following formats:

- TV commercial
- radio commercial
- print media campaign (poster, brochure, newspaper, magazine, etc.)
- web-based campaign.

Remember, your target audience is people your age.



Shutterstock.com/Pinkcandy

Other benefits

Being physically active is not only good for physical health, it can also have social, emotional, cognitive and spiritual benefits.

Social health

Social health is your ability to make and keep healthy relationships with the people around you, such as family, friends and teachers. You are socially healthy when you have a

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network of friends and family that you can rely on for support and sharing life experiences. It is important and good for your social health to talk to people every day about what is going on in your life, including the good and the bad!

Social health is just as important to overall wellbeing as physical health. Poor social health can be just as bad for physical health as not exercising, or poor **nutrition**. Physical activity can improve social health through interactions with other people in team sports and recreational settings. Being active with someone else has the added benefit of making physical activity more enjoyable and fun.

nutrition
food that is needed for health and growth

There are many ways to improve your social health through physical activity. Some examples are volunteering at the local Auskick program, offering to walk an elderly neighbour's dog or getting involved in a community garden. The benefits are more than just being physically active: you get to meet new people, help others and contribute to the community. These benefits help to improve your social health.

Five tips for improving your social health

1. Develop healthy relationships with yourself and others.
2. Avoid unhealthy and destructive relationships.
3. Find out where to get support when you need it.
4. Involve yourself in your community.
5. Help other people.



Shutterstock.com/Stephanie Barbary

Why is it important to have a range of people to talk to, including adults as well as friends?

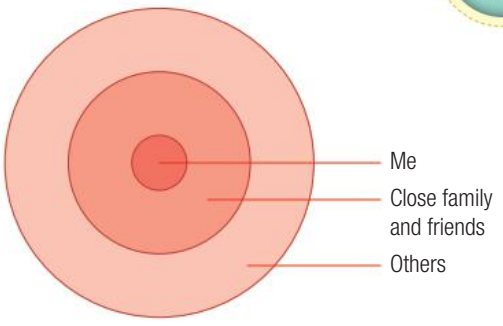
review & reflect

CIRCLE OF FRIENDS

Draw a diagram like the one shown. Write your name in the innermost circle; in the next circle write the names of the people who are most important to you; in the outer circle, write the names of the people who are in your life, but who you might not interact with as often.

From these people, list who you would turn to in each of the following scenarios:

- ➜ something great has happened and you want to share it
- ➜ you are having trouble at school and need someone to talk to
- ➜ you have had an argument with your parents and you feel like they don't understand you
- ➜ you are excited and nervous about starting at a new dance school.



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It is important that you have in your life people who you can trust and who will provide help and support when you need it. Among your circles of friends, there are people who you will talk to every day and share both little things and really important ones. For some people, this will be their parents; for others a close friend. You will only interact with some other people, such as school counsellors, at times in your life when you need them.

Emotional health



You can tell someone, or sometimes everyone, how you feel with one little picture

These days, you can text, iMessage, post and tweet your emotions with a simple click. Emotional health is the ability to recognise, understand and effectively manage your emotions and to use this knowledge when thinking, feeling and acting. Regular physical activity can reduce stress, anxiety and depression and has been shown to have a positive effect on self-esteem and sleep habits. How you think and feel can play a big part in how you behave.

Life as a teenager is not always happy and there are times when you will have to face situations that are difficult to deal with emotionally. These situations might include the break down of a friendship, starting at a new school, being bullied by classmates or even the death of a family member. On top of the expectations of just being a teenager, these can make life anything but carefree. The ability to thrive despite these challenges depends on your **resilience**. Being resilient means being able to adapt well to difficulty, trauma or tragedy – anything that causes stress – and manage feelings of anxiety and uncertainty.

SUCCESSFUL OR HAPPY?

Which of the two statements below do you think is true?

- ➜ Successful people are more likely to be happy.
- ➜ Happy people are more likely to be successful.

Research has found that '**chronically** happy people are in general more successful across many life domains than less happy people and their happiness is mostly because of their positive emotions … When people feel happy, they tend to feel confident, optimistic and energetic and others find them likeable and sociable.'

Adapted from 'The benefits of frequent positive affect: does happiness lead to success?', Lyubomirsky, King, Diener, and The Gallup Organization, *Psychological Bulletin*, of the American Psychological Association, Vol. 131, No. 6, November 2005

resilience
the ability to cope with and recover from difficult situations

chronic
a condition that lasts a long time or frequently reoccurs



BUILDING RESILIENCE

Go to the website of the American Psychological Association (or link direct via http://ffl78vic.nelsonnet.com.au). Click on Help Centre, search for 'Resilience guide for parents and teachers' and read through the '10 tips for building resilience in children and teens'.

1. Why is it important to develop resilience?
2. How is resilience related to emotional health?
3. What are the benefits of being emotionally healthy?

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CASE STUDY Girl Scouts' 'Science of Happiness' badge promotes positive psychology

THE Girl Scouts of the USA teamed with Dr Martin Seligman from the University of Pennsylvania to develop a 'Science of Happiness' badge. To earn the badge, 'cadettes' — Girl Scouts in sixth, seventh and eighth grades — must create and implement a month-long strategy for increasing their own happiness, says Alisha Niehaus, executive editor of Girl Scouts program resources.

The Science of Happiness badge takes cadettes through five steps, including 'Make yourself happier' and 'Get happy through others', each with its own recommended activities. Girl Scouts can make a collage about someone meaningful to them, write a list of things that make them feel good or create a family 'bliss box' of memories and souvenirs. Girls also keep a journal about the activities and their plans for future projects.



The badge is intended to boost the girls' awareness of the science behind happiness and psychology, Niehaus says. 'We're always looking for high-interest science activities, and this gives budding psychologists a chance to work in a research-oriented way', she says. It also helps prepare them for the future. 'Adolescence is such a hard time', says Niehaus. By showing girls that there are strategies for developing happiness, the Girl Scouts hopes to teach them that they have some control over their feelings and actions. 'It can be really helpful just figuring what makes you happy and trying it out to see what works for you', Niehaus says.

Source: Adapted from E Wojcik, *Monitor on psychology*, American Psychological Association, Vol 43, No. 1, p. 11, January 2012

MAKE YOUR OWN

Design your own 'happiness' badge. What elements of happiness would you include on your badge?

critical + creative thinking

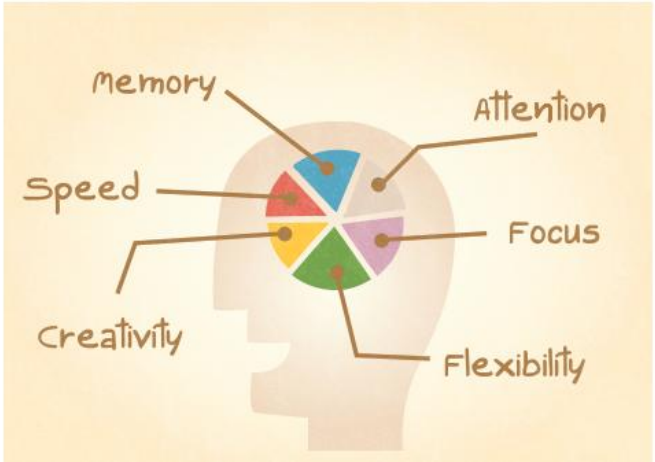
'POSITIVE EDUCATION'

Geelong Grammar School in Victoria has been collaborating with Professor Martin Seligman and his team from the University of Pennsylvania. They have developed 'Positive Education' — a whole-school approach to teaching and learning from early learning to Year 12. The Handbury Centre for Wellbeing gives students the best start for the rest of their lives through developing strategies to help them deal successfully with modern living, allowing them to feel confident, resilient and optimistic.

Cognitive health

Cognition is the ability to think, learn and remember. It is the basis for how you reason, judge, concentrate, plan and organise. Good cognitive health, like physical health, is very important.

Regular physical activity improves cognitive health. Many studies have shown that the structures in the brain increase in size and brains perform better with regular physical activity. This boosts memory and learning, improves decision-making ability and allows you to think more clearly and learn more effectively. That means, by increasing physical activity levels, you can also do better in your school work!



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UP + MOVING

MEMORY GAME

What to do:

1. Play a game of memory. You can use a card game or make your own with 10 pairs of words or pictures.
2. Place the cards face down on the table and take turns at locating the pairs.
3. Record how many turns you took to find all of the pairs.
4. Now, go outside and do five 50-metre sprints.
5. Repeat steps 1 to 3.

Discussion:

6. Did the number of turns required to locate all of the pairs stay the same, increase or decrease after your sprinting?
7. Based on your results, write a statement that shows the relationship between exercise and short-term memory.
8. Define cognitive health.
9. What are the benefits of regular physical activity for cognitive health?

Regular physical activity doesn't just improve cognitive function. It can also help older adults maintain their brain function so they continue to lead healthy, meaningful, independent lives. There are many benefits to the individual, and the community as a whole, of reducing age-related decline in physical, social, emotional and cognitive health. Older adults who are healthy are more likely to have fewer illnesses, be more mobile, have greater independence and have a lower risk of **dementia**.

dementia
a disorder that affects the functioning of the brain and interferes with a person's ability to live a normal life

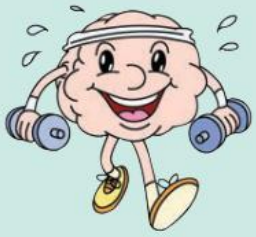


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Keeping active as you get older not only benefits the body but also the brain

BEEF UP YOUR BRAIN

Regular physical exercise, such as a brisk 30-minute walk three times a week, can increase brain power and maintain good brain function in older adults.



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iStockphoto/skynesher

Meditation is a great technique for connecting mind, body and spirit

Spiritual health

Spiritual health refers to a person's sense of belonging, meaning and purpose in life. Spiritual health is a personal and unique part of you and allows you to make sense of your world. People who are physically active are more likely to make connections with others, with nature and to be more aware of their spirituality. For some people, spirituality may be their religious beliefs and faith; for others it may be a sense of inner peace.

CLOSING THE GAP

There are a number of health and wellbeing initiatives that are designed to promote better health outcomes for Aboriginal and Torres Strait Islander people. The Australian Indigenous Health*InfoNet* website (link via http://ff178vic.nelsonnet.com.au) contains a wealth of information about Indigenous health issues. Follow the links on the website home page to find answers to the following questions.

- What is the 'Closing the gap' initiative?
- How is this initiative tackling chronic disease risk factors in the Aboriginal and Torres Strait Islander communities?
- Find a program aimed at improving the health and wellbeing of Aboriginal and Torres Strait Islander people that is running in your state and note the project title.
- What are the main aims of the program?
- Why is it important that people who share similar cultural values are involved in the development of health promotion activities for their own culture?
- Explore reasons why a sense of connection to country/place is important for sustaining health and wellbeing for Aboriginal and Torres Strait Islander peoples.

WORKBOOK>>
Worksheet 3.6

ISBN 9780170376181

critical + creative thinking

HOW 'HEALTHY' ARE YOU?

Are you as healthy as you think you are? Find out the state of your physical, social and cultural, emotional and spiritual health by taking this quiz. In your notebook, record your responses for each section to find a total for each type of health, then add up all the numbers to get a final score.

SCAFFOLD>>

How healthy are you?	Rarely or never	Sometimes	Most of the time	Always
Physical health				
I get at least eight hours of sleep each night	1	2	3	4
I get colds, flu or infections	4	3	2	1
I get at least 30 minutes of walking, playing or other exercise every day	1	2	3	4
I eat fruits and vegetables every day	1	2	3	4
I do some form of relaxation and stress release daily	1	2	3	4
Social and cultural health				
I get along with the members of my family	1	2	3	4
I have someone that I can talk to about my feelings	1	2	3	4
I have a friend or friends of my own age group	1	2	3	4
I consider how what I say might affect others	1	2	3	4
I consider what I say before I speak	1	2	3	4
Emotional health				
I manage to 'bounce back' after difficult things happen in my life	1	2	3	4
I can express my feelings of happiness, sadness, fear or anger without feeling silly	1	2	3	4
I am an extreme worrier	4	3	2	1
I am able to adjust to changes in my life	1	2	3	4
When I am angry or annoyed with someone, I can let them know in a calm, respectful way	1	2	3	4
Spiritual health				
I believe that my life is worthwhile	1	2	3	4
I feel that I have my place in the world	1	2	3	4
I look forward to the things my life may offer now and in the future	1	2	3	4
I think that all people and living things have an important place on this earth	1	2	3	4
I believe that everyone has something to offer in life	1	2	3	4

Source: Jenny O'Dea, *Everybody's different*, ACER Press, 2007

Physical health score

- **13–17 points:** you have excellent physical health and you can add five more points if you don't smoke. A perfect score for you will be 22.
- **10–12 points:** you are moderately healthy and you can add five more points if you don't smoke. You need to take more care of yourself. Think of ways that you can look after your physical self.
- **5–9 points:** you are in relatively poor physical health but you can add five more points if you don't smoke. You need to work on all aspects of your physical health. Even small changes will help you to become healthier.

Social health score

- **15–20 points:** you have excellent social health. You have people who care about you and support you, and you take care with the feelings of others. You might be a bit of a social butterfly!
- **10–14 points:** you are moderately healthy from a social point of view. You need to focus a little more on developing friendships and social relationships.
- **5–9 points:** you are in relatively poor social health. You need to work on all aspects of your social health, relationships and social networks.

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Emotional health score

- **13–17 points:** you have excellent emotional and mental health. You manage your emotions very well and you adjust to upsets and changes in your life very well.
- **10–12 points:** you are moderately healthy. You need to take more care of your emotional needs by expressing your feelings and talking things through with others.
- **5–9 points:** you are in relatively poor emotional health. You need to work on all aspects of your emotional health.

Spiritual health score

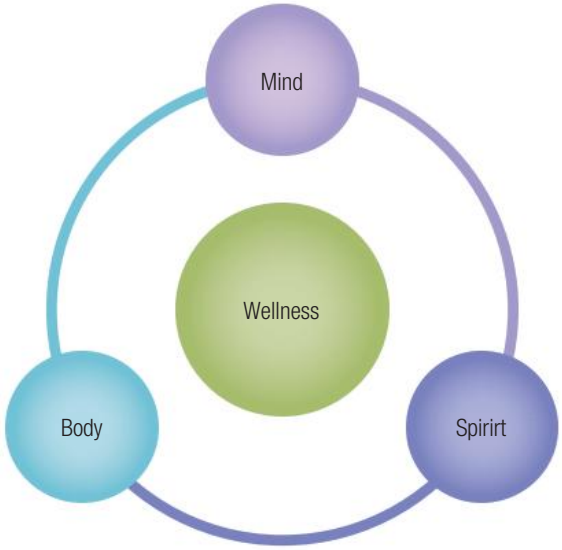
- **15–20 points:** you have excellent spiritual health.
- **10–14 points:** you are moderately healthy. But you need to take more care to recognise your spiritual beliefs and the meaning of your life.
- **5–9 points:** you are in relatively poor spiritual health. You need to work on all aspects of your spiritual health and the meaning and satisfaction of your life.

Total health score

- **61–79 points:** you have excellent overall health and score well on all of the different health scales. Keep it up and you can look forward to a healthy life.
- **45–60 points:** you are moderately healthy but you need to take more care of yourself in some areas. You may be doing quite well at some aspects of your health and neglecting other areas. Remember to take care of your 'whole' self and not just some aspects of your overall health.
- **22–44 points:** you need to work on all aspects of your health. Ask someone to help you to think of ways of becoming a more 'healthy' person.

THE MIND–BODY–SPIRIT CONNECTION

Many cultures believe that the mind, body and spirit are all connected. When these elements are all healthy, a person will experience overall wellness. While the mind–body–spirit connection was originally an Eastern philosophy, it is now widely accepted in Western cultures.



There are many practices that are believed to have health benefits, including meditation, prayer, tai chi and yoga. Each practice has a particular focus:

- meditation: mind
- yoga: body
- tai chi: mind and body
- prayer: spirit.

These practices aim to change your understanding of your mind, body and spirit and to increase awareness of your spiritual side.

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HEALTH BENEFITS OF MIND–BODY–SPIRIT PRACTICES

- Practising tai chi has helped reduce the number of falls experienced by elderly people.
- Meditating has been shown to reduce anxiety and depression.
- Practising yoga has been shown to decrease the pain associated with arthritis and to increase flexibility.
- Practising has been shown to reduce the frequency of asthma attacks.

Source: F Luskin, 'Transformative practices for integrating mind-body-spirit', *Journal of Alternative & Complementary Medicine*, 10 (Supplement 1), S-15, 2004



MIND–BODY–SPIRIT PRACTICES

1. Do a tai chi or yoga class.
2. Draw a concept or mind map to show your understanding of how a mind–body–spirit practice may help achieve optimal health. Start with the practice you did in the centre of the mind map.
3. Discuss why these types of activities are sometimes referred to as 'alternative' practices.
4. Examine how different cultures value the contribution of the mind–body–spirit connection to health and wellbeing.

INFLUENCES ON PARTICIPATION IN PHYSICAL ACTIVITY

The health benefits of being physically active are very clear. It is important to participate in regular physical activity and to reduce or limit sedentary activities. There are many opportunities to be active, and many choices to make. It is important to understand how and why you make decisions about the physical activities in which you participate.



WHAT I LIKE TO DO

Use the following table to list the physical activities that you do and why you do them, those that you would like to try and reasons why you may not have had the opportunity to give them a go.

SCAFFOLD>>
What I do

What I do	Why I do this activity	What I would like to do	Why I may not be able to do these activities
e.g. Play tennis	My friends are in my team	Go snow skiing	Too far to go, too expensive

Social influences

The people who you are active with or who encourage and support you to be active are called social influences. Often physical activity is done with other people – walking with a friend, going for a bike ride or a day at the beach with family, playing

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Alamy/Andres Rodriguez

Why do you think dog owners are more active than non-dog owners?

team sports with mates. Friends and family are two of the biggest influences on your physical activity behaviours, but a dog can also encourage you to be active! Did you know that dog owners are more likely to be active than non-dog owners?

Parents can be good role models for physical activity. By being active themselves, they are setting a good example and sending positive messages about the importance of lifelong physical activity to health and wellbeing. As well, they support your participation in physical activity in many ways, including driving you to training and games, paying for uniforms and club fees, buying equipment or by doing physical activity with you.

Cultural influences

Australia is a country with many cultures and long-established traditions. The Aboriginal and Torres Strait Islander people have a rich and wonderful way of life that has physical activity as part of its tradition. Dance is an important and unique part of the traditional ceremonies and is among the knowledge and stories of the ancestors that are passed down from one generation to the next. Chapter 8 has more information about some of the traditional games of the Aboriginal and Torres Strait Islander people.

All other Australians are migrants or descendants of migrants, meaning that there are many cultural influences on participation in physical activity. More than 25 per cent of all Australians were born overseas and these people have brought their own cultural influences with them.

WORKBOOK>>
Worksheet 3.7

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Alamy/Robert Harding Picture Library Ltd

Dance is an important part of storytelling in the Aboriginal and Torres Strait Islander culture

stereotype
an overly simple generalisation about a group of people or things

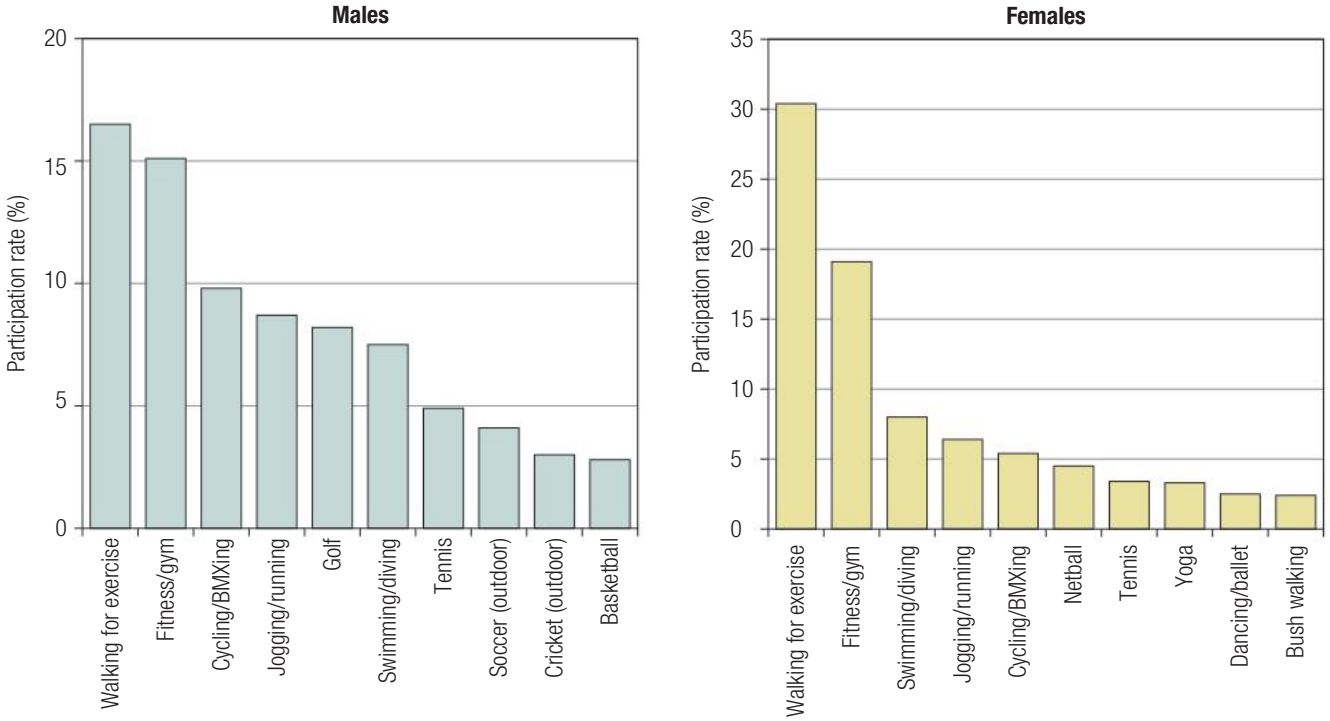
There are many **stereotypes** about Australians. One is that Australians love leisure time and watching or playing sport. Sport has been important in Australia's history. Have you heard of Phar Lap (a racehorse), Sir Donald Bradman (cricketer) or Dawn Fraser (swimmer)? What about the traditions of the Ashes, the Davis Cup and the Melbourne Cup? They all contribute to the way that Australians are regarded today.

AUSTRALIA'S PARTICIPATION IN PHYSICAL ACTIVITY

How active are adult Australians?

Australians appear to be physically active. A survey by the Australian Bureau of Statistics (ABS) in 2011 found that 65 per cent of Australians 15 years and older (11.7 million people) had participated in sport and physical recreation at least once during the previous 12 months.

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Ten most popular sports and physical recreation activities for Australian men and women

Source: *Participation in Sport and Physical Recreation, Australia, 2011–12,* ABS, 2012

INTERPRETING DATA

1. Why do you think walking is such a popular choice?
2. What activities did you expect to see in the top 10 that aren't there?
3. Why do you think this is the case?



Another survey by the ABS, the *Australian Health Survey: Physical Activity*, found that in 2011–12, adults spent an average of 33 minutes a day doing physical activity. However, this average of 33 minutes may not be enough to provide real health benefits, and an average is not always a good statistic to use! The survey actually found that 60 per cent (6 of every 10) of Australian adults were doing *less than* half an hour a day, and only 20 per cent (2 of every 10) of people were doing *more than* an hour a day.

The survey also found that 30 per cent of Australian adults spent more than five hours a day in non-active leisure activity, like watching TV or playing electronic games!

WORKBOOK>>
Worksheet 3.8

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How active are Australian children?

The Australian Bureau of Statistics has studied the participation in organised sport of children aged 5 to 14 years for some years. Its latest figures show several interesting facts:

- 60 per cent of children aged 5 to 14 years play sport. The highest participation rate was for those aged 9 to 11 years (66 per cent).
- Participation in sport was similar for boys (67 per cent) and girls (65 per cent), but for those aged 12 to 14 years, more boys (67 per cent) participate than girls (61 per cent).
- More Australian-born children play sport than children who have migrated here.
- The ACT (Canberra) has the highest number of children playing sport: almost three-quarters of all children living in Canberra play sport!

Source: *Children's Participation in Sport and Leisure Time Activities, 2003–2012*, ABS, 2012

TABLE 3.7 Percentage of children aged 5–14 who play sport in each state, 2012

At least one organised sport	Participation rate
	(%)
Australian Capital Territory	73
New South Wales	60
Northern Territory	54
Queensland	56
South Australia	63
Tasmania	58
Victoria	61
Western Australia	64

Source: *Children's Participation in Cultural and Leisure Activities*, ABS, 2012

critical + creative thinking

DATA ANALYSIS

Use Table 3.7 to answer the following questions:

1. Rank the Australian states and territories from most to least participation in organised sport.
2. Suggest reasons why some states have participation rates lower than the national rate of 60 per cent participation.
3. Investigate why the ACT may have such a high participation rate in organised sport.

The most popular choices for organised sport for boys and girls are shown in Table 3.8. However, the percentage of children who said they rode bikes, skateboarded, rollerbladed or rode a scooter was higher than any of the organised sports. More boys (70 per cent) than girls (57 per cent) participated in bike riding while 60 per cent of boys and 47 per cent of girls skateboarded, rollerbladed or rode a scooter.

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TABLE 3.8 Percentage of children aged 5–14 years who played sport or danced, April 2011–April 2012

	Boys (%)	Girls (%)
Soccer (outdoor)	21.7	6.5
Swimming/diving	16.5	18.9
Australian Rules football	14.9	–
Basketball	9.2	6.6
Cricket (outdoor)	8.6	–
Tennis	8.4	6.3
Martial arts	7.8	3.7
Rugby League	7.5	–
Rugby Union	4.0	–
Dancing	3.5	27.1
Athletics, track and field	3.2	3.1
Horse riding	2.0	–
Hockey	2.0	–
Netball	–	16.2
Gymnastics	–	8.1

Source: *Australian Social Trends*, ABS, June 2012

EXTRA ACTIVITY>>
Do the numbers add up?

WORKBOOK>>
Worksheet 3.9
Worksheet 3.10

Swimming and soccer the most popular sports for children

SWIMMING and soccer top the list of most popular sports for Australian kids, according to survey results from the Australian Bureau of Statistics (ABS) today.

The survey showed that 6 out of 10 Australian kids participated in organised sport in the previous 12 months.

Nearly one in five girls participated in swimming and almost one in four boys played soccer.

Children aged between 9 and 11 years were the most active, more boys participated in sport than girls, with two-thirds of boys involved in at least one organised sport compared with just over half of all girls.

The highest participation rate amongst the states and territories was in the ACT where nearly three quarters of kids participated in organised sport.

The survey also looked at children's use of technology and the internet.

Ninety per cent of children had accessed the internet in 2012, which was an increase from 79 per cent in 2009 and 65 per cent in 2006.

Nearly one third of children had a mobile phone in April 2012 and the likelihood of having a phone increased with age, with nearly three quarters of 12 to 14 year olds having a mobile phone.

Information collected on recreational activities showed that more kids are spending time on the internet, computers and games consoles than three years ago. However more children are also riding bikes, skateboarding and riding scooters.

On average, children spent 15 hours watching TV outside of school hours in the last two school weeks prior to the survey period.

Source: *Children's Participation in Cultural and Leisure Activities, Australia*, ABS, 2012

The environment and physical activity

Research has found that communities that have lots of outdoor spaces, such as parks and playgrounds, walking and bike tracks, and recreational programs, have higher rates of physical activity than those with fewer recreational facilities. People

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who live near a park that has well-lit walking tracks are more likely to use this facility to be active.

review & reflect

MY NATURAL ENVIRONMENT


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1. From the photos, select the natural environment that appeals to you most.
2. What makes it especially appealing to you?
3. What feelings do you get when you look at the picture?
4. What type of activity would you like to be doing in that environment?
5. What would be the benefits to your health and wellbeing of being in this environment?

The great outdoors

Being outdoors and active in a natural environment is great for health, but the availability of parks and green open spaces in communities can affect the amount of physical activity that people do. Primary-school-aged children are more active when the school playground has more 'green' features such as trees and gardens. Being active outdoors has been shown to reduce stress, blood pressure, heart rate and muscle tension and to improve mood. Another benefit of being outdoors is the ability to 'unplug' from electronic devices, although more and more are becoming portable devices so it's a good idea to leave them at home!

In my community

infrastructure basic facilities and services needed for the functioning of a community or society, such as roads, transportation, power lines, schools

Local communities provide **infrastructure** and opportunities for residents to participate in physical activity in their local area. These may include the following:

- aquatic facilities
- sports grounds
- walking tracks
- bike paths
- skate parks.

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There are also many opportunities to be involved in physical activity within the community:

- walking groups
- sport teams
- cycling groups.

Active communities

The Heart Foundation's 'Healthy, active communities' (http://ffl78vic.nelsonnet.com.au) is a resource package for local councils to use to create environments that support active and healthy lifestyles. This includes providing the **infrastructure**, such as bicycle paths, bike lanes and public transport options, that helps to increase community use of sustainable and physically active modes of transport, as well as ensuring that every member of the local community has access to outdoor and indoor physical activity facilities.

infrastructure
physical structures and facilities

DESIGN BRIEF

review & reflect

You have been approached by the local council to design an 'ideal' outdoor space for your community. The design needs to be aimed at increasing physical activity levels in all age groups within the community. You must consider access to the space, safety and aesthetics (the way it looks), as well as the sort of facilities you will include.

Present your design as an annotated poster or multimedia presentation.

EXTRA ACTIVITY>>
Map your community

BIKE RIDING

review & reflect

Bike riding has many benefits for your health and the community. Can you think of ways that would benefit your community if more people used cycling as a form of active transport?



Getty Images/Mark Bowden

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SUSTAINABLE TRAVEL

There are a number of ways people can change their behaviour to reduce car trips in favour of walking, cycling, car pooling and public transport. Select one of the initiatives from the list and explain how it may influence someone to change their travel behaviour. Go to http://ffl78vic.nelsonnet.com.au for links to the websites of the following programs:

- Active School Travel Program
- Bike Buses
- Bike Ed program
- Buy/Borrow a Bike scheme, such as Melbourne Bike Share
- Community-based cycling proficiency training
- Cycle events, such as Ride to Work day
- Bicycle recycling schemes
- Bikes on buses schemes
- Walk to School.

Increase physical activity, decrease sedentary time!

This chapter has shown how important physical activity is for overall health and wellbeing. Initiatives such as Australia's Physical Activity and Sedentary Behaviour Guidelines provide information about how much physical activity people of various age groups should be doing each day. Including physical activity into a daily routine is easier than most people think! Ideas include riding or walking to school, or getting off the bus or train one stop earlier; use the stairs at the shopping centre rather than the escalator; or being active at lunchtime. Increasing physical activity results in improvements in health and overall wellbeing.

WORKBOOK>>
Worksheet 3.11



Alamy/Lynne Carpenter

Swings that can be used by disabled children are being introduced into parks around Australia

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CHAPTER REVIEW

WORKBOOK>>
Worksheet 3.12

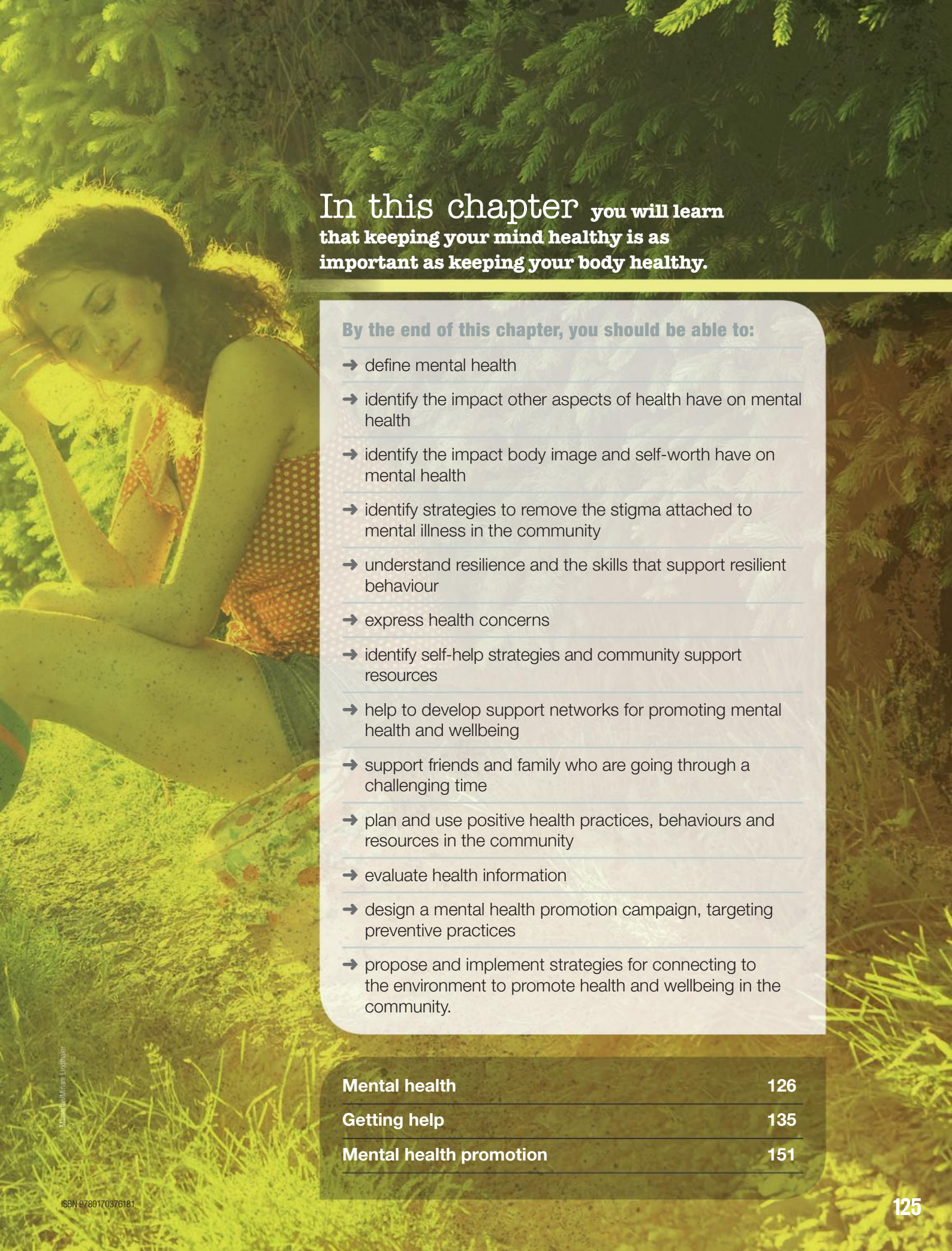
- Physical activity can be classified in two ways: incidental, which is physical activity that occurs as a result of performing another task; or structured, which is planned physical activity such as a game or sport.
- Fitting physical activity into your daily routine can be achieved through leisure time physical activity, household and gardening tasks, occupational or work-related tasks and active transport.
- Australia's Physical Activity and Sedentary Behaviour Guidelines for each age group are recommendations for levels of physical activity and sedentary behaviours that have been shown to reduce health risks.
- The dimensions of frequency, intensity and time (FIT) help to determine how often, how hard and how long to perform physical activity.
- The physical activity pyramid can help decide which types of physical activity should be done.
- Sedentary behaviour involves sitting or staying in one place for a long period of time and can be bad for your health.
- It is important to try to minimise the amount of sedentary behaviour in your day by making small changes to your daily routine.
- Overall health and wellbeing includes physical, social, emotional, cognitive and spiritual health.
- The heart, bones, muscles and the whole body benefit from regular physical activity.
- There are many health campaigns aimed at increasing the physical activity levels of Australians.
- Social health is the ability to maintain healthy relationships with the people around you. Physical activity can improve social health through positive interactions with others while being active.
- Emotional health is your ability to recognise, understand and manage your emotions.
- Cognitive health is important for thinking, learning and remembering and can be enhanced with regular physical activity.
- Spiritual health refers to a person's sense of belonging, meaning and purpose in life. It is the essence of the mind–body–spirit connection.
- There are many opportunities to be active in your community. The choices you make are influenced by social (friends and family), cultural (who you are) and environmental (spaces and facilities) factors.
- Most Australians don't participate in enough regular physical activity.
- Australian children participate in a range of organised sports and other recreational activities such as bike riding, skateboarding and riding a scooter.

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MENTAL HEALTH AND WELLNESS



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In this chapter you will learn that keeping your mind healthy is as important as keeping your body healthy.

By the end of this chapter, you should be able to:

- define mental health
- identify the impact other aspects of health have on mental health
- identify the impact body image and self-worth have on mental health
- identify strategies to remove the stigma attached to mental illness in the community
- understand resilience and the skills that support resilient behaviour
- express health concerns
- identify self-help strategies and community support resources
- help to develop support networks for promoting mental health and wellbeing
- support friends and family who are going through a challenging time
- plan and use positive health practices, behaviours and resources in the community
- evaluate health information
- design a mental health promotion campaign, targeting preventive practices
- propose and implement strategies for connecting to the environment to promote health and wellbeing in the community.

Mental health	**126**
Getting help	**135**
Mental health promotion	**151**

Maskenfee/Miriam Lindhaler

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MENTAL HEALTH

In Chapter 3 you learnt about physical health, social health, emotional health, cognitive health and spiritual health. A further aspect of your overall health and wellbeing is your **mental health**.

mental health
a state of wellbeing where a person is able to cope with stress and live productively in their community

The World Health Organization defines mental health as 'a state of physical, mental, spiritual and social wellbeing in which the individual realises his or her own abilities, can cope with the normal stresses of life and is able to make a contribution to their community. Mental health and wellbeing is a combination of both positive feelings and positive functioning'.

MENTAL HEALTH FACT

Approximately one in four young people experience a mental health issue

Source: www.beyondblue.org.au/resources/for-me/young-people

WHAT IS THE COST OF MENTAL HEALTH?

1. Approximately $7.6 billion was spent on mental health-related services in Australia in 2012–13. This equates to $332 per person. This has risen from $248 per person in 2006–07.

   Source: *Health expenditure Australia 2012–13*, AIHW, Canberra, 2014

2. It is also estimated that the cost of mental illness in Australia is about $20 billion, mainly because of people not being productive or not attending work!

   Source: www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features30March%202009

review & reflect

MENTAL HEALTH WORD CLOUD

Brainstorm as many words that come to your mind when you hear the words 'mental health'. Use your words to make your own word cloud, like those below. These might be appropriate to hang up around the school.

Depression and anxiety don't discriminate. **Do you?**



Positive and negative attitudes towards mental health

The words 'mental health' sometimes have a negative association in society and people think it's a subject that shouldn't be talked about. Often it is because people don't understand what mental health is and therefore don't talk about it openly. Some people are even scared to talk about it!

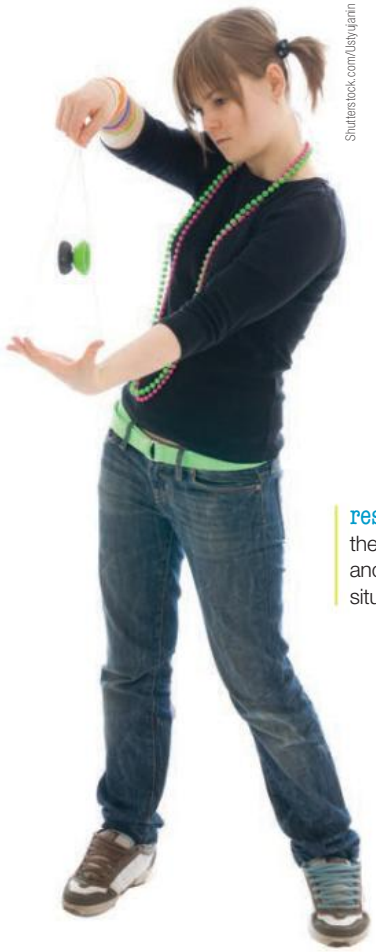
Count how many words on the list you made for your word cloud are negative and how many are positive. There are both positive and negative parts of mental health, but if you concentrate on making the words 'mental

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health' positive, more people will be willing to talk about it. If it is easier to talk about, more people might feel confident seeking help if they need it, and won't feel embarrassed. It is not embarrassing to have a mental health issue, just as it is not embarrassing to have a physical health issue. The best thing to do is identify the issue and get help. Challenging ideas in society is hard to do, and it will take time, but the more people that speak up about it, the more accepted it will become.

People with good mental health:

- accept the world as it is and are realistic
- like themselves and have positive self-image
- act freely; they can be themselves and make their own decisions
- can express their feelings and handle their emotions well
- have good relationships and communicate well with others
- take responsibility for their own actions and don't blame others
- work towards a future and try to achieve their goals.

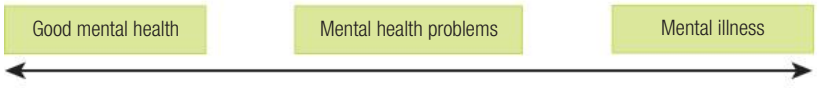


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People with good mental health are resilient. As discussed in Chapter 3, **resilience** is the ability to deal constructively with change or challenge. Resilient people are able to keep or return to their social and emotional wellbeing when they encounter difficult events. Imagine a yo-yo that comes back up to your hand after throwing it or someone doing a bungee jump. This capacity to bounce back is what resilience is all about. When something happens to you, how quickly do you bounce back?

resilience
the ability to cope with and recover from difficult situations

You could think of mental health as a scale or **continuum**, with good mental health at one end and mental illness at the other.



Continuum of mental health issues

continuum
a type of scale where the two ends are very different from each other (sometimes opposite), and there are varying elements in between

Mental health problems such as low self-esteem, anxiety, depression and panic disorders would fall somewhere along the continuum, depending on how much they affect your life. People may not stay at the same place on the scale for their whole life; there are times when they might move

mental health problems
issues that affect the way people feel, think and behave, the most common being depression and anxiety disorders

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mental illness
a diagnosable illness that has a deep effect on quality of life, can include schizophrenia and bipolar disorder

along the scale. Everyone has times of good mental health and times when they may need help. Mental health problems that go on for a long period of time can develop into **mental illness**, which is why it is so important to get help early.

face 2 face

HANDLING YOUR FEELINGS

Remembering back to when you were a child, were you taught how to handle feelings such as anger, sadness or fear? Do those same methods work now? Some strategies that help deal with these feelings are discussed later in the chapter.

The other aspects of health – physical, social, emotional, cognitive and spiritual – can influence mental health. As discussed in Chapter 3, good physical health has a positive impact on the other aspects, including mental health and wellbeing. The same can be said about positive mental health having a positive impact on the other aspects. Even if, for example, your physical health isn't all that good, it is still possible to have a positive outlook and see possible ways of improving your physical health. If your mental health is not good, you may not feel like socialising with your friends or family and this could lead to you feeling isolated or alone. This means your social health is affected.

When all aspects of health are good, you are more likely to look after yourself and have a positive outlook, including being positive about yourself on the inside and out! Knowing who you are and having a realistic body image are key aspects of having good mental health and wellness.

WORKBOOK>>
Worksheet 4.1

Identity and self-worth

identity
the characteristics that make us who we are

Knowing who you are is a great step towards being resilient. These are a few examples of what you know if you know who you are:



iStockphoto/jianying yin

- what you like
- what you will and won't do
- where you want to go in life.

This helps you to make good decisions because you are less likely to choose something that will have a negative impact on your life. For example, if you identify as being good at sport, you are less likely to stay up playing computer games all night before a big game, or you are less likely to skip practice because you know how important practice is to becoming a better player. Someone who is resilient usually has a strong sense of **identity**.

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Look beyond the stereotype – appearances can be deceiving

Stereotypes

Identity can be influenced by the stereotypes that exist around the world. Stereotypes based on gender, culture, religion, sexuality and disability can have an impact on how people live their lives. The media, families, friends, school, church, community groups and/or workplaces often reinforce these stereotypes. The strength of your mental health can determine whether you feel you need to fit a stereotype. If you have good mental health, you are more likely to be yourself, whether that fits a stereotype or not. A strong sense of identity will make challenging stereotypes easier as you are less likely to worry about what other people think of you.



Who are you?

WORKBOOK>>
Worksheet 4.2

I'M A STAR!

The class will sit in a large circle for this activity; each person has a pen. Your teacher will give you a worksheet. You write your name at the top of the worksheet, and then pass it to the classmate on your right side. They will write down one reason why they think you are a star, and then pass the worksheet on to the next person on their right. Eventually you will get it back, and read what your classmates feel makes you a star!

face 2 face



Think positively!

YOUR IDENTITY

To truly know your own identity, you need to know how you are similar to others and also how you are different from them.

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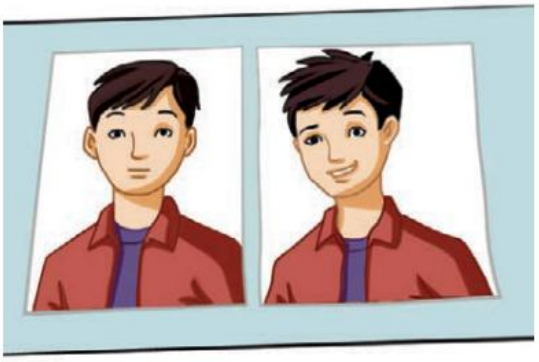
Body image

Body image is the way that you see yourself and what you think others think of you. As you grow up you become more aware of what you look like and how you present to society. Moving away from your family and forming your own identity is a normal process that everyone goes through. It can be hard at times because there are many influences in your life. What your family or carers think might be very different from what your friends think; you need to decide what you think.

critical + creative thinking

PICTURE YOURSELF

Do this activity in pairs. Your teacher will give everyone two pieces of paper and pens or pencils for drawing. If you really don't want to draw, you can use words to describe yourself and your partner.



You may not see yourself the same way others see you

1. On one piece of paper, draw a picture of yourself. Do not let your partner see the picture.
2. On the second sheet of paper, draw a picture of your partner. Do not let your partner see the drawing.
3. When both of you have finished two drawings, exchange the picture you drew of your partner. You will now have two drawings of yourself.
4. Look for similarities: what are they?
5. Look for differences: what are they? Why are they different?

WORKBOOK>>
Worksheet 4.3



Sometimes our view of ourselves may not be realistic

Sometimes your idea of how you look is quite different from reality. You might be hard on yourself and think that your ears stick out more than they really do or that you are fatter or thinner than you really are. Sometimes what you see and what others see are two different things. When what you see affects the way that you think about yourself in a negative way, it becomes a mental health issue.

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Forming our body image

There are various things that influence your body image, including the media, your family, friends and other people, and transitions in our life. How does this happen?

The media

There is a real pressure on both boys and girls to look a certain way. Boys are encouraged to look strong and athletic; girls are encouraged to look thin and pretty. Where do you think these ideals come from?

Every day we see advertisements, magazines, television programs, movies and books that show these 'ideal' body types. Messages seem to come from everywhere about having a certain 'look'. If you achieve this look, it means that you will have more fun, more friends, be popular, wear cool clothes, get a boy or girlfriend, have money and be successful. Can your body type bring all of these things? Of course not, but these pressures for some young people are real and can actually cause harm. Bodies are different; for some young girls, it is impossible to fit into a tiny dress because they are simply too tall, or their bone structure makes it impossible. Too often, ideals about having the perfect body are associated with weight, but you could be severely underweight and still not fit into that ideal. Everyone needs to be realistic in their expectations of what their bodies can and cannot be.



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What does it really take to look like this?

'School asked us to airbrush class photo', company says

By Megan Levy, *The Age*, 6 April 2011

A photographic company that digitally altered the school portraits of six Melbourne students says the girls' college at the centre of the controversy specifically requested that the images be airbrushed.

Parents were outraged yesterday when their daughters returned home from Our Lady of Sion College in Box Hill with school photographs that had been touched up to change hairstyles, hide ears and eliminate earrings.

Several students had their ponytails removed, while one parent, Mary, said her 16-year-old daughter had hair drawn across her ears and ended up sporting a ridiculous 'bouffant'.

'It didn't even look like her in the end, it just didn't look like her at all,' said Mary, who did not want to reveal her name to protect the identity of her daughter.

'My daughter said to me, "What was wrong with me mum? Why did they need to do that?" It's just sending the wrong message to the girls. Their self-esteem isn't the best at that age.'

The college today said the bizarre and embarrassing mix-up was a result of a break-down in communication, after it failed to check the final proofs of the portraits.

However the company that took the photographs, National School Photography, this afternoon said the college had specifically requested for the portraits be photo shopped.

Question

What does this newspaper article say about society and the pressures on young people to look a certain way?

Source: www.theage.com.au/victoria/school-asked-us-to-airbrush-class-photo-company-says

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WHAT'S THE DIFFERENCE?

1 Search the internet for video clips of the 'Dove Evolution' and 'Dove campaign for real beauty (male version)'. Watch the clips.
- ➜ What changes were made to the models?
- ➜ Why were these changes made?
- ➜ Do you think digital alteration ('retouching') of photos should be allowed?
- ➜ What impact does this have on young people?
- ➜ Do you think that most young people know about photo retouching?
- ➜ Do the videos change the way that you think about the media?
- ➜ What would you say to the media industry about this practice?

2 Write an argumentative essay either for or against digital alteration of photos.

DEBATE

After reading the article on the next page, form two debating teams, each with five members, with the rest of the class as adjudicators. The subject of the debate is: 'Schools should be able to digitally alter school photos.' After the debate has been won, the 'audience' can also supply arguments 'for' or 'against'.



Should school photos be digitally altered?

WORKBOOK>>
Worksheet 4.4

Advertising

How does the media benefit from making us think we need to change ourselves? Advertisements are made to sell products. If they can convince you that you are lacking in some way, and a certain product would improve you, you may be inclined to buy the item. If you believe the advertising and buy the product, the advertisement has done its job. With so many similar products on offer, advertising needs to be inventive in order to appeal to buyers.

Family, friends and other people

Unfortunately, pressure sometimes comes from individuals, family and peer groups, either directly or indirectly. For example, a friend or family member might make a comment about your body that makes you think you need to change something, even if that is not what they meant. Sometimes our parents or carers have their own body image issues and make comments that affect their children. Messages they send may not even be verbal. For example, if you see an adult in your life regularly standing on the scales and making negative comments about putting on a kilogram or two, you may receive the message that we should pay very close attention to our weight, or that putting on weight is a bad thing. For young people, this can be dangerous because you are going through a period in your life when you are putting on weight because you are growing. It would be very harmful to interfere with this

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process! Look at the following images and think about how the comments would affect the way that you behave or the decisions you make.



'Your jeans are getting a bit tight', Mum says



'You will never be a supermodel, Sienna, you have such a big appetite', Dad said



'I wonder when your muscles will start to grow, Ben', says Coach



'Don't you think you should do something about that acne?', says your friend

Transitions in life

Puberty can come at a bad time. Just when you begin to be comfortable with your body and think you know what it looks like and what it can do, all these amazing changes occur. You might start feeling differently about your body during this time. You can learn more about the physical and emotional changes that happen during puberty in Chapter 5 (pages 173–81).

If puberty starts for you before it happens to your friends, you might feel a bit isolated because there may not be others you feel comfortable talking about the changes with. If puberty occurs late for you, you may feel like everyone else has joined a club that you are not invited to, and that also might make you feel alone. No matter when puberty happens for you, it can be filled with feelings of uncertainty, excitement, fear, interest, worry, fascination and concern. Talking about these feelings can help, as it is a normal process that everyone goes through. It is important to identify people or resources you can contact to express any health concerns you have.

Another type of transition during teenage years is the change in the relationship with your family, as you move from being a child to an adult and take on more and more responsibilities. Sometimes young people don't think their parents understand what they are going through, because it has been so long since they were teenagers. On the other hand, some parents don't think their adolescent child understands the dangers in life, and they want to keep them safe. There are always two sides to any story and two viewpoints that need to be considered. In the activity on page 145 you will find some skills to help with these situations. Good relationships with family and friends are important as they are protective factors that help to strengthen your mental health (see Table 4.1, page 152).

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stress
a physical response to events that may make you feel threatened or upset your balance in some way

eustress
stress experienced from a positive event

distress
stress experienced from a negative event

stress response
when the body senses danger, whether real or imagined, defences kick in to high gear in a rapid, automatic process known as the 'fight-or-flight' response

The impact of stress

Stress is a normal part of life. We often think of it as a bad thing, but it is not always! Good stress (**eustress**) is when something good happens and you have a physical response to it, like the sense of excitement that you might feel if you won a prize and had to make an acceptance speech. Bad stress (**distress**) is when you have the same physical response but to something that isn't so positive, such as doing a final exam. The extent of the **stress response** will depend on how stressful the situation is. This 'fight-or-flight' response keeps you attentive and is your body's way of keeping you safe. In some cases it can even save your life.

What causes stress?

Stressors are the things that cause people stress. Some examples of stressors that might happen in your adolescent years:

- making, keeping and breaking friendships
- competing in a sporting or other school event
- dealing with family situations
- making a presentation in front of people
- going through puberty (what to expect and what changes occur)
- changing relationships
- managing school work and study
- handling pressure to do well in life
- starting at a new school or starting a new year level
- dealing with money
- managing accommodation
- juggling demands
- understanding body image
- making decisions.

Can you add to this list? What things cause you stress? Some of these can be easy to deal with and some really hard. The types of stressors can be different at different times of your life. There will be things that stress you out right throughout your life – even as an adult! If you learn good coping strategies now, the things that cause stress won't have such a big impact.

FIGHT OR FLIGHT

The body signals the nervous system to make you more alert, and the hormone system gets the heart going. Both of these work together to help you get through, and in some cases survive, a difficult situation. This 'fight or flight' response is an instinct.



Stressed out!

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Reactions to stress

Your body may have a physical reaction to stress. You may feel or have these symptoms:

- increased heart rate
- faster breathing
- dry mouth
- increased sweating
- clenching muscles
- queasy stomach
- clammy hands
- sharpened senses
- grinding teeth.

If your body is under stress for too long, it becomes difficult to function normally. You will start to experience physical, mental, emotional, social, cognitive or behavioural symptoms that could include:

- changed eating patterns
- problems remembering
- feelings of sadness
- poor decision making
- inability to keep up with schoolwork
- changed sleeping patterns
- inability to relax
- tiredness
- moodiness
- being bad tempered
- nervousness
- negativity
- unexplained pain
- increased heart rate.

If you learn to recognise your body's responses to stress early, you can do something about it to avoid negative changes.

WORKBOOK>>
Worksheet 4.5

GETTING HELP

Getting help for a mental health issue can sometimes be difficult. There are factors that influence how easy it is to get help. It is difficult to make generalisations about any individual or group of people, however, there are some issues that need to be considered when understanding why getting help may be difficult. If people don't seek help when it is needed, their mental health and wellness can suffer, which can have an impact on all aspects of their lives.



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Finding help

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The stigma of mental health issues

If you have a cold, or even a more serious illness, you would usually tell people and perhaps feel better just by talking about it. Mental health can be different because there has in the past been a **stigma** attached to it. Often people don't understand and are not comfortable discussing mental health issues, so the person with the issue feels alone and unsupported. When you look at the following barriers to getting help for mental health issues, think about how people might respond emotionally if these barriers are in place. As an example, if you didn't speak English very well, and you didn't understand what the doctor was saying but didn't feel like you could ask questions, how might that make you feel? How might your mental health be affected?

stigma
a mark of shame or disgrace attached to something

Access to help

Access to services may be difficult because of lack of transport, money, disability or knowledge of available services. Depending on where you live, you may or may not be able to get help when you need it. In some rural towns everyone knows everyone else, even the health professionals, and you may not want to discuss mental health issues with them. In some remote places in Australia, the doctor may only be available on a fly-in-fly-out basis. The distance patients and health-care providers must travel contributes to the overall expense of treatment, which may mean that some people cannot afford the services they need.



Let's cut stigma out!

Language barriers

Most doctors will speak to their patients in English if they don't have immediate access to an interpreter. So the patient must just do their best with the language they have. Sometimes an adult patient might take a child with them to appointments so they can interpret, but the child may not understand or have the right words to translate the information. Telephone interpreting services are also available to non-English speakers.

Grief and loss over leaving home country

Migrants and refugees are people who have left their home country. Sometimes, when they didn't want to leave, they can face a difficult time starting a new life in a new country. Adapting to a new life without family or social support means that migrants often face issues such as isolation, unemployment, unrecognised qualifications and differences in language and social norms. In addition, some refugees have experienced significant hardship; all these factors have the potential for a large impact on a person's mental health.

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Time

Sometimes it takes more time to get the help needed for a mental health problem than for a general health issue. There are several reasons for this:

- time is needed to establish trust between the person being treated and the health professional
- it takes time to get family members involved to help with decision making and/or treatment
- it takes time to organise interpreters, ensure understanding and arrange any necessary follow-up care.

Cultural considerations

People understand, talk about and find help in different ways. When talking about mental health with other people, it is important to be respectful of their culture. Aspects of verbal and non-verbal communication such as eye contact, types of body language and the use of certain words can be seen as judgemental, and communication may break down. It is always best to ask the person if they are comfortable talking about these issues.

WORKBOOK>>
Worksheet 4.6

Relaxation techniques

It is useful to know some **relaxation techniques** to use when you feel yourself becoming stressed. Sometimes, stress can be so overpowering that you can't think of anything productive to do. But if you are able to calm yourself down and clear your head, you will be able to make better decisions about the situation that's creating the stress. With a clear head you can see things from different points of view and come up with solutions to the situation.

relaxation techniques
methods used to calm down or relax

Some relaxation techniques to try:

- **breathing** – just concentrate on breathing in and out. Don't listen to anything else but the air coming into your lungs and then going out
- **meditating** – concentrate on one thing or a repetitive action where your mind is focused on that action alone. Some things that can help with meditation include repetitive exercise, drawing, playing or listening to music.
- **practising mindfulness** – focus your mind on one thing at a time and take the time to enjoy what you are seeing. If you find your mind is wandering, bring it back to the object.
- **listening to music** – choose a slow or relaxing song



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YOUR SMILING MUSCLES

According to Dr Song from the University of Chicago Medical Centre, smiling uses 12 muscles and frowning uses 11 muscles. So frowning actually uses fewer muscles! Dr Song explains how smiling takes less effort:

> 'Even though smiling uses more muscles, it is believed that it takes less effort than frowning. This is because people tend to smile more, which means the relevant muscles are in better shape. When muscles are in better shape, they require less energy (effort) when used … Humans are born with the ability to smile, it is not something that we learn. For instance, even blind babies are able to smile.'

Source: http://zidbits.com/2011/09/does-it-really-take-more-muscles-to-frown-than-to-smile/

- **interacting** – smile at someone or give someone a hug; pat your cat or dog
- **visualising** – think about yourself being happy and relaxed, or think of a place you would like to be and all the sights, sounds, smells and colours you would be surrounded by
- **laughing** – can make you feel calmer, and maybe even happier!



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Laughter is the best medicine

face 2 face

TONGUE TWISTER

Can you read this tongue twister without smiling?

Mr See owned a saw.

And Mr Soar owned a seesaw.

Now, See's saw sawed Soar's seesaw before Soar saw See,

which made Soar sore.

Had Soar seen See's saw before See sawed Soar's seesaw,

See's saw would not have sawed Soar's seesaw.

So See's saw sawed Soar's seesaw.

But it was sad to see Soar so sore,

just because See's saw sawed Soar's seesaw.



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RELAXATION PRACTICE

UP + MOVING

The whole class should ideally be sitting on the floor of the gym, with some space around each person. Your teacher will take you through progressive muscle relaxation. (Note: this relaxation technique is not suitable for students with back problems.)

Progressive muscle relaxation involves a two-step process in which you systematically tense and relax different muscle groups in your body.

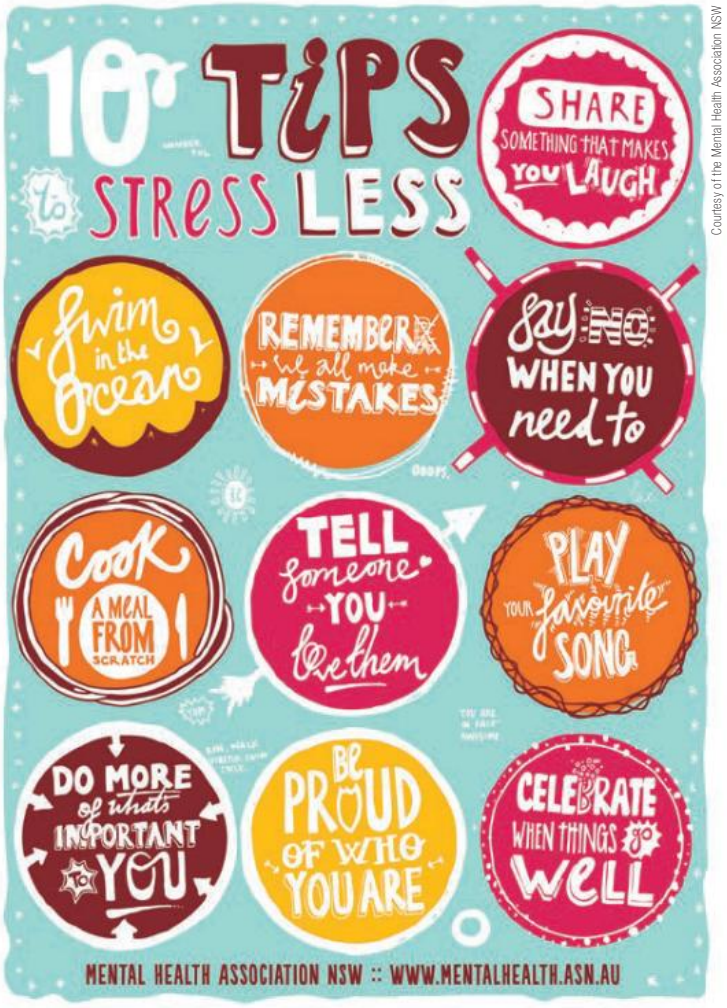
With regular practice, progressive muscle relaxation will help you know what tension and complete relaxation feel like in different parts of your body. This awareness will help you spot and counteract the first signs of the muscle tension that accompanies stress. As your body relaxes, so will your mind. You can combine deep breathing with progressive muscle relaxation for extra stress relief.



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Group relaxation

WORKBOOK>>
Worksheet 4.7



Courtesy of the Mental Health Association NSW

WORKBOOK>>
Worksheet 4.8

Ten tips to stress less

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Relaxing rocks

iStockphoto/Kali Nine LLC



Bubble breathing

Relaxation ideas

Relaxing rocks

Find a beautiful, smooth stone that fits comfortably in your hand. Take a deep breath in and squeeze the stone as hard as you can, sending all your stress, worries, anger and sadness into the stone. When you've squeezed as much as you can, slowly breathe out, uncurling your fingers at the same time, allowing the stone to rest gently in the palm of your hand, holding all your stress in the stone. You might like to write a word on your stone, or paint a face!

Bubble breathing

Have some bubble solution and a bubble wand handy. Taking in a deep breath, imagine gathering together all your worries, anger, sadness and frustration and blow all those worries out in a bubble. You might like to watch as it floats away, or clap your hands together and pop it. You might like to follow this by imagining breathing in lovely peaceful, smooth, happy and confident feelings and gently blowing bubbles out into the room or the outdoors. Does the bubble have a colour? Do your peaceful bubbles look different from your worry bubbles?



LAUGHTER AS RELAXATION

1. Go to Laughter Yoga Australia's website (http://ffl78vic.nelsonnet.com.au). On the menu click 'Videos', then click on 'Babies laughing' in the menu at the right. View one or two of these videos. Do they make you laugh? Do you think people feel better after having a good laugh?
2. As a class, or in small groups, brainstorm all the ways that people might try to relax themselves that wouldn't be very healthy.

NICOTINE

Some people smoke cigarettes to calm them down. The drug in cigarettes, nicotine, actually speeds up the central nervous system, which is the opposite of calming down! They are feeling 'calmness' because they are getting the drug they are addicted to.

Making the right choices

Sometimes people think what they are doing is helping them feel better and deal with stress, but some decisions that you make can actually be harmful. In Chapter 1 you will have seen that some drugs that you think are harmless are in fact quite harmful. How do you know whether the health information you get is correct? You can't make good decisions without the right information to weigh up the consequences. Chapter 5, pages 165–167, also has information about decision making.

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Communication skills

Communication plays an important role in coping with stress or a mental health problem. There are two types of communication: the internal communication you have with yourself and the external communication you have with others.

Internal communication

Sometimes the way that you speak to yourself (self-talk) has as much impact as what others say. The thoughts that go on in your head can be repeated so many times that you might start to believe them.



Stop the negative chat!

POSITIVE SELF-TALK

Athletes are encouraged to use positive self-talk as a strategy in sport to help them win. For example, a netballer saying, 'I'm going to get this goal in' will have more success than one who says, 'I'll never get this goal in'. The aim is to connect the statement with the belief in what is being said.

Believing your own negative self-talk can become dangerous, especially if the messages you receive from others reinforce it. To stop this, be aware of your own negative thoughts: try to catch yourself saying them, then turn the message around and start thinking something more positive. Repeating these positive messages throughout the day helps turn any negative self-images into more positive ones, and the more you hear these positive messages, the more you will believe them!

Instead of	Say
'I'm not good enough'	'I'm going to try my best'
'I'm too slow'	'I can get faster'
'I'm a loser'	'I'm a good person'.



If you believe, you can achieve

ISBN 9780170376181



With a partner, discuss the types of negative things that you each tell yourselves and come up with some positive options to say instead.

External communication

External communication is the way that you communicate with other people. You do this in a number of different ways:

- what you say
- the words you use
- the way you say things, for example, how fast and loudly or slow and softly
- your body language.

There are three important skills to know for good communication. These are listening, negotiation and empathy. Effective communication can assist greatly with enhancing mental health.

Listening

By listening carefully, you are signalling to the speaker that what they are saying is important. Sometimes people just want someone to listen to them to help them feel better.

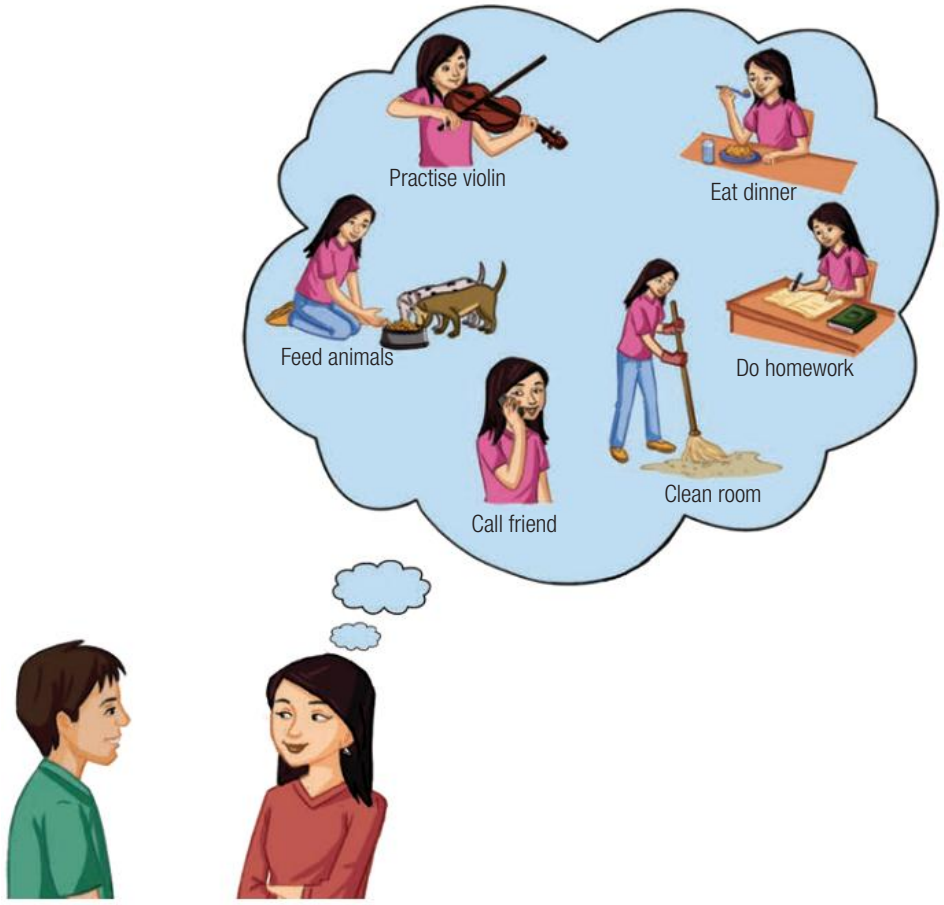
There are many ways you can show that you are listening:

- lean in
- repeat what the speaker has said
- nod or smile
- ask relevant questions
- make eye contact.

If you are listening to your own internal conversations, you are not listening to the speaker effectively. You may be thinking about what you will do when you get home from school or how much homework you have. You may want to tell the speaker something really important and are waiting for an opportunity to jump right in and talk. Often this begins with 'that happened to me and I …' or 'you should …'. This can be really frustrating for the speaker because they are trying to tell their story, not hear about your experiences. If you do this a lot, you might find that people don't talk to you very often.

Listening is a skill that takes patience; not everyone is good at it! Try to focus on what the speaker is saying. If you find your mind beginning to wander, try to refocus by nodding, repeating what they have said or encouraging them to continue their story. Use these tips to help improve listening skills.

ISBN 9780170376181



Are you really listening?

Tips for being a good listener

1 Let them talk

If someone's telling you something difficult or important for them, don't interrupt with a story about yourself, even if it's relevant. Let them finish and try to work out what it means to them.

2 Don't judge

If someone comes to you with a problem, try to be a friend without saying things that might hurt them. Work through whatever they're dealing with and suggest options rather than passing judgement.

3 Let someone disagree

If someone comes to you for advice, tell them what you might do in their situation. Remember, though, that your advice might not work for them and they may disagree with you. That's OK, just help them by supporting their ideas, as long as they are safe.

4 Ask good questions

Good questions are open questions that let the speaker go anywhere. Instead of asking 'yes/no'-style questions, think about 'how does that work' or 'tell me about …'.

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5 Show them you're listening

People will trust you more if they can see you're really listening to them. Ask questions about what they're saying, and put it back to them in different words to see if you've gotten it right.

6 Body language

Having open, relaxed body language – facing a person without being too close, and making occasional eye contact – will make whoever's talking to you more comfortable.

Source: http://au.reachout.com/Listening-skills-worth-having

Negotiation

negotiate
the process of discussion to find a solution that everyone agrees to

When we **negotiate** with someone we are more likely to both be happy with the outcome. Use the following steps to guide you through the negotiation process.

1. The first step is to find out what the issue is that you need to negotiate (you want to go to the movies but your friend wants to go to the swimming pool).
2. Each person then needs to explain their reasons for wanting that option (there is a movie you have wanted to see for ages; your friend wants to check out the new waterslide at the pool).
3. You can both then come up with all the options available (you could do something else that you both want to do; you could go to the pool today because it is going to be hot, and go to the movies on Friday because it is supposed to rain; you could flip a coin to decide, etc.).
4. Decide on an outcome that you are both comfortable with.

Sometimes you will not be able to come up with a mutually agreeable solution; that is alright, as long as the negotiation has been fair. It is OK to agree to disagree!

1 Issue	✓
2 Explain	✓
3 Options	✓
4 Outcome	✓

face 2 face

NEGOTIATION

Turn to the person next to you and negotiate whether you will go to the movies or the pool. Then explain to the class how you decided. Can you think of another situation where you would need to negotiate?

Use the checklist provided to work through the negotiation. How would the negotiation change if someone was really upset, angry, frustrated, happy or excited? How do our emotions affect the way that we react?



Let's talk this through

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Sometimes there are situations where you don't have the same opinions as your parents or carers. Sometimes you have to negotiate situations that can be difficult for both you and your parents. Your parents want to keep you safe but you want to become more independent and try new things, which can lead to clashes about what you think you should be able to do. Perhaps you have friends who are allowed to do more than you; this can feel unfair, or make you feel as if your parents don't trust you. The following activity is an opportunity to put yourself in your parent's shoes and try to negotiate a solution. You still may not agree with what they say, but you may see why they make the decisions they do.

KEEPING EVERYONE HAPPY



Pair up with someone. One of you will take the parent role and the other will take the child role, then you will swap next time. Choose one of the scenarios below. Your challenge is to negotiate an outcome that both parties are happy with.

Scenario 1 Your best friend has asked you to come to their brother's 18th birthday party. You know your parents won't let you go because there will be alcohol at the party. You really want to go because there is a really cool band going, and you don't know when you will you ever get that kind of chance again.

Scenario 2 You want to start getting on a bus after school every day and going to the local youth centre to hang out with your friends. You know that your parents won't want you to go because you usually look after your younger sister until one of your parents gets home.

Scenario 3 You've just got a new iPod and have access to the internet at home; you can message your friends using social media or video chat with them any time of the day! Your parent or carer doesn't want you to be on the iPod all day, but you don't want to miss out on any of the socialising that is happening between your friends, especially on the weekend.

Scenario 4 Your favourite artist is coming to town, and you really want to go to the concert. You've talked about it with your friends and all of you are going to go home and ask your parents. You want to catch the train or bus to the show and you wouldn't get home until about midnight. Your parents do not think that you are ready for this kind of adventure, but they said if you really want to go that they will come with you. You couldn't think of anything worse as they would embarrass you if they came.

Was it harder to be the parent or child? Can you see how difficult it might be for a parent to give their child freedom, yet still keep them safe?

Empathy

To be **empathetic**, you try to put yourself in 'someone else's shoes' and attempt to understand how they are feeling and why they might be feeling this way. It is an important skill that helps to develop and maintain relationships. It allows you to understand the other person without judgement, and it can often provide assistance when difficult times arise.

empathy
the ability to understand someone else's situation

ISBN 9780170376181

critical + creative thinking

WHO'S EMPATHETIC HERE?

Consider the following five scenarios and discuss whether the characters are being empathetic towards Tyler. List the ways that they are being empathetic. If not, what could they do to be more empathetic? What might be alternative ways to respond to Tyler?



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Tyler is having a hard time

Tyler thinks his parents are about to split up and he is worried that they will make him choose who he will go and live with. He doesn't need this kind of pressure and it is stressing him out. He is overreacting to things his friends are saying and not concentrating in class. It seems to be taking over his brain and he can't think about anything else!

Scenario 1 Luke is in most of Tyler's classes and Tyler is just bumming him out at the moment. Tyler won't even come and kick the footy with him after school any more. He tells Tyler that he'll have to find a new friend if he doesn't snap out of this mood soon.

Scenario 2 Miss Grey is Tyler's Maths teacher and notices Tyler talking quietly to Sara. Tyler has been waiting for an opportunity to talk to Sara because her parents split up recently and he wanted to hear her experience of the whole situation. Miss Grey asks Tyler to stop talking and get on with his work. He obeys for a few minutes, but their conversation starts up again. 'Right, Tyler, I'm sick of this, come down the front here away from Sara, maybe you'll be quiet now. And I want you to come and see me after school to apologise for your behaviour.' Tyler tries to object, as he knows he has to go straight home with his dad. 'No excuses, Tyler, my office after school!'

Scenario 3 Mrs Peace is the Student Wellbeing Coordinator at school and Tyler's parents have told her about their situation. She has been keeping an eye out for Tyler and is a bit worried that he is withdrawing from school. When she sees Tyler and Luke at lunchtime having what looks like a serious discussion, she tells Tyler that she needs his help with something and asks him to come to her office. She really just wanted to get Tyler away and see if things were OK. She lets Tyler spend the next period in her office, just reading and catching up on some homework.

Scenario 4 Geoff, Tyler's dad, picks him up from school every day. Tyler was late coming out today and Geoff was getting angry. Tyler got in the car and Geoff shouted at him, 'You know things are really stressful at the moment, do you want to make them worse?'

Scenario 5 Kane, Tyler's brother, notices he is really quiet tonight, and asked Tyler if he was OK. Tyler shook his head; Kane could see tears in Tyler's eyes. 'Don't worry bro, go to your room and pretend to be doing your homework, I'll keep dad occupied,' said Kane.

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When someone is experiencing stress (good or bad), sadness, a mental health issue, a disability, a difficulty, isolation or fear, they might become angry, sad or frustrated; they may isolate themselves from their friends or just act differently. This can be hard for their friends and family, as they may not understand what the problem is and so don't know how to help. Friends and family can also become frustrated because of this behaviour. When you notice different behaviour from people you know, think about why they are acting differently and ask them what they need. Sometimes they won't even know. Just showing that you are there to support them might be all they need.

R U OK?

If you want to ask a friend who seems a bit troubled 'are you ok?', check out R U OK? website by following the link at http://ffl78vic.nelsonnet.com.au. There are activities for schools, as well as tips on how to start that conversation.

Where can I go for help?

WORKBOOK>>
Worksheet 4.9

It is important to know how to find people or places (including websites that have trustworthy information) that will provide good, accurate and timely information to help you with things that are causing stress. Seeking help is an important life skill, because if you can get help quickly, you are less likely to be stressed out!



Courtesy of RU OK?

Waverley College students in Sydney encouraging more students to look out for each other and ask, 'are you ok?'

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There are lots of good sources of information available for us:

- family
- friends
- teachers
- student wellbeing coordinator or school counsellor
- nurse
- doctor
- youth worker
- relatives
- internet
- books
- pamphlets
- health centres.

Some of these may not be good sources for all the information you might need, for example your friends may not know any more than you do. So you may need to look for another source.

face 2 face

FINDING SOURCES OF HELP

1 Do this activity in groups of three. Each person should contribute one example to each of the three questions.
   - **a** What family situation might cause a young person stress? (e.g. an older sibling moving out of home)
   - **b** What decision might a young person have to make that causes them stress? (e.g. choosing the elective that you want to do or the one all your friends want you to do)
   - **c** What stressful things might happen to young people during puberty?

2 Using one of your own examples from question 1; name three different options (people, places, websites, etc.) where you could go for help if you were experiencing that stress.

3 How could you help one of your friends if they were stressed? What advice would you give them?

critical + creative thinking

THE HELPING HAND

On a blank piece of paper, trace a picture of your hand. You can decorate your hand any way you like. Think about who you can go to for help. On each finger and your thumb, write one person, place or source where you could find good information that could help you.



The helping hand

WORKBOOK>>
Worksheet 4.10

The internet as a source of help

The internet provides a huge amount of information, but not all of it is accurate! How do you know whether you are being given good information?

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First, look at the web address. If it includes '.gov' or '.org' it should provide accurate information that is written by professionals in the field. If the site has '.com' it may be written by a company to convince you to buy a product, and therefore the information on it may be one sided. Check also which country the website is written for or targeted to; it is often better to use Australian information. You need to also think about the reason the website has been created.



Alamy/Kevin Kirkman

Ask yourself: what is the purpose of the site?

WORKBOOK>>
Worksheet 4.11

COMPARISON: HOW TO MANAGE ACNE

critical + creative thinking

Two different organisations give information on their websites about how to manage acne (pimples):

1 Advice from the Better Health Channel

WEB

- Cleansing – cleansers specifically developed for acne-prone skin can help. Try washing the affected areas twice per day. Don't overdo it. Too much cleansing can cause other skin problems, such as dryness or skin irritations. Try to keep hair clean and off the face and neck, as oil from the hair can make acne worse.
- Make-up – choose water-based, oil-free products where possible to avoid worsening acne by clogging the pores with oils or powder. Make-up should be thoroughly removed before going to bed.
- Don't squeeze – picking and squeezing pimples can make them worse and lead to scarring.
- Stress – this can trigger an outbreak of pimples as it causes the release of hormones that can make oil glands release more oil onto the skin. This is why pimples seem to magically appear on stressful days, such as at the time of an exam or special date. While stress may be difficult to control, at least you know that the outbreak is due to stress, not a sign that the treatments do not work.
- Diet – there is now more evidence that a low-GI diet may help some people with acne. Many people think that lollies or chocolate cause pimples. Research has not shown any strong link with these foods, but if you notice that eating certain foods causes pimples to break out, try avoiding them.

Source: www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Acne

2 Advice from the makers of Clearasil

While doctors continue to debate what causes the increased production of sebum that leads to pimples, a number of factors – including hormones, bacteria, certain medications and heredity – can play a key role. But, instead of blaming your parents for your challenging skin situation, let us help you put together a new skin-care routine or even just grab a few products that will help give you clearer skin.

Source: www.clearasil.com.au/skin-talk.php

Which prevention plan would you choose? The Better Health Channel ('.gov') showed a wider variety of solutions. It mentions stress and diet as factors, which could help the reader assess their lifestyle and make some changes, which would have significant impact on their experience of acne. The pimple cream company ('.com') gives one solution – to buy their product!

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review & reflect

RELIABLE INFORMATION?

How can you tell if a website is giving good health information? Make a list of things that you could use to tell whether a website is reliable.

Local resources

Knowing your local area is an important part of help-seeking behaviour. Knowing what is available and where cuts down the time it takes to get help when you need it. You may never use this information yourself, but you may be able to help a friend or family member in the future.

WORKBOOK>>
Worksheet 4.12



Newspix/Tim Carrafa

critical + creative thinking

PLACES TO GO FOR HELP IN YOUR LOCAL AREA

Being able to finding reliable sources of information in your local community is a good skill to have. Find a map of your school and the surrounding local area and answer the following questions using a search engine. Then design a fridge magnet with the information.



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- How far is the nearest medical clinic or doctor's office? Could you walk from school?
- How far is the local pharmacy? Could you walk from school?
- How far is the closest hospital from school?
- Is there a specialist mental health service close to school? List some of the services it provides.
- Are there any counsellors in the area? What type of counselling do they offer?

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MAKE A MENTAL HEALTH FIRST AID KIT

review & reflect

1. Bring in a cardboard box from home and decorate it with pictures, words, colours or objects that you love.
2. Collect and fill the box with items that represent things that you can do to help improve or cope with the daily stressors of life. For example, you could include photos of friends/family you can talk to; a list of phone numbers you could call if you needed help; music you love or that relaxes you; ideas of activities you love that make you feel better (exercise, spending time with friends, relaxation, etc.); or a childhood toy that brings back good memories and a feeling of safety.
3. Keep your kit somewhere where you can look at the contents when you need a bit of a lift.



Some of the things that help us cope

MENTAL HEALTH PROMOTION

Mental health promotion is any action that is taken by individuals or groups to improve mental health and wellbeing.

The things that can be done to help strengthen your mental health are called protective factors. The things that put you at risk of having mental health issues are called risk factors. When parents/carers and schools work together to help put protective factors in place there is a better chance of adolescents having good mental health and wellbeing. These protective factors help to build resilience by providing opportunities to grow and develop in a safe and supportive environment. Table 4.1 is part of the Melbourne Charter for promoting mental health and preventing mental and behavioural disorders. These protective factors are included in the planning stages of health promotion strategies.



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Promoting mental health: the green ribbon signifies mental health awareness

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TABLE 4.1 Protective factors and risk factors for mental health and wellbeing

Protective factors	Risk factors
Arts and cultural engagement **Childhood**: positive early childhood experiences, maternal attachment **Cultural identity** **Diversity**: welcomed/shared/values **Education**: accessible **Empathy** **Empowerment** and self determination **Environments**: safe **Family**: resilience, parenting competence, positive relationship with parents and/or other family members **Food**: accessible, quality **Housing**: affordable, accessible **Income**: safe, accessible employment and work conditions **Personal resilience and social skills** **Physical health** **Respect** **Services**: accessible quality health and social services **Social participation**: supportive relationships, involvement in group and community activity and networks **Spirituality** **Sport and recreation**: participation and access **Transport**: accessible and affordable	**Alcohol and drugs**: access and abuse **Disability** **Disadvantage**: social and economic **Discrimination and stigma** **Displacement**: refugee and asylum-seeker status **Education**: lack of access **Environments**: unsafe, overcrowded, poorly resourced **Family**: fragmentation, dysfunction and child neglect, post-natal depression **Food**: inadequate and inaccessible **Genetics** **Homelessness** **Isolation and exclusion**: social and geographic **Natural and human-made disasters** **Peer rejection** **Physical illness** **Physical inactivity** **Political repression** **Poverty**: social and economic **Racism** **Unemployment**: poor employment conditions and insecure employment **Violence**: interpersonal, intimate and collective, war and torture **Work**: stress and strain

Source: www.vichealth.vic.gov.au/Publications/Mental-health-promotion/Melbourne-Charter.aspx

WORKBOOK>>
Worksheet 4.13

review & reflect

PROTECTING STUDENTS AT SCHOOL

Can you think of anything your school already does to help build these protective factors into your life? An example might be promoting diversity through a Harmony Day event.

EXTRA ACTIVITY>>
Reconciliation

HOT

WELLBEING POLICY

Analyse your school's student wellbeing policy for protective factors. Do you think your school's policy does enough to build these into a student's day-to-day life?

World Mental Health Day, Good Sports Mental Health and Building Bridges Cultural Games are examples of health promotion strategies that are designed to improve the awareness of mental health, provide information and/or build skills in dealing with mental health problems. These strategies all try to include protective factors to help build mental health and wellness in their communities.

World Mental Health Day

World Mental Health Day is an example of international health promotion. Held on 10 October each year, the aim of this special day is to educate and raise awareness about mental health issues. The organising body is the World Federation for Mental

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Health (WFMH). The participating countries organise various events and activities to promote mental health and wellness and to try to reduce the stigma around mental health. Each year is based on a special theme related to mental health; previous themes have included mental health and older adults; depression; diabetes and depression; and caring for the caregiver. Check out the Australian website for World Mental Health Day at http://ffl78vic.nelsonnet.com.au.

Good Sports Mental Health

Good Sports Mental Health is an Australian health promotion program that aims to raise awareness of mental health in regional and country areas. Run by the Australian Drug Foundation, the program works to support community sports clubs with information on how and when to respond to individual mental health issues. It also looks at the club environment in general to ensure it is able to support any club members with mental illness. The program makes information about mental health readily available to the club, provides training for key people and identifies local services that could also assist the club. For more information, go to the Good Sports website at http://ffl78vic.nelsonnet.com.au.

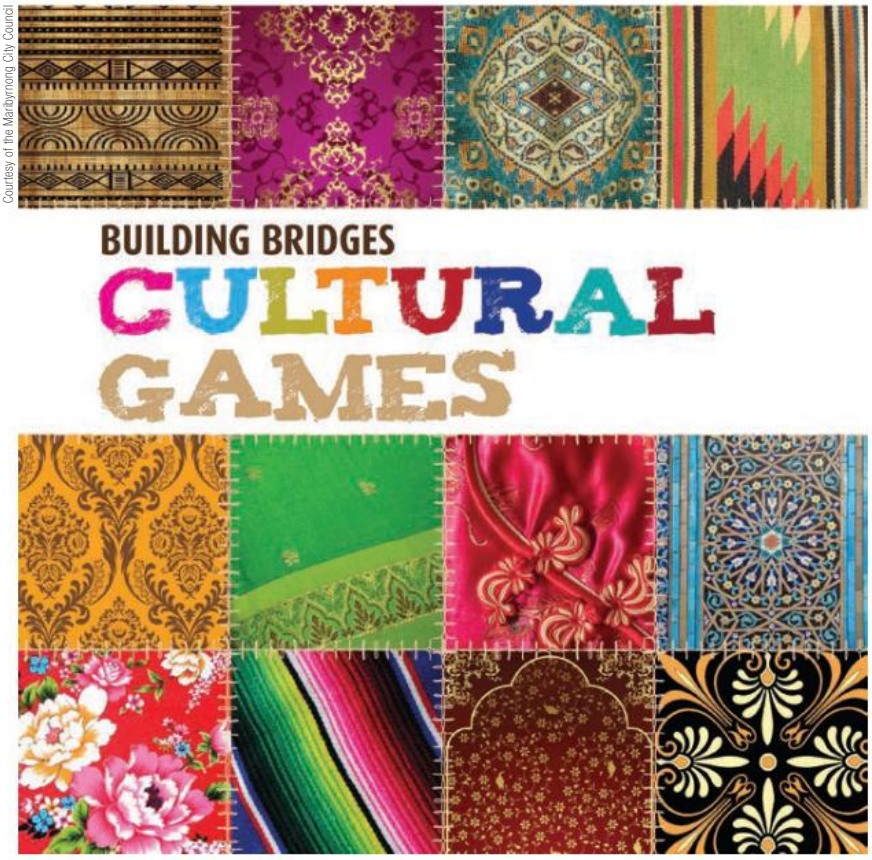


Good Sports: building awareness of mental health in Australian sporting clubs

Building Bridges Cultural Games

As part of its effort to raise awareness of the impact of discrimination in the community, the Maribyrnong City Council in Victoria developed a project called the 'Cultural Games'. The project involves local primary schools teaching and playing games from all around the world. The games represent many different cultures and languages and are a great way to teach primary-school-aged children about diversity, working together, talking and listening. The council produced a booklet about the program, which you can view at http://ffl78vic.nelsonnet.com.au.

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Building Bridges Cultural Games is an example of a local health promotion program

UP + MOVING

CULTURAL GAMES

In groups, choose a game from the 'Cultural Games' booklet. Learn how to play the game, get the required equipment and have a practice. When the whole class is back together, teach each other your games.

UP + MOVING

LOCAL HEALTH PROMOTION

Organise a stress-awareness week at school to help students, teachers and parents understand and cope with stress. Decide how your class will go about organising this week. The following list will help get you started.

- ➜ Research and identify ways of dealing with stress, e.g. exercise, good sleep habits, talk about worries, time management skills, having fun with friends, etc.
- ➜ Research and develop a display that can be left out for the week, highlighting your ideas for dealing with stress, with pamphlets and handouts available that students can take home.
- ➜ Make use of school newsletters (write an article for students and/or parents), daily bulletins and announcements.
- ➜ Organise a lunchtime event based on exercise, food, study skills, relaxation, etc.
- ➜ Make up a skit, rap or poem that you could perform or read at assembly.
- ➜ Organise a speaker for assembly and invite parents to come.
- ➜ See if the local newspaper could write an article about your health promotion activities.

If this event falls around the time of Mental Health Week in October, don't forget to register your activity with the Mental Health Foundation of Australia. Make sure you evaluate the week to see what could be improved next time!

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CHAPTER REVIEW

1. What is the definition of mental health?
2. Why should we strive for good mental health?
3. What is the difference between a mental health problem and a mental illness?
4. Name two effects good physical health will have on your mental health.
5. Name two effects good social health will have on your mental health.
6. As people grow up, who or what are the influences on body image?
7. What role does the media play in defining the ideal body?
8. What causes stress?
9. What is the 'fight-or-flight' response?
10. List four barriers to someone finding help for a mental health problem or illness.
11. Identify three relaxation techniques.
12. How could you incorporate these relaxation techniques into your everyday life?
13. Does the way that you communicate with others have an impact on your mental health? Why or why not?
14. Write three negative self-talk statements and rewrite them to make them positive self-talk statements.
15. Name three people that you know who you could go to for advice on a mental health issue.
16. Name three organisations you could seek help from about a mental health issue.
17. Why is it important to have resilience?
18. List an example of an international, national, state and local health promotion. Can you think of others that are not in this chapter? How do these help people with mental problems or illnesses?

WORKBOOK>>
Worksheet 4.14

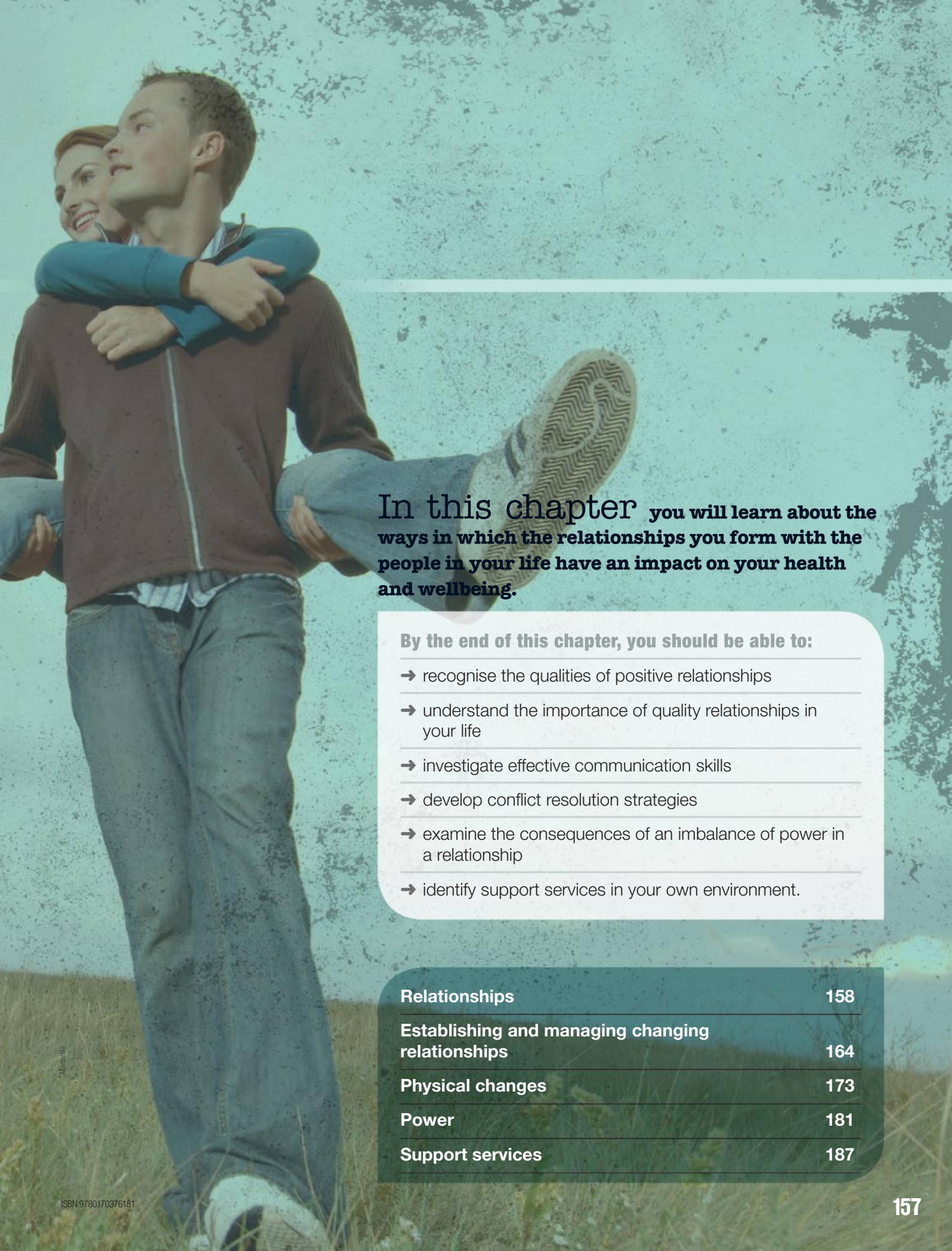
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POSITIVE RELATIONSHIPS

5



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In this chapter **you will learn about the ways in which the relationships you form with the people in your life have an impact on your health and wellbeing.**

By the end of this chapter, you should be able to:

- ➜ recognise the qualities of positive relationships
- ➜ understand the importance of quality relationships in your life
- ➜ investigate effective communication skills
- ➜ develop conflict resolution strategies
- ➜ examine the consequences of an imbalance of power in a relationship
- ➜ identify support services in your own environment.

Relationships	**158**
Establishing and managing changing relationships	**164**
Physical changes	**173**
Power	**181**
Support services	**187**

Master file

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RELATIONSHIPS

In this chapter, you will have the opportunity to understand why relationship develop, how these relationships change over time and the impact they have on your own actions and decisions. Health has many dimensions that cover physical, social, emotional, cognitive and spiritual aspects. The formation of each of these parts plays a role in personal identity, how people develop over time and in the types of relationships that are formed.



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Any connection or association you have with the people around you can be called a relationship. These may be with your immediate family, your extended family, close friends or with acquaintances, such as those people you work with or know through a sporting club. From the time you were born, you began to connect and interact with the people around you. The ability to maintain effective relationships will lead to an improved sense of wellbeing and assist your overall **holistic health**. It is important to understand the importance of positive relationships, what makes them work and how to cope when they change throughout your life. Forming relationships help to satisfy human needs of feeling loved, accepted and belonging.

holistic health
the physical, social, emotional, cognitive and spiritual wellbeing of a person

Every relationship that is formed is different. Some will be more **intimate**, such as those with your parents. Others will be more distant and casual, such as those with your next-door neighbour. The type of relationship you have with someone may depend on factors such as how long you have known each other, your interests and your age.

intimate relationship
a deep emotional connection with another person

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Families

Relationships with family members are very important and help to satisfy many physical, emotional and social needs. When people are younger, they are dependent on family for food, clothing and shelter. Families make important decisions and shape values, **morals** and social behaviours that are accepted in the community. Families help to develop communication skills, self-esteem and a sense of safety and security in the members of their household. They establish the roles, rights and responsibilities that help children to learn how to relate to people in different ways.

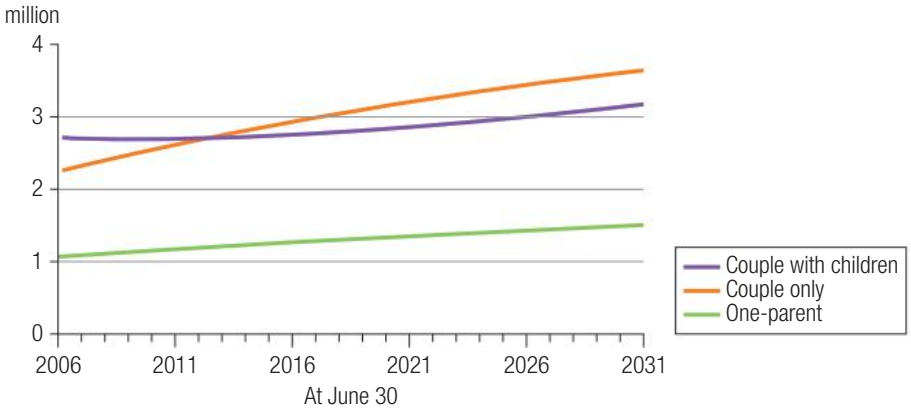
morals
behaviour and attitudes towards what is right or wrong

A family is a group of people who live together and love, care for and support one another, keeping each other safe. They may or may not be **biologically** related.

biological
genetically related to the parents

The Australian Bureau of Statistics defines a family as people who are related by blood, marriage or through adoption and usually live in the same household together. In today's society there is no longer a typical type of family. There are many different family types:

- **nuclear** families, which consist of a man and a woman and their children. These children can be biological or adopted.
- **sole-parent** families where only one parent is raising the children. This may be due to divorce, death or adults choosing not to marry.
- **extended** families where adults from different generations of a family live together. They may include parents, children, cousins, grandparents, aunts and uncles.
- **communes** which consist of a number of adults and children who are not all related but choose to live together. The group share resources and tasks and may live together because of a common purpose, such as their religion.
- **blended** families occur when two people, who already have biological or adopted children from a previous relationship, marry each other. This family type may also be called a step-family.
- **same-sex** families consist of two adults of the same sex in a relationship; they may or may not have children.



Projected change in family types 2006–31

Source: Australian Bureau of Statistics, Household and Family Projections, Australia, 2006 to 2031

WORKBOOK>>
Worksheet 5.1
Worksheet 5.2

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review & reflect

INTERPRETING DATA

1 Describe three trends represented in the graph on page 159 of changing family types over time.

2 Discuss the sorts of changes that might occur in future societies as a result of the increasing numbers of 'couple-only' families.


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FACTS ABOUT AUSTRALIAN FAMILIES

1 By 2026, couples without children are projected to be the most common type of family in Australia.

2 In 2006–07, nuclear families (where the children are the biological or adopted children of both parents) were still the most common type of family, making up 73 per cent of all families.

3 One in five families is a step-family or blended family, with experts predicting this statistic will rise as divorce rates increase and people find new partners later in life.

Source: J Healy, *Changing Family Trends*, Spinney Press, 2010

Intercultural understanding

Australia's population is made up of people from many different cultures and **ethnic** backgrounds. According to the data collected by the Australian Bureau of Statistics during the 2011 **census**, about one-quarter of people living in Australia were born overseas and many residents who were born in Australia have a parent who was born in another country.

ethnic
people of the same race or nationality who share the same culture

census
official count of the population of a country

Aboriginal and Torres Strait Islander people make up 2.5 per cent of the population of Australia but tend to have a larger number of children than other Australians. They are more likely to live in multifamily and multigenerational households; they are also more likely to live in regional and remote areas.

critical + creative thinking

FAMILY TYPES

Are some family types more common in particular cultures? Investigate a culture found in Australian society. Create a collage for the classroom, displaying the family types that are most common within this culture and some of its typical family characteristics.

WORKBOOK>>
Worksheet 5.3

CASE STUDY Making the most of extended family

FROM the moment children are born, they are programmed to bond, initially with parents, carers, siblings and step-parents. But as children grow and develop, a degree of the physical and emotional support they receive can be provided by other family members, including grandparents, aunts, uncles and cousins.

Human beings are genetically wired to bond as family units. In prehistoric times this helped ensure physical survival. In today's pressured society, the support of a family unit can also ensure emotional survival.

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The support of the extended family is not just beneficial for children. Relatives can also provide parents and carers with positive support and encouragement through the ups and downs of raising children. Family members can be a protective sounding board and a safe house at times of crisis.

Extended family can often cover two, or perhaps three, generations, and aunts, uncles and grandparents who have finished raising their own children can often be sources of wisdom and common sense when it comes to keeping the family unit functioning.

For many children, contact with extended family helps to provide support and enhance their sense of identity and feelings of self-worth and esteem. One-on-one time spent with relatives is an effective way for a child to understand the 'bigger picture', where they fit in the family and the importance of their contribution as a family member.

Where possible, regular contact with extended family members can benefit the whole family unit. Where face-to-face contact isn't possible because of geographical distance, illness or relationship constraint, the occasional letter, email, photo or phone call can help to foster a sense of belonging.

Questions

1. Define 'extended family' in your own words.
2. Analyse how the functions of a family have changed over time.
3. Discuss the benefits for both adults and children living in an extended family.
4. Describe a situation where a child may feel more comfortable talking to someone from their extended family rather than a member of their immediate family.

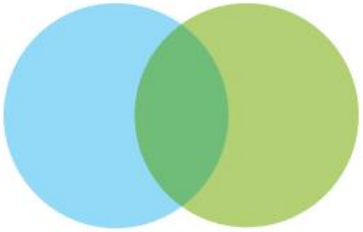
Source: www.kidslife.com.au/Page.aspx?ID=1033

GENERATIONS



Design an interview that highlights how families have changed through different generations. Interview one person from your family from each of the following age groups:

1. 10 to 20 years old
2. 30 to 50 years old
3. 60 plus.



Sample questions for your interviewees:

- how many siblings do you have?
- what types of jobs did/do your parents have?
- what hobbies or interests did you have when young?
- what chores or jobs did you do around the house?
- what activities did your family do together?

Use a Venn diagram such as the sample provided (or online) to establish the similarities and differences in the generations.

Drawing on examples from your Venn diagram, assess how families have changed over time and explain why these changes may have occurred.

SCAFFOLD>>
Venn diagram

HAPPY FAMILIES



Go to http://ffl78vic.nelsonnet.com.au or search for 'Kids count strong happy families'.

Use the information from the website to answer the following questions.

1. What qualities help make strong, happy families?
2. Identify the qualities you have learnt from your family.
3. Describe some specific examples of how your family has passed these qualities on to you.
4. How do these qualities help to build positive relationships?

WORKBOOK>>
Worksheet 5.4

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Individual characteristics and features make people unique, or different from each other. These qualities help to establish each person's personal identity, which is made up of their physical features, personality qualities, skills and beliefs. As you grow, you will develop your own feelings, ideas, values and beliefs about different aspects of life, based on your upbringing, friends, religion, culture and the environment around you. These influences then help you to establish what is important to you and who you feel you are.

values
things that are considered to be good, appropriate and important in people's lives

Values are established by your family relationships from a very early age. They are ideals that provide guidance on what to do and how to behave in certain situations. Children often take on their family's views on issues from an early age and then as they grow and mature, the importance of some of those views will change, according to life experiences. Values will vary from person to person because of their individual backgrounds.

Families also have an influence on perceptions of gender roles. Gender roles or **stereotyping** refers to views on how people should behave, act or dress, based on whether they are male or female. Children learn very quickly what it means to be a boy or a girl through activities they are involved in, opportunities they are given, responses from those around them and parental guidance on appropriate behaviours. As children grow and develop into adolescents, gender stereotypes are often reinforced by other factors in the environment such as culture, friends at school and the way that gender issues are presented in the media.

stereotype
a widely held view or perception of a person or thing based on appearance, gender, race, culture or religion

Friends

As you move through adolescence, your friends and peers play a greater role in your life. They have an influence on what you wear, what music you listen to, what activities you like to participate in and how you feel about yourself. Peer



Alamy/Kristoffer Tripplaar

Friends spend time together, doing activities they can share with each other

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relationships develop through common interests such as school, sport or other leisure activities and are usually dynamic, meaning that they continually change as people mature, have new experiences and move through life. Friends usually come from your peer group and are the people with whom you feel the most comfortable sharing your thoughts and feelings.

Belonging to a peer or friendship group can allow you to feel safe and secure, supported and respected. Having friends encourages the development of qualities such as respect, trust, tolerance, good communication skills and honesty. The sense of belonging and being connected with friends or peers plays a part in developing **self-esteem**, **self-confidence** and self-identity and further develops social and emotional health.

self-esteem
how people feel about themselves; their sense of worth

self-confidence
belief in one's own abilities

FRIENDS

critical + creative thinking

1 Complete the sentences:
   - **a** A friend is …
   - **b** Three things I like about my friends are …
   - **c** It is good to have friends because …
2 Some people find it difficult to make friends. Why? How could this be overcome?
3 Discuss some problems that can arise from belonging to a group.
4 Describe some rules that exist in your group of friends.
5 Write an acrostic poem using the word FRIEND, with each letter of FRIEND as the starting letter of a new line of the poem.



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FRIENDSHIP CAKE RECIPE

Up + Moving

If you had to make a recipe for a friendship, what ingredients would you include and in what amounts?

1 Work in a group of three or four to design your own recipe.
2 Compare your friendship cake with another group.
3 Are both recipes the same? Why or why not?

FAMILIES

review & reflect

1 Describe why families are important.
2 List three values your family taught you.
3 What qualities make a good friend?
4 Explain how the importance of different relationships changes as you develop.

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ESTABLISHING AND MANAGING CHANGING RELATIONSHIPS

WORKBOOK>>
Worksheet 5.5

The relationships that you form may not stay the same throughout your life. There are many different types of relationships and each has an impact on your own actions and decisions.

Peer group

EXTRA ACTIVITY>>
20 things to say

During adolescence, your peer group plays a larger role in establishing what you feel is important. The influence of your peer group during this time can be positive or negative. A positive influence might be when your friends encourage you to try something different, such as a new sport, or they may help you to make decisions that benefit you in some way, such as which outfit to wear. Here are a few more examples of positive peer group influence:

- studying for a test together
- volunteering at a local community centre as part of your school service requirements
- talking to someone you wouldn't normally have approached.

A negative influence might be if your friends persuade you or push you into making a decision that is harmful to yourself or others, such as trying a cigarette. There are other examples of negative peer group influence:

- skipping school
- vandalising something
- letting someone copy your homework
- bullying.

peer pressure
the strong influence of a group to act in a particular way

This is called **peer pressure**. Common peer pressure techniques:

- dares or threats: 'if you don't do this, you won't be a part of our group any more'
- guilt: 'if you really wanted to be my friend, you would go along with it'
- generalisations: 'everyone else is doing it'
- poor logic: 'no one's going to find out'.

It can often be difficult to stay true to the values and standards you have learnt from your family when your friends feel differently and you want to fit in and be part of a group. Feeling part of a group satisfies a need to belong, so it is

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understandable that you may feel pressured to go along with what other people are doing in order to be accepted. If you are being encouraged to try things that don't feel right or that make you feel uncomfortable, such as feeling sick in your stomach, or sweaty and shaky, chances are these actions are not right for you.

While it can be tough to stand up to your friends if they are doing things that you do not want to do, it is important to do what you feel is right and commit to actions that represent what you believe in. If your friends are constantly pressuring you, they may not be the right group of friends for you. It can be difficult to stand up to them, particularly when you are on your own, but there are some simple strategies that could be used to avoid negative peer pressure:



Alamy/Yoav Levy/PHOTOTAKE

Peer pressure can happen in many different environments

- hang out with people who have the same interests as you as they will have similar values and goals
- use humour – a funny one-liner may help to take the pressure off
- avoid risky situations where peer pressure is more likely to occur
- be assertive – this means being able to say no in the nicest possible way!
- seek help from your support networks – this might be your parents, your siblings, a teacher, the school counsellor or more formal organisations such as Kids Helpline.

Decision making

WORKBOOK>>
Worksheet 5.6

Using a proper decision-making process allows you to solve problems by considering the consequences of all the options that are available to you. Decision making is the process of selecting a solution to a problem from two or more possible choices. For every decision, there are three factors to consider:

1. alternatives (the choices available to you)
2. consequences (how your decision will affect you and others)
3. degrees of risk (the possible emotional, physical, social or mental outcome).

The most successful decision making occurs when all three parts are considered.

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There are many internal and external influences on decision making. Internal influences are those aspects that come from within you that have been shaped over the course of your development. The external factors are the people and things around you that you do not have as much control over.

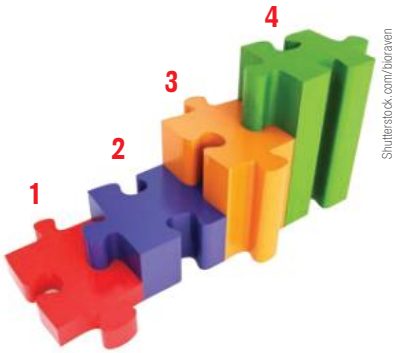
TABLE 5.1 Internal and external factors in making decisions

Internal factors	External factors
Self-esteem	Family
Self-concept	Peer group
Past experiences	Friends
Emotions	The environment the decision is made in, including where you are and who you are with
Expectations	The importance of the decision
Physical wellbeing	Available resources
Values	
Goals	
Culture	
Religion	

The decision-making process involves logical steps. Some decisions are so simple that you don't even think about the steps. What to eat for breakfast is a decision where the alternatives, consequences and level of risk can be quickly established. Other decisions, such as what subjects to choose at school, are more complex and therefore will be harder to identify the consequences and associated risks. A decision-making model will assist you when making important decisions. There are four steps in the decision-making model:

1. identify the problem
2. look at the alternatives and their consequences
3. choose and implement an alternative
4. evaluate the outcome.

By evaluating the result of decisions you make, you will make better decisions in similar situations in the future. Good decision making requires effective communication and will be influenced by your previous experiences and your values and morals established by your family.



Shutterstock.com/bioraven
The decision-making model involves a series of steps

face 2 face

DECISIONS

1. In pairs, use the decision-making model to come up with a solution to the following problems:
   - **a** what to wear to a party on Saturday night
   - **b** what sports to play during the term
   - **c** whether to lend a friend your homework because they didn't finish theirs
   - **d** whether to try out for the school musical.

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2 Explain the impact gender will have on the decision in the following situations:
   a shopping for a new outfit
   b getting a new haircut
   c going to the doctor
   d choosing a career.

ROLE PLAY

In groups of four, role play the options available to you when making the decisions in the following two scenarios. Use a freeze frame in the middle of each script to demonstrate the different alternatives and consequences.

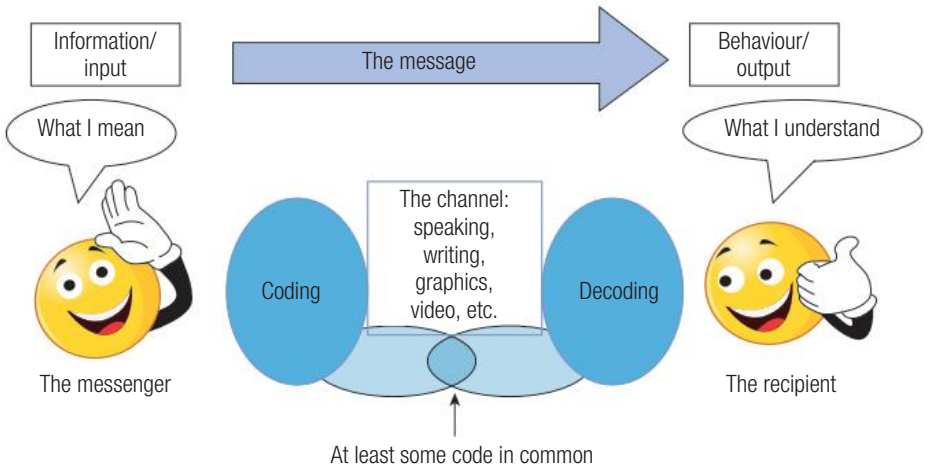
Scenario 1: You are walking down the street and find a wallet on the footpath. You look around to see if anyone is nearby and you see no one. When you open the wallet, you find that it's full of money. You have lost your wallet before and it was never returned to you. What will you do?

Scenario 2: You have been invited to a party hosted by one of the most popular kids at school. Most of the people at the party are smoking and you are offered a cigarette. You really want to fit in and be a part of the group. What will you do?

Communication

Interpersonal communication is sending and receiving messages between two or more people. Effective interpersonal communication is essential for forming positive relationships with family or friends because it allows you to express how you are feeling, your needs and your emotions.

To communicate effectively, messages about thoughts, feelings and emotions need to be sent in a clear, easy-to-understand way. For the communication cycle to be complete, you also need to listen to find out how your messages are interpreted by the person you are communicating with and to reduce any distractions around you.



The communication cycle

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verbal
the use of spoken language including words, letters or numbers

non-verbal
non-spoken, including facial expressions, body gestures and emotions

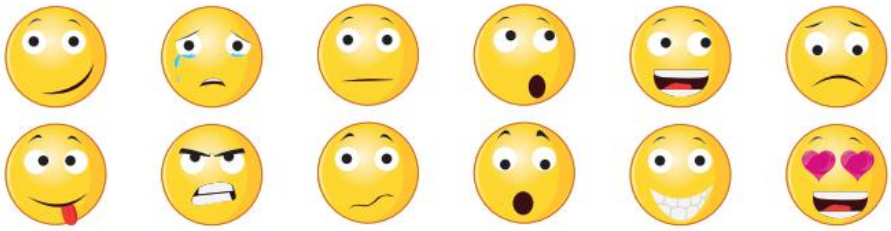
Communication can be through words, text, facial expressions or even body posture! These are known as **verbal** and **non-verbal** forms of communication.

Verbal communication can be face-to-face conversation, a conversation over the phone or via video chat, through the radio or TV, or through social media, websites and blogs.

Non-verbal communication includes eye movements, tone of voice, speed of talking and body position. Be aware of your body language when you are speaking to someone; even your hand gestures and how you are speaking will have an impact on whether your message is received in the way you intended.

review & reflect

WHAT DOES YOUR FACE SAY?



1 What does each face say in non-verbal terms?
2 Describe how non-verbal messages could conflict with verbal ones.

Effective messages

Here are some tips to remember to make sure your messages are sent and received the way you intended:

- be specific in what you want to say
- respect others' feelings, and always be polite
- speak clearly and concisely
- get to the point without talking too much
- make eye contact with people you are talking to
- use body language that matches your words
- don't speak too loudly or too softly
- be assertive.

Being a good listener is just as important to the communication process. Here are some tips to remember:

- pay attention to the person who is talking to you by looking at them
- try to reduce or remove any distractions around you
- consider the other person's point of view and take your time to respond afterwards, without interrupting

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- show you are listening by nodding, asking for some information to be repeated or asking questions to make sure you understand what you have just heard.

Sometimes, there can be barriers to communication. These are all potential barriers:

- poor listening and speaking skills
- background noise
- one or both people are upset
- confusing messages
- not enough time to explain
- individual differences.

To reduce these barriers, you may need to try some of the following strategies:

- reduce or eliminate background noise
- repeat or rephrase the message received if you are not sure what was said
- select the best method for communication
- select the words you use carefully
- avoid difficult communication when you are in a hurry
- try to reduce the physical distance between yourself and the other person
- try to see things through the eyes of the other person – this gives you a different perspective.

WORKBOOK>>
Worksheet 5.7

COMMUNICATION GAMES



1. Play a game of Grapevine. Sit in groups of 8 to 10, with one person thinking of a message to whisper to the person next to them. Pass the whispered message around the circle until it comes back to the person who started it. Was the message at the end the same as it was at the beginning? Identify some barriers to communication that may have led to the message being changed.
2. Work with a partner to do the following activity.
   a. Stand as close to each other as possible and talk about your favourite music.
   b. One person sits while the other stands. Talk about what you are doing in the next holidays.
   c. Touch each other in some way and describe your family.
   d. Stand on opposite sides of the room and talk about what you want to do when you leave school.
3. How did each situation in question 2 affect the ability to communicate? From these activities, what can you determine to be the most effective way to communicate?
4. Research a different form of communication such as Morse code, sign language, semaphores or signals used by a referee to control a particular sport. Describe the method of transmission and the skills required to effectively send and receive messages in this form.
5. Play Charades as a class. Charades is a word-guessing game where one person mimes the title of a movie, TV show or book without speaking. How does communication change without the use of verbal cues?

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Communication styles

The way you communicate will have a big impact on the way you can relate to people. The style of communication you choose will affect whether the message is sent or received successfully. There are three main styles of communication: passive, aggressive and assertive.

Passive communication

Passive communicators often don't stand up for what they believe in. They ignore their own rights and can allow other people's ideas and actions to take over conversations and decisions. They may do this in order to avoid confrontation but they may be frustrated by not being able to get their message across. They may often feel anxious, resentful and confused, leading to a lack of self-esteem and self-confidence, saying things like, 'People never consider my feelings' or 'My needs don't matter'.

Aggressive communication

Aggressive communicators express their feelings and opinions and satisfy their needs in a forceful way that doesn't acknowledge the rights of others. They may be verbally or physically abusive. Aggressive communicators may try to blame, humiliate or criticise others. They may interrupt frequently and not listen well to other people's opinions.



Corbis/Randy Faris

Aggressive communication is a barrier to getting your message across

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Assertive communication

This is the most effective style of communication. It allows all ideas and feelings to be expressed while respecting other people's rights. Others are treated with dignity, and the communicator believes that each person has something worthwhile to say. Being assertive allows you to say 'no' and feel in control of your choices. Assertive communicators state their needs, wants and feelings clearly, appropriately and respectfully. They listen well without interrupting, and use 'I' statements such as 'I feel hurt when you speak to me in that way' or 'I would like you to ask for my opinion before making a decision'.

Conflict

When communication messages become jumbled, misunderstandings can occur and conflict may arise. Conflict is when individuals or groups disagree about a topic or decision that needs to be made. It is a natural result of human interaction and occurs because of differences in values, opinions, ideas, goals or beliefs. Conflict can be positive, by helping people's understanding and perspectives around the issue, or negative when there is no agreement or negotiation and a resolution cannot be reached.

Often conflict will occur in families as children grow up and want to become more independent, particularly if the parents hold a different point of view. Conflict can also occur in friendship groups where there can be a variety of personalities and a variety of beliefs.



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Conflict can occur when people have different perspectives

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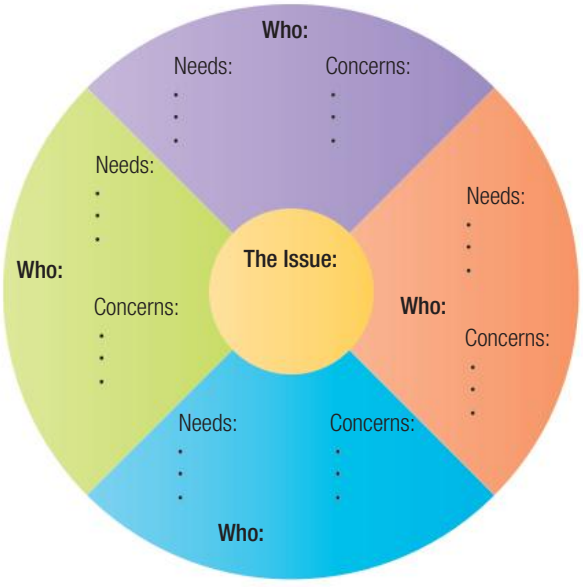
Sometimes during conflicts, you say things you don't really mean. To avoid this, there are some conflict resolution strategies that you can use in these situations.

Conflict resolution strategies

- Try to remain calm. Walk away for a few moments if you have to. Often counting to 10 (in your head) before responding helps.
- Think of a compromise – this is when both sides decide to give up some demands and meet in the middle to come to an agreement.
- Get a different perspective on the conflict.

SCAFFOLD>>
Conflict map

A conflict map might help you to understand how the other person sees the same situation. A conflict map may look like this:



WORKBOOK>>
Worksheet 5.8

Write down the issue, then think about the people involved in the conflict and what their concerns and needs might be. This helps you to gain some insight into how others might be feeling and thinking.

- Communicate honestly.
- Be respectful in how you speak to the other person and the type of language you use.
- If no solution can be found, you may have to agree to disagree.



Reachout.com suggests some ways to talk out conflict with those around you (link via http://ffl78vic.nelsonnet.com.au):

- Try to find a time when no one is angry, upset, stressed or tired and somewhere you can sit without being interrupted.
- Be willing to compromise and have a number of options you're willing to accept.
- Don't make it personal. Try to avoid being sarcastic and making personal comments.
- Be honest.
- Listen to what they have to say and accept that their point of view might be as valid as yours.
- Stick to your agreement once a compromise has been reached – this could even mean writing a contract that you both promise to stick to.
- Try sending an email or writing a letter that explains how you feel if talking seems impossible.

REACHOUT.COM

Reachout.com is an online youth mental health service. It has information, support and stories on almost any topic for people aged 15 to 24.

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ROLE PLAY





You want to go to the movies on Saturday night with your friends. You ask your parents and they say no because they don't want you staying out late at night. Create a role play to show how you could resolve this conflict and reach a compromise. In your presentation, demonstrate the conflict resolution strategies that might work best in this situation.

CONFLICT



1. Discuss the most common causes of conflict in your family. What strategies do you use to resolve them?
2. What causes conflict in your friendship group? Describe which conflict resolution strategies might be used to resolve them.
3. In groups of four, design a common conflict scenario that could occur in any family, friendship group or sporting team. Give your scenario to another group for them to come up with some specific strategies to resolve the conflict.

PHYSICAL CHANGES

Many of the issues that arise during teenage years happen because of the physical and emotional changes that are part of this stage of human development. Human development is a continual process that begins at fertilisation when, after sexual intercourse, an **ovum**, or egg, from a female unites with a **sperm** from a male. This is known as **conception** and the single cell that results is called an **embryo**. The embryo grows and develops into a baby in the mother's uterus until it is ready to be born after 40 weeks.

After birth, **growth** and **development** continue through numerous stages over the course of your life. These stages include infancy, childhood, puberty, adolescence, adulthood, middle age and old age.

TABLE 5.2 The stages of human life

Conception to birth	(40 weeks)
Infancy	0–2 years
Childhood	3–12 years
Puberty/adolescence	13–18 years
Adulthood	19–39 years
Middle age	40–65 years
Old age	65 years+

WORKBOOK>>
Worksheet 5.9

ovum
the female reproductive cell, also known as the egg (plural is ova)

sperm
the male reproductive cell

conception
when the sperm fertilises the egg and the embryo is created

embryo
the fertilised egg for the first eight weeks of development

growth
physical features and changes that can be measured

development
how you learn to handle the physical, social, emotional and intellectual changes through life

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The factors that have an impact on how people grow and develop over time include the environmental aspects that you don't have control over, such as where you live, the climate, your community, your peer group and the media.

hereditary passing of genetic characteristics from parents to children

Other factors that can't be controlled are **hereditary** features. These are the characteristics such as hair colour, eye colour and height that are passed on from parents to their children.


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Attached earlobes


Shutterstock.com/Mateusz Kopyt
Can roll tongue


Shutterstock.com/Tracey Helmboldt
Dimples


Shutterstock.com/Novelo
Right-handed


Shutterstock.com/Savarevich Viktar
Freckles


Shutterstock.com/Djomas
Naturally curly hair


Corbis/Mario Castello
Cleft chin


Shutterstock.com/Eric Isselee
Allergies


Shutterstock.com/Yanikad
Cross left thumb over right


Shutterstock.com/gratvision
Can see red and green

primary sex characteristics male and female sexual reproductive organs such as the penis and vagina

secondary sex characteristics physical features, other than the reproductive organs, that appear in puberty and distinguish males from females

pituitary gland a small gland at the base of the brain that produces several hormones

hormone a substance produced by the body that has an effect on growth or development

oestrogen the main female hormone, responsible for female secondary sex characteristics

testosterone a male hormone that is responsible for male secondary sex characteristics and the production of sperm

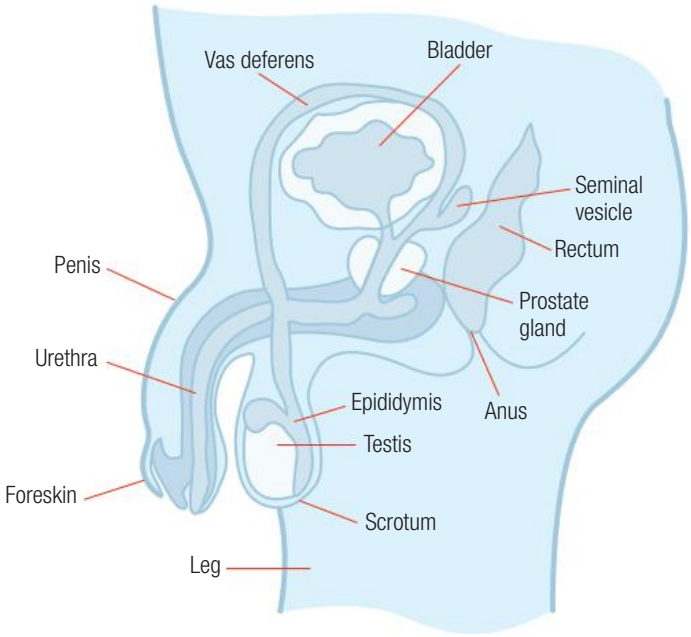
? Which inherited traits do you have?

Once through the childhood stage, when walking, talking and social skills are learnt and developed, young people experience puberty. This is a short time of rapid physical growth when the body begins its transition from childhood to adulthood. It usually occurs between the ages of 9 to 16 for girls and 12 to 18 for boys and it takes several years for the changes associated with puberty to be complete. While the **primary sex characteristics**, which are the parts of the body responsible for reproduction (including the vagina and uterus in females, and the penis and testes in males), have been present since birth, during puberty the **secondary sex characteristics** begin to appear. They begin because the **pituitary gland** at the base of the brain starts to produce **hormones**, which cause physical and emotional changes to occur in the body. In girls, these hormones send a message to the ovaries to produce the female hormone called **oestrogen**. Oestrogen is the main female hormone and is responsible for secondary sex characteristics in women as well as controlling the menstrual cycle. In boys, the levels of the male hormone **testosterone** increase sharply, promoting the development of secondary sex characteristics and contributing to the production of sperm.

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Functions of the male reproductive system

Structure	Function
Vas deferens	Tube used to transport sperm and semen to the urethra and penis.
Urethra	Carries urine and sperm to the outside of the body.
Seminal vesicles	Small glands that add fluid to the sperm to produce semen.
Epididymis	A sperm storage area that links the testes with the vas deferens.
Prostate gland	Surrounds the urethra under the bladder and secretes a fluid that assists with movement of the sperm.
Sperm	The male reproductive cell that fertilises a female egg.
Penis	The organ used in sexual intercourse to release sperm.
Testes	Responsible for the production of sperm and testosterone. Located in the scrotum sac.
Scrotum	Loose pouch of skin that hangs below the penis and contains the testicles. The scrotum keeps the testes at an optimum temperature for sperm development.

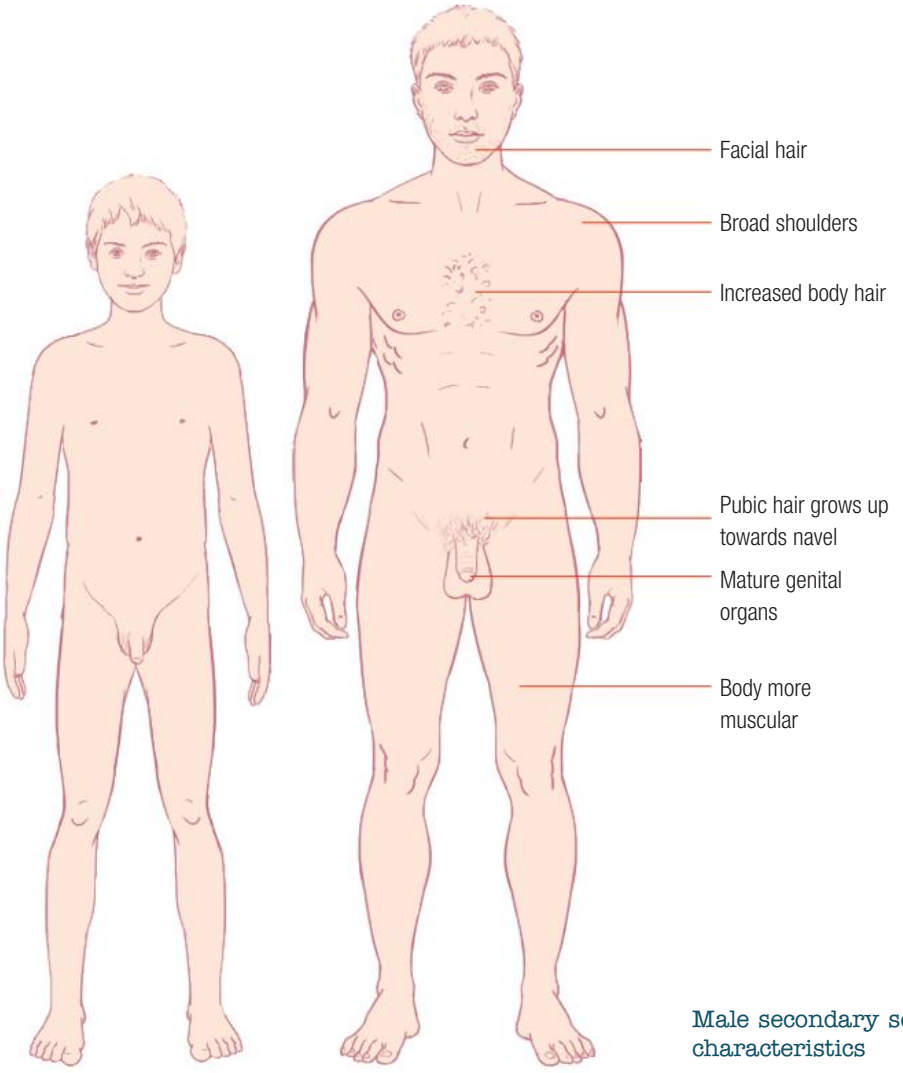


The male reproductive system

Male secondary sex characteristics that develop during puberty:

- growing taller
- bigger muscles
- voices 'break' and become deeper
- hair growth on the body, around the pubic area, under the arms and on the face
- the penis, scrotum and prostate enlarge
- sperm production will begin
- wet dreams may occur
- more interest in forming intimate relationships.

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Male secondary sex characteristics

Other changes in boys

nocturnal emissions
a night discharge of semen, containing sperm

erection
when the male penis becomes enlarged and fills with blood, usually prior to sexual intercourse

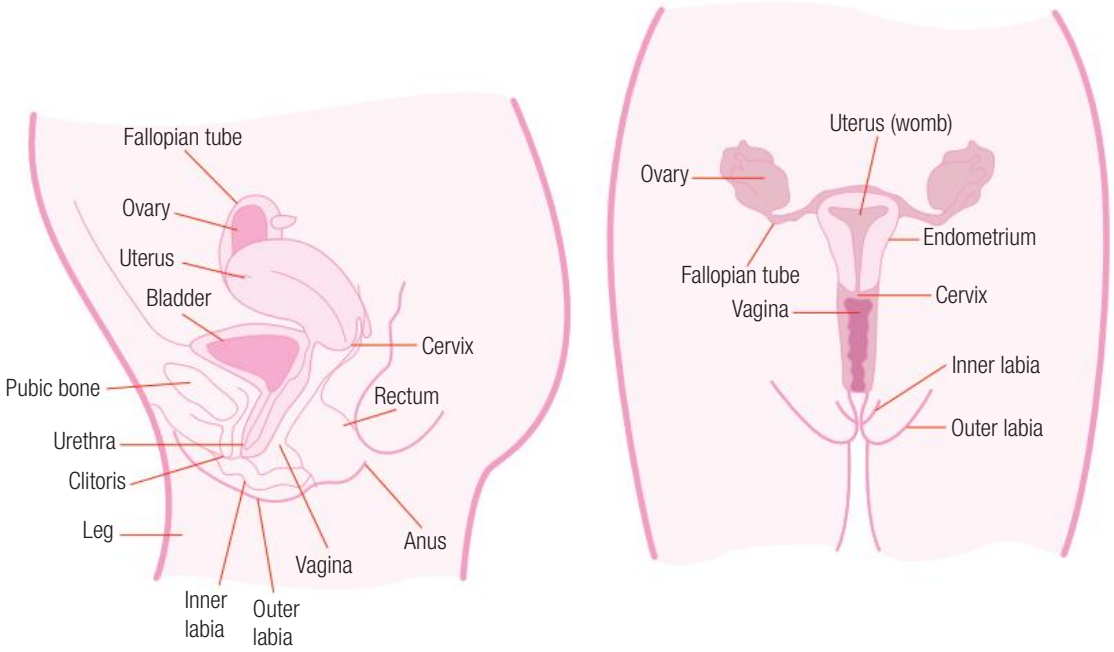
Boys also experience changes other than the development of secondary sex characteristics during puberty. They can start to experience **nocturnal emissions**, or what are commonly called 'wet dreams'. This is when semen, the fluid containing sperm, is discharged from the penis during an ejaculation while the boy is sleeping. Boys may also find they have more **erections** during this time. Erections are when the boy's penis fills with blood, causing it to enlarge and stand upright, away from the body.

Although erections are generally caused by sexual arousal, they may also occur for no particular reason. Boys may feel embarrassed or upset about this, but it is perfectly normal and part of growing up. As the production and release of hormones becomes more consistent, the frequency of wet dreams and unexpected erections will decrease.

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Functions of the female reproductive system

Structure	Function
Fallopian tube	Extends from the ovary to the uterus to carry the egg after ovulation. It is usually where fertilisation takes place.
Ovaries	Glands that produce the female sex hormones, oestrogen and progesterone, and the ova.
Ovum	The female sex cell, or egg, fertilised by a sperm at conception.
Uterus	A muscular pear-shaped organ that supports the developing baby. The lining of the uterus is shed during menstruation when an egg is not fertilised.
Cervix	Joins the uterus and the vagina. It is the part that opens when a baby is ready to be born.
Urethra	A tube that runs from the bladder to the outside of the body to release urine.
Vagina	Joins the uterus to the outside of the body. This is where the sperm are released during sexual intercourse.
Clitoris	A small sensitive organ located just above the vaginal opening.
Labia	Folds of skin that protect the opening to the vagina.

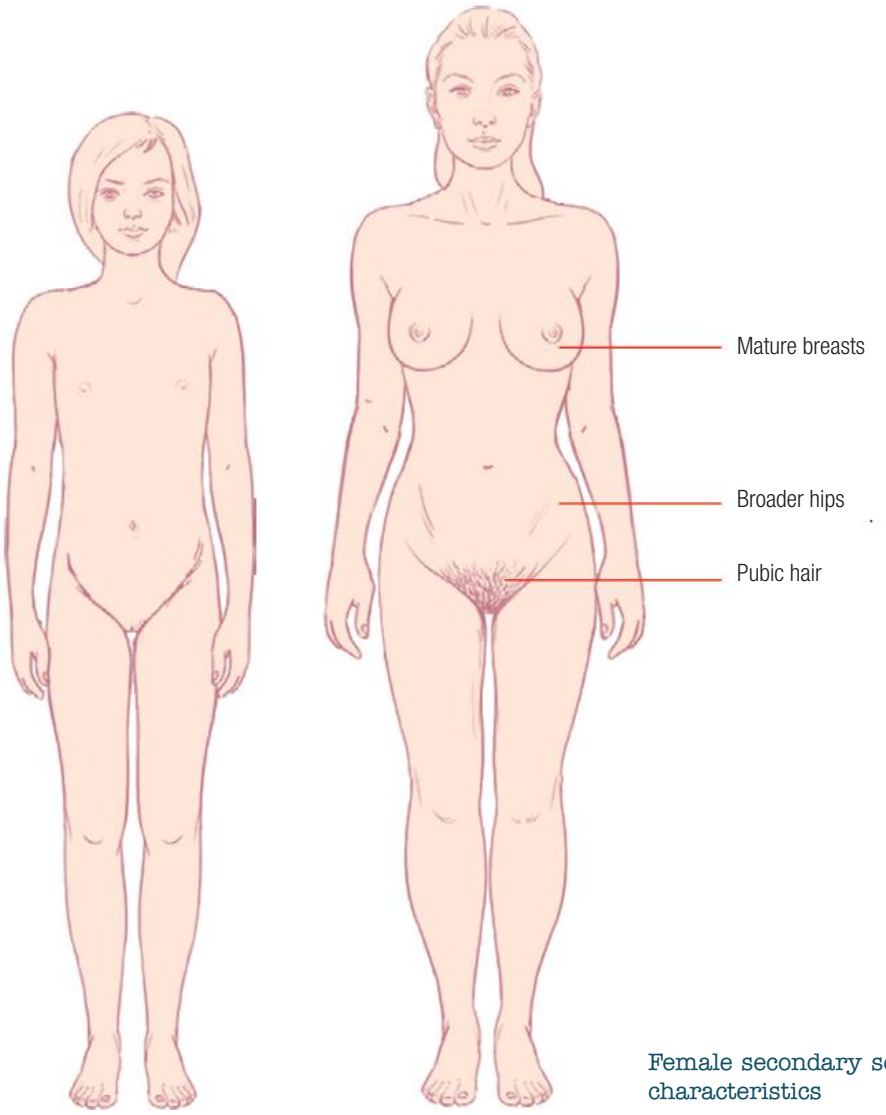


The female reproductive system

Female secondary sex characteristics that develop during puberty:

- growing taller
- breast development
- hips become bigger
- body hair around the pubic area and under the arms
- reproductive organs such as the vagina, fallopian tubes and the ovaries enlarge
- ovulation and menstruation will begin
- more interest in forming intimate relationships.

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Female secondary sex characteristics

Puberty and hygiene

Both boys and girls need to have good hygiene during puberty. Your skin and hair will probably become oilier, and without regular washing, there is the chance that acne or pimples may occur on your face, neck, shoulders and back.

Acne is bumps on the skin in the form of whiteheads, blackheads and red pimples. Your skin is covered in pores that contain sebaceous glands, which produce sebum, an oily substance that moisturises your skin and hair. Sebum is produced in increasing amounts during puberty. Without regular washing and cleansing, acne and pimples will be more likely to occur as the pores become blocked. A good diet and face wash when showering will reduce the likelihood of severe acne.

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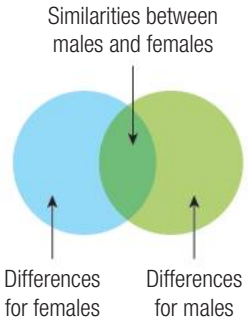
The sex hormones also trigger more body odour, so it's important to wash and change your clothes regularly, particularly after physical activity, and use a deodorant or anti-perspirant.

WORKBOOK>>
Worksheet 5.10

TEST YOUR KNOWLEDGE

review & reflect

Draw a Venn diagram that shows the similarities and differences in the secondary sex changes for males and females during puberty.



SCAFFOLD>>
Venn diagram

Menstruation

Menstruation, also called periods, occurs for girls and women every month once they reach puberty. It is triggered to start by the production of oestrogen and other hormones in the ovaries. When periods start to occur regularly, this is called the menstrual cycle and is the preparation of a female's body for pregnancy every month. The average cycle is 28 days but it can range from 21 to 35 days. Everyone is different!

At the start of the cycle, the ovaries prepare to release a mature ovum, or egg. This process is called **ovulation**. Ovulation usually occurs around the 14th day of a menstrual cycle and it is when the girl or woman is most fertile. At the same time, the lining of the uterus has been growing and thickening with blood and tissue in anticipation of nurturing a developing baby, or embryo.

ovulation
when a mature egg is released from the ovary

The egg travels down the fallopian tube, which joins the ovary to the uterus. If a sperm from a male fertilises the egg during this journey, it will attach into the thickened lining of the uterus. If the egg is not fertilised, the lining of the uterus is not needed and breaks down, passing out of the body through the vagina. This is what is known as the menstrual period and usually lasts for three to five days.

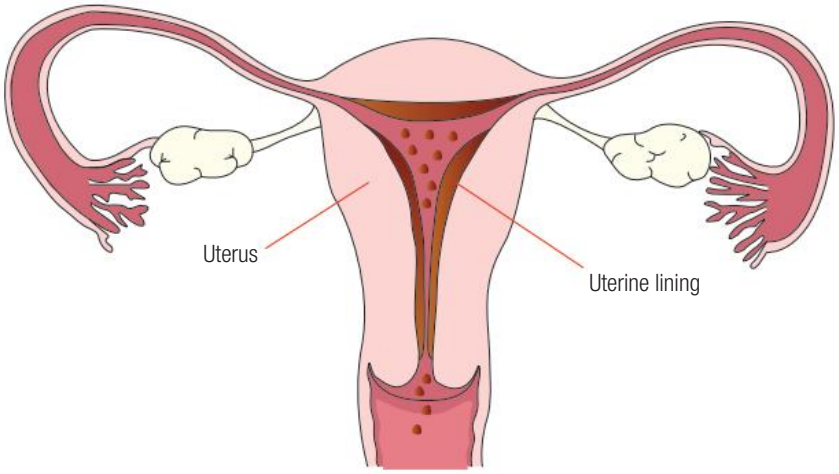
Sanitary pads or tampons can be used to absorb the menstrual flow. Choosing which is right for you is a personal choice and your parents, the school nurse or your doctor can help you decide. Girls should follow instructions on the packaging and change their pads and tampons regularly for hygiene purposes. Menstruation continues in women until they are around 45 to 55 years old. The end of menstruation is called **menopause**.

menopause
the end of ovulation and menstruation in a female

Symptoms that the menstrual cycle is about to begin may be physical and emotional. Girls may experience cramps, feel tired, have tender or sore breasts, or be

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more sensitive and moody. Not all girls will feel the same during menstruation and not all menstrual cycles will be the same. Your periods may not become regular for a few months and may vary in the amount of blood lost and length of time they occur. It is important that you maintain a nutritious diet and get plenty of exercise and sleep during your period. Exercise can often decrease the menstrual symptoms and make them more manageable. If you are concerned that your periods have stopped or are not as regular as they should be, you should seek advice from a trusted female or your family doctor.

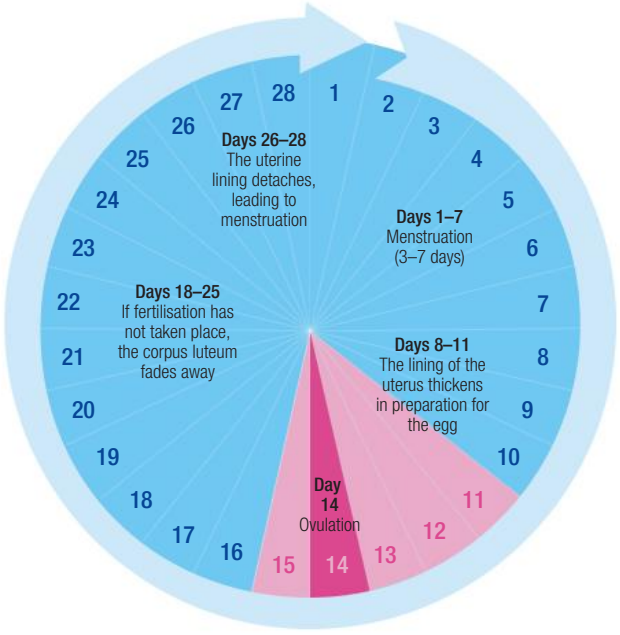


The uterus lining breaking down to form part of the menstrual flow



NUMERACY ACTIVITY

Represent the circular chart below in a different format such as a line diagram, colouring in the different days and stages of the menstrual cycle.



A typical 28-day menstrual cycle

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Emotional changes

Coping with these physical changes can be difficult for both boys and girls. You may feel self-conscious about your changing body or embarrassed if you look different from your friends. People may start to treat you more like an adult because you look like one, but you may not feel confident in dealing with these additional responsibilities. Communicating and associating with both boys and girls may become more of a priority and you may take more of an interest in having a boyfriend or girlfriend. The release of hormones during puberty may also cause mood swings and more tension between you and your family. Not all parents feel comfortable discussing puberty and the physical, emotional and social changes that accompany it. To help you cope, it's important to remember that you are not alone – everyone goes through puberty at some stage. Talk to an older sibling, a friend or your family doctor to help you understand and deal with how you are feeling.

POWER

During puberty and adolescence, teenagers often feel **vulnerable**. This is because it is a time of exploration and uncertainty about identity and the future. It is also a time when teenagers are most influenced by people around them, often because other people seem to have more power.

vulnerable
likely to be hurt by criticism, highly sensitive

Power has many meanings. In terms of relationships, power can mean the ability or capacity to do something or act in a particular way, or the capacity or the ability to direct or influence the behaviour of others or the course of events.

Everyone has some degree of power. Finding the right balance of power within relationships will help to create positive, healthy interactions that are respectful to everyone involved.

Power is a presence in daily life. There are many ways it can appear:

- the power of knowledge, such as a parent teaching a child right from wrong
- the power of authority or position, such as a school principal
- the power of expertise in a particular area, such as a doctor
- the power of being physically or emotionally strong, such as an older brother or sister
- the power given by customs and traditions, such as power held by an Indigenous elder.



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Achieving a balance of power

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empathetic
to have empathy; to feel and understand another person's point of view

tolerance
willingness to accept attitudes different from your own

prejudice
a judgement or opinion formed without knowledge of facts

discriminate
to treat people differently based on their personal characteristics, race, religion or beliefs

People are at risk of being emotionally and physically hurt when they have relatively little power in a situation. It is important to maintain a balance of power so that positive, fair relationships can be formed.

Positive use of power involves acting or influencing others in ways that show respect for others' rights. Everyone has rights, no matter who they are, what culture they come from, where they live or what they believe in.

Knowing yourself – your attitudes, needs, values, beliefs and interests – will contribute to your sense of identity. This allows you to have power and feel confident in who you are and what you believe in. It is also important to be **empathetic** towards others who hold different values and beliefs. This develops **tolerance** and reduces the possibility of **prejudice** and **discrimination** taking place.

face 2 face

POWER

Discuss the following with a partner:

1 How is power used positively in our legal system?
2 How could power be used negatively in the way brothers and sisters treat each other?
3 Define the following uses of power as positive or negative. Explain your choice.
   a Your sports coach asks you to play in a position you don't normally play.
   b A friend at school asks you to lie to a teacher for them.
   c The Student Representative Council enforces rules about wearing the school uniform correctly.
   d A teacher sends a student to the principal for being disrespectful in the classroom.
   e A group of senior students make jokes about a younger student's hair style.
4 Explain how the misuse of power can be destructive to relationships.

Rights and responsibilities

rights
entitlements that everyone should have

responsibilities
obligations that ensure rights are maintained

Every positive relationship involves being treated with understanding and respect. In order for this to happen, you need to be aware that you have **rights** that need to be satisfied and **responsibilities** to fulfill.

Rights are what every human being deserves to have, such as the right to clean drinking water. Responsibilities are the things that you are required to do in order to maintain other people's rights and entitlements, such as the responsibility of crossing at a pedestrian crossing in order to keep ourselves, other pedestrians and car drivers safe from accidents.

review & reflect

RIGHTS AND RESPONSIBILITIES

1 Which of the following are rights and which are responsibilities?
   a To learn without being disrupted by other students.
   b To listen to others when they are voicing their opinion.
   c To clean up after yourself.
   d To work in a safe environment.
2 As a class, develop a Class Charter with a list of 10 rights and responsibilities that you could maintain in your classroom to ensure the best possible learning environment.

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Bullying

An example of an abuse of power is bullying. According to the Australian Human Rights Commission, bullying involves someone or a group of people with more power than you, repeatedly and intentionally using negative words and/or actions against you, which causes you distress and has an impact on your wellbeing. It includes behaviours that are repeated and that may cause you harm and contribute to negative social relationships and environments. It is important to remember that bullying is not a one-off incident or just having a fight with someone.

EXTRA ACTIVITY>>
What's the impact?



Alamy/Bubbles Photolibrary

Bullying can be physical or verbal

Bullying can take several forms:

- verbal behaviour, such as name calling, teasing or threats
- physical behaviour, such as hitting, punching or kicking
- social behaviour, such as keeping someone out of a group
- psychological behaviour, such as spreading stories, hiding or damaging possessions, or sending nasty text messages or social media posts.

Other forms of bullying include harassment or discrimination based on someone's race, religion, gender, sexual orientation or disability. Remember, bullying is not acceptable in any circumstance, either as a bully or an onlooker. Bystanders need to take responsibility and let others know that bullying is not alright.



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Technology such as mobile phones and the internet allows bullying to occur from a distance

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BULLYING. NO WAY! AND BACKMEUP

1 Go to the Bullying. No Way! website (or link direct via http://ffl78vic.nelsonnet.com.au) and research other forms of bullying such as harassment or discrimination. Develop a fact sheet to present to the class on one form of bullying, its effects and some strategies to help deal with this type of bullying.

2 Find out more about the Something in Common campaign. Go to the Australian Human Rights Commission website to read about its purpose (or link direct via http://ffl78vic.nelsonnet.com.au).

WORKBOOK>>
Worksheet 5.11

Reluctance to be at school

Becoming more withdrawn

Being absent more often

Changed eating habits

Being more sensitive or upset



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Some signs that one of your friends might be the victim of bullying. Encourage them to seek support and help from a trusted adult.

EXTRA ACTIVITY>>
Bursting the bubble

Bullying can happen anywhere – at school, at work, at home, in sporting teams or at the skate park. People often bully because they feel it may help them to become more popular, will help them fit in, will make them seem more powerful and be a leader, because of prejudices or because they themselves are unhappy.

NRL BULLYING CAMPAIGN

Watch the NRL Tackle Bullying campaign at http://ffl78vic.nelsonnet.com.au.

1 Describe the forms of bullying that can be seen during the video

2 Why would the NRL become involved in a campaign such as this?

3 Explain how you think it will assist in preventing bullying.

FACTS ABOUT BULLYING

- Approximately a quarter of Year 4 to Year 9 Australian students report being bullied every few weeks during a term of school.
- Frequent school bullying was highest among Year 5 (32 per cent) and Year 8 (29 per cent) students.
- More than 80 per cent of students who bully or were bullied online also bully or are bullied offline.
- Peers were present as onlookers in 87 per cent of bullying situations.
- Hurtful teasing was the most common bullying behaviour experienced by students, followed by having hurtful lies told about them.
- Girls were more likely to bully in more secretive ways.

Source: Cross, D, Shaw, T, Hearn, L, Epstein, M, Monks, H, Lester, L, & Thomas, L, *Australian Covert Bullying Prevalence Study* (ACBPS), Edith Cowan University, Perth, 2009

Cyber bullying

With more people using mobile phones, social networking sites and playing online games, cyber bullying is rapidly increasing. Bullies can reach their victims through all of these channels. Cyber bullying is using technology to deliberately and repeatedly harass someone. It might take the form of nasty text messages, inappropriate images sent via email, text message or smartphone app, or comments or rumours spread online. There are

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some ways you can protect yourself if you feel you are a victim of bullying or cyber bullying:

- report the problem immediately to the social media site
- don't respond to or retaliate against the message
- change your privacy settings to block the bully immediately
- don't share your private information with people you don't know
- keep a record of the messages, photos or inappropriate content
- **talk to someone you trust to gain further support and help.**

CASE STUDY Two scenarios

CHOOSE one of the scenarios and answer the questions with a partner.

Scenario 1: Lisa has found out a group of girls are spreading nasty rumours about her to other girls and boys at school via text message. There have even been some photos included of her that have been digitally altered to change her appearance. Girls who she previously regarded as her friends will now not talk to her.

Scenario 2: Watch a short video called 'Let's fight it together: Joel's story' via http://ffl78vic.nelsonnet.com.au.

Questions

1. Why is the scenario considered bullying? What forms of bullying are displayed?
2. Expand on the role bystanders play in the scenario.
3. Discuss the options the person being bullied has to seek support.



Teen's death highlights cyber bullying trend

7.30 Report, ABC, 23 July 2009

A Melbourne mother has blamed her 14-year-old daughter's suicide on the internet and the tragic case has highlighted the problem of cyber bullying among young people.

In Australia, one of the first comprehensive studies of cyber bullying shows about 10 per cent of teenagers and children have experienced some form of sustained bullying using technology.

It is a behaviour that can have tragic consequences. Speaking on Melbourne radio, mother Karen Rae is in no doubt that cyber bullying was responsible for the death of her 14-year-old daughter.

'Friday night she was on the internet and told me about some message that had come through, and she wanted to die because of the message,' Ms Rae said.

'I laid in bed with her in my bed and we discussed it for about an hour and she left me fairly happy. I can guarantee you if she didn't go on the internet Friday night she'd be alive today.'

The girl's death has devastated her family and friends and has dramatically brought to the fore the impact of cyber bullying.


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Professor Donna Cross from Edith Cowan University has completed a landmark study on cyber bullying, commissioned by the federal Government. Professor Cross describes cyber bullying as 'any bullying behaviour that is delivered through technology – through mobile phones or over the internet'. She says kids who have been bullied are much more likely to suffer from depression and anxiety. 'We know that probably the most significant effects on children who've been bullied are effects on their mental health,' she said. 'They're much more likely to feel depressed, anxious, their self-esteem is affected, there are some students that report suicide ideation [imagining or making a plan for suicide]; it has very serious immediate effects and long-term effects. Twenty thousand Australian school children were surveyed using a combination of anonymous questionnaires and interviews. According to the survey conducted by Professor Cross, about 10 per cent of young people reported they were being cyber bullied.

One of those young people who has been the target of cyber bullying is Tom Wood. 'I was involved in a lot of forums and websites on the net and one of them had members that wanted to abuse others just to get reactions,' he said. 'I tried to stand up to them one day and it just started a chain of continuous abuse and threats.' Mr Wood had no idea how to respond to the abuse that was being directed at him online. He recalls the experience from a few years ago and how difficult it was to speak up about what was happening. 'For a while I didn't know and I didn't react and stop it, instead my thoughts were it wasn't worth telling my parents,' he said. 'It would have just alarmed them; they wouldn't have any idea of what to do, so I thought I'd just keep retaliating and not put up with it. 'But after a while I realised all it did was make it worse and kept provoking the situation, so at the end I just decided not to respond and after a while I didn't get any abuse any more and it just stopped it, simple as that.' Since his experience, Mr Wood has become an activist speaking in schools about tackling cyber bulling. He says the internet is a positive and important social tool for young people and just switching off the computer in order to deal with cyber bullying is not a realistic option. 'I usually tell them not to respond to the bully but try to block and delete them,' he said. 'Save the evidence and report the abuse to the administrator, because most of the time that will effectively stop it.'

But for Professor Cross, one of the biggest problems identified by her research is that young people do not think adults take cyber bullying seriously. 'The young people would say the greatest harm is that they feel they can't tell anybody, that covert bullying is something that adults would think isn't that serious,' she said. 'Having a rumour spread about you, does that really hurt you? Young people would say, yes, it does, it hurts us enormously, it hurts our reputation, our sense of popularity, and as a result it really can do some harm to us socially, emotionally and mentally.'

And what many cyber bullies do not realise is that the abuse which may be meted out over the net or mobile phone may well put them not just outside acceptable social norms but also the law.

Lawyer James Newman says the act of cyber bullying could result in criminal charges.

'There can be offences against the Commonwealth Crimes Act for things all the way from threats to kill down to simply harassment,' he said. 'If that harassment, threats to injure, threats to kill occur over telecommunications equipment, those students can be exposing themselves to criminal charges.' There are now calls for parents, schools and children to act together to combat the growing problem of cyber bullying. 'The group that has the greatest opportunity to change this behaviour are peers – we need young people to say, "we don't want to tolerate this behaviour",' Professor Cross said.

Questions

1. How many teens report experiencing some form of cyber bullying?
2. From the article, identify the definition of cyber bullying.
3. Explain the impact that cyber bullying can have on victims.
4. Describe some suggestions for blocking cyber bullies.
5. Propose how the community as a whole can combat cyber bullying.

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Online relationships

The Australian Bureau of Statistics states that 96 per cent of 12 to 14 year olds have used the internet and are spending up to two hours a day online. With this kind of accessibility, people have the ability to form new online relationships every day, particularly through chat rooms or social media sites. It is important to remember that all you know about a new person is what you see on the screen – this may be in the form of a photo, an avatar, a username or characteristics they use to describe themselves and may not represent who they really are. It is very easy to 'friend' someone and never meet them face to face.



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Social media allows online contact to be made 24/7

Having lots of connections online can make you feel special, particularly if it's with a group of people you have a special connection with or who have similar interests to you. However, there are also risks in forming relationships in this way. Are the people you are corresponding with who they say they are? Are they really your friend? Do they value your special qualities that make you unique? Be aware it is very easy to remain anonymous online. Do not give away your personal details and do not arrange to meet people you do not know.

SUPPORT SERVICES

Knowing where you can find help when you need it and having this information on hand allows you to have a strong support network. Being **proactive** in getting some help is an important step to resolving any issue that you may be experiencing.

proactive
to act, rather than react to events

There are many sources you can turn to, depending on the type of help you need. Adults should be included in your support network as they will know the best way to deal with the issues you may be experiencing. School counsellors or wellbeing teachers may be able to advise you further on support options. Year coordinators, teachers you can trust or school nurses are also people at school who will listen to your needs and assist you where possible. You may feel most comfortable talking to your friends or your family as they know you best and understand your perspectives. These are known as informal support networks. There are also formal support networks available online or by phone, which specialise in dealing with young people and their health.

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EXTRA ACTIVITY>>
Spreading the word

WORKBOOK>>
Worksheet 5.12

Kids Helpline
1800 55 1800

Kids Helpline provides free 24-hour phone, web or email counselling for Australian kids or young people aged 5 to 25 years. The Bullying. No Way! website is another useful resource.

REACH OUT.COM

ReachOut.com by Inspire Foundation is an Australian non-profit organisation with a mission to help young people lead happier lives. It provides fact sheets, stories, forums and videos on mental health issues.

WEB

critical + creative thinking

SUPPORT AGENCIES

Investigate two different formal support agencies for young people. Compare their services, identifying what they offer and the target audience they cater to. Prepare a digital promotion that would increase the awareness of the organisation using the information you discovered.

Some useful websites for this activity:

- Relationships Australia – relationship support service
- Lifeline – crisis support
- Bursting the bubble – violence and abuse support for teenagers
- The Line – a campaign that aims to prevent violence against women by connecting with Australian teenagers and providing information about respectful relationships.

You can link directly to these sites at http://ffl78vic.nelsonnet.com.au.



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CHAPTER REVIEW

WORKBOOK>>
Worksheet 5.13

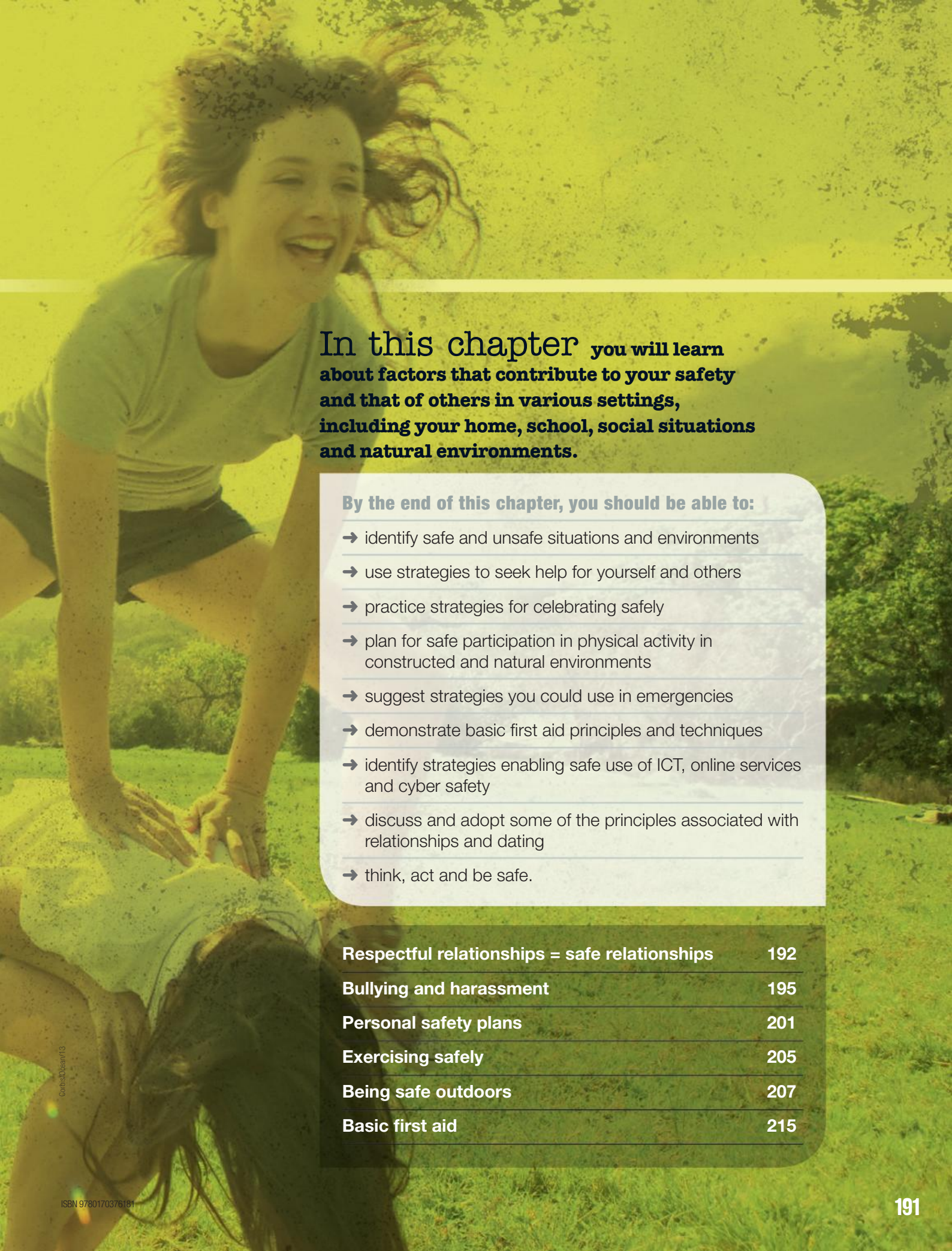
1. What qualities do positive relationships have? Why are they important to your holistic health?
2. Describe three different types of relationships you have and analyse the functions they perform.
3. Draw a diagram to represent the communication cycle.
4. Explain how communication helps to maintain effective relationships.
5. If you had to present an information session to your peers on your top tips for conflict resolution, what would they be and why?
6. Compare the physical changes that occur during puberty for males and females.
7. Design a flow chart that describes the journey of the ovum after ovulation.
8. How can power be used both positively and negatively? Give specific examples of each.
9. Outline the forms of bullying and the impact they can have on teens.
10. Describe the formal and informal support networks available to young people.

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THINK SAFE, ACT SAFE AND BE SAFE



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In this chapter **you will learn about factors that contribute to your safety and that of others in various settings, including your home, school, social situations and natural environments.**

By the end of this chapter, you should be able to:

- identify safe and unsafe situations and environments
- use strategies to seek help for yourself and others
- practice strategies for celebrating safely
- plan for safe participation in physical activity in constructed and natural environments
- suggest strategies you could use in emergencies
- demonstrate basic first aid principles and techniques
- identify strategies enabling safe use of ICT, online services and cyber safety
- discuss and adopt some of the principles associated with relationships and dating
- think, act and be safe.

Respectful relationships = safe relationships	**192**
Bullying and harassment	**195**
Personal safety plans	**201**
Exercising safely	**205**
Being safe outdoors	**207**
Basic first aid	**215**

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RESPECTFUL RELATIONSHIPS = SAFE RELATIONSHIPS



The types of relationships that you have now may change several times as you progress through secondary school. Relationships that are unhealthy can hurt emotionally and, sometimes, physically. People who are in respectful relationships, on the other hand, promote a sense of safety and caring. People in respectful relationships show respect for other people's needs:

- sense of feeling good about themselves
- cultural and religious beliefs
- right to be safe and to express their opinions and thoughts
- need to feel secure
- desire to be accepted for who they are
- right to be heard
- need to be trusted.

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Safe relationships exist when young people not only expect to be treated in certain ways, but also carry out their responsibilities regarding the needs of others:

- be respectful
- listen to what people are saying, not just hear what they are saying
- provide support
- accept different points of view
- exercise empathy
- protect others from harm
- be considerate of other people's feelings.


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Listen to what people are saying, not only by words, but also by body language and other cues

Young people have the right to express themselves and their opinions, but they should also be prepared to put themselves in the place of others when listening to what they have to say. In positive relationships, both people have an equal say in decision making and should feel free to be who they are and say what they think without fear, anxiety or risk of punishment. In this type of relationship there is a balance of power, with both people equally respecting each other's feelings, their right to be heard and their right to feel safe.

Power

Power exists in relationships when someone tries to control a situation in order to bring about change. Power can be used positively when the outcome is also positive. Examples include helping a friend complete a task in which you are more skilled; helping grandparents complete tasks around their home because you find them easy and they tend to struggle; speaking up when someone is being bullied because you have the confidence to do so; and helping a mate when they have received bad news in relation to a team selection. In all of these examples, the outcome is positive in terms of physical, mental and social health.

WORKBOOK>>
Worksheet 6.1

EXTRA ACTIVITY>>
Positive and negative power

In some relationships the balance of power is skewed in favour of one person and this can be harmful because it leads to situations where the possibility of abuse is increased. The three types of abuse resulting from abuse of power in relationships are emotional abuse, physical abuse and sexual abuse.


123RF/Graham Oliver

A balance of power allows all involved to benefit and feel positive

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Emotional abuse

vilification criticism or abuse directed towards someone or something

Emotional abuse includes put-downs, non-inclusion, racial or religious **vilification**. It happens when a person attempts to exert control over another person. If your friend or partner displays any of the following behaviours, then your relationship would be considered to be emotionally abusive:

- being possessive
- telling you who you can and can't see
- being jealous
- telling you what you can and can't wear.

NEGLECT

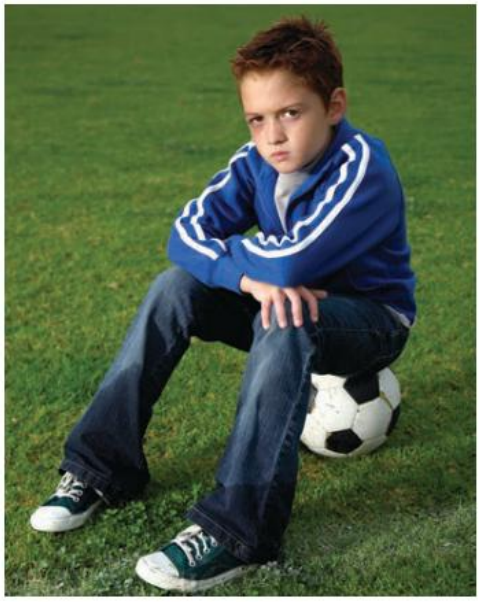
Neglect is the failure (usually by the parent) to provide for a child's basic needs, including failure to provide adequate food, shelter, clothing, supervision, hygiene or medical attention. Neglectful behaviours could be physical, emotional, educational or environmental.

Physical abuse

This includes behaviours such as punching, kicking and hitting and occurs when someone uses their power to be physically violent towards another, less powerful, person. Typical examples of physical abuse:

- kicking, hitting, striking, etc.
- smashing personal belongings
- threatening to physically hurt someone.

In Australia, physical abuse is a criminal offence and carries serious consequences and penalties.



Corbis/MM Productions

Bruising is often a sign that physical abuse might be occurring

Sexual abuse

Sexual abuse includes unwanted sex, unwanted touching, suggestive behaviours or comments; it occurs when a person uses their power over another person for sexual reasons. Common sexual abuse involves the following actions:

- forcing others to have sex
- **exposure**
- suggestive behaviours or comments.

exposure also called indecent exposure or flashing: showing your sexual organs to other people in public

Sexual abuse involving young people always includes elements of emotional abuse and can have damaging effects that last well into the future. It is important to remember that young people who are sexually abused are not responsible for the situations they find themselves in and should not feel guilty or at fault.

All types of abuse involving young people need to be stopped by the intervention of a trusted person. Abusive relationships are not safe relationships because of the negative effects:

- distress
- anxiety
- lack of trust in others
- fear
- withdrawal
- stress
- lack of confidence
- bullying and harassment.

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review & reflect

TYPES OF HARM

TABLE 6.1 Children who have been harmed in Australia in 2011–12

	NSW	VIC	QLD	WA	SA*	TAS*	ACT*	NT	Australia
Emotional abuse	7264	4936	2702	850	584	491	319	483	17 629
Neglect	7792	591	3254	803	952	334	359	899	14 984
Physical abuse	4475	2636	1375	508	409	151	103	270	9927
Sexual abuse	3644	912	350	598	189	43	39	53	5828
Total	**23 175**	**9075**	**7681**	**2759**	**2139**	**1025**	**861**	**1705**	**48 420**

*In South Australia, Tasmania and the ACT, the abuse type was 'not stated' and could not be described as physical, sexual, emotional or neglect. Therefore, the totals do not equal the sum of categories.

Source: *Child protection Australia 2011–12*, AIHW, 2013 p. 59

Study the information presented in Table 6.1. Use the information to create a column graph to summarise the incidence of the four types of abuse experienced by young people.

Keep in mind that discussing some of these points may be upsetting for some of your classmates and they may need to step outside for a few minutes if they think that might help.

1. Discuss three different types of emotional abuse you are aware of. You do not need to name people; simply outline the incident by saying 'I know someone who …'.
2. Why do some young people engage in sexual activities they really don't feel comfortable with?
3. Discuss stereotypical behaviours from boys and girls in heterosexual relationships.

WORKBOOK>>
Worksheet 6.2

BULLYING AND HARASSMENT

Bullying occurs when a person, or group, uses their power over another person or group to threaten or force them to do something. This type of behaviour is unsafe and needs to be stopped before people are hurt. Harassment is a type of bullying that is nasty, degrading, frightening and harmful to the victim. It can affect people emotionally, socially and physically. Sexual harassment involves any sexual behaviour that is not invited and that is threatening, embarrassing and offensive.

EXTRA ACTIVITY>>
RUOK?

face 2 face

WHAT'S GOING ON?

In pairs, discuss what you believe might be going on in this scene. Do you think there is a power imbalance? Does the image portray any unsafe behaviours? Discuss.



Alamy/ACE STOCK LIMITED

ISBN 9780170376181



Alamy/Angela Hampton/Bubbles Photolibrary

Exclusion and making people feel uncomfortable are forms of bullying

Some of the most common forms of bullying:

- physical – being punched, kicked, scratched or threatened with physical violence
- psychological – spreading rumours, giving dirty looks, sending nasty text messages or using social media to post or spread gossip
- social – excluding people from group activities, ignoring people
- verbal – being made to feel uncomfortable by racist, sexist or homophobic comments.

See also Chapter 5, pages 183–6.

face 2 face

BULLYING SCENARIOS

In groups of three, consider each of the following scenarios and suggest what type of bullying is taking place. Discuss some strategies that would help the person being bullied, as well as making the bully aware that their behaviour is unacceptable.

- A Year 7 student thinks she is same-sex attracted and has messages like 'lezzo' and 'dyke' written on her locker.
- A Year 8 boy tries to play footy on the oval with his classmates at lunchtime, but they tell him to 'nick off'.
- A Year 8 girl has a crush on a student in Year 10 and texts him a suggestive photo of herself.
- A Year 7 boy always finds himself handing over money at school to a student in Year 11 who threatens to punch him if he does not.
- A Year 8 girl looks older than she is and the year 10 boys regularly make sexual comments about her around the schoolyard.
- A Year 8 boy receives abusive text messages from other students in his year level after he ends a relationship with a Year 8 girl.

WORKBOOK>>
Worksheet 6.3

Online and cyber safety

Think how many times you have used digital technologies today – not just at school, but from the time you woke up this morning. You may even be reading this chapter on a computer or tablet, by projection on a smartboard or through the school's own internal learning management system. Can you imagine living without a mobile phone, computer or access to the internet? When was the last time you sent a text, downloaded music, had a chat with a friend or simply used a computer to create and share your ideas?

The Australian Communications and Media Authority (ACMA) is the organisation responsible for the regulation of broadcasting, the internet, radio communications and telecommunications in Australia. It conducts a survey each year on the way that Australian families with children use electronic media and communications in everyday life. Go to http://ffl78vic.nelsonnet.com.au to link to the ACMA website.

WEB

ISBN 9780170376181



LIKE, POST, SHARE

The Australian Communications and Media Authority (ACMA) commissioned research into young Australians' social media experiences. These are some of the main findings of the report published in 2013:

- In the four weeks prior to the survey, 95 per cent of the 8–11 year olds and 100 per cent of the 16–17 year olds surveyed had accessed the internet
- Around a quarter of 14–17 year olds and 20 per cent of 8–13 year olds had seen something on the internet in the last year that bothered them
- In the four weeks prior to the survey, 67 per cent of 12–13 year olds, 85 per cent of 14–15 year olds and 92 per cent of 16–17 year olds had used a social networking site on a computer
- More than 60 per cent of 12–13 year olds had shared their computer or mobile device password with someone else, compared with 48 per cent of 16–17 year olds
- Parental awareness of cyber bullying was generally high, with the exception of parents of 16–17 year olds
- Almost 20 per cent of 16–17 year olds reported that they or a friend had received sexually suggestive nude or nearly nude photos or videos of someone else
- The vast majority of parents (93 per cent) and 12–17 year olds (91 per cent) wanted some online safety information and/or education
- Of 16–17 year olds surveyed, 92 per cent had gone on a social networking site on a computer, 71 per cent were on these sites daily and 41 per cent had accessed them more than once a day
- More than 30 per cent of 8–12 year olds reported using Facebook, which is not intended for users under 13
- The majority of 14–17 year old social network users reported posting personal information online, especially photos of themselves (68 per cent), followed by the name of their school (43 per cent) and their full name (34 per cent)
- Nearly 10 per cent of 12–13 year old internet users had met someone face-to-face they first met online, mainly someone their age who their friends already knew.

Sources: 'Like, post, share: Young Australians' experience of social media', Australian Communications and Media Authority, 2013

SURVEY



Conduct a quick investigation in your own class on any, or all, of these online student practices. Try to convert your class results into percentages and then compare these to the 2013 ACMA report.

Use a tally sheet like this as a starting point for your investigation:

Internet for homework	Internet for socialising/ chatting	Mobile for text messages	Social networking: Facebook, etc.	Internet for gaming/ games	Mobile for talking	Internet for media such as sports, movies, etc.

SCAFFOLD>>
Tally sheet

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Social media

Social media sites such as Facebook, where users can post information, share photos, tell everyone what's happening in their lives and even share videos and/or play games, are very popular with Year 7 and 8 students. You probably have classmates who seem keen to obtain large numbers of 'friends', both people they know in 'real life' and people they don't know, because they think this will make them seem popular. Online multiplayer games, like World of Warcraft or RuneScape, are another way that you can directly interact with a great many people, including people you don't know and who you are unlikely to ever meet.

review & reflect

WHO AM I?

Some young people belong to several websites on which they post their profiles, mostly real, but sometimes as another person. Why do you think some young teens would want to pose as someone else? What are some of the potential dangers of this practice?

Social networking is a great way to stay in contact with friends and family. This can be very important for people who are socially or physically isolated, such as those with a physical disability or students living in rural or remote areas. But social networking needs to be used appropriately because it's easy to forget who you are communicating with online, as well as who might be able to access or see the information you post. Sometimes, you might do and say things online that you would never consider actually doing in real life. If this difference between 'real' and 'virtual' worlds becomes blurred the following problems may occur:

- cyber bullying
- identity theft
- unwanted contact
- exposure to offensive or illegal content
- excessive or compulsive behaviour.

Think about how your online behaviour will affect not only you, but also others. How can your actions ensure that you are cyber safe today, tomorrow and well into the future?

WORKBOOK>>
Worksheet 6.4

Ten cyber smart ways to protect your privacy

- Limit your friend list to people you do know – don't 'friend' random people.
- Sharing passwords is not a good idea, unless it's with a trusted adult like your mum or dad.
- Double-check your privacy settings – make sure that the information you share is only seen by the people you want to see it.
- Protect your digital reputation – think before you post, chat, upload or download.
- Don't use a webcam with strangers.

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- Check which location services are enabled on your mobile phone and switch off all of the unnecessary ones.
- Be very careful about checking in from your mobile phone – this lets people know where you are, what you're doing and where you have or haven't been.
- Check that you're not also displaying your location details to those nearby who you might not know.
- If you feel unsafe while you're at a particular location, contact the police, and if you have problems while using a service, report it to the service provider.
- Apply the same rules to the stuff you post about your friends – make sure you check with them before you tag them in photos or check them into a location.

Source: www.cybersmart.gov.au

Cyber bullying

Cyber bullying is use of the internet, email or mobile phone to harass, embarrass or threaten another person. Research shows that cyber bullying is more likely to happen to children who are also bullied offline.

Examples of cyber bullying include the following:

- posting unkind comments or images on social media
- sending abusive texts and emails
- imitating and teasing others online
- excluding others or spreading rumours online.

Cyber bullying and face-to-face bullying are very similar, but there are some differences:

- the cyber bully may feel protected by a sense of **anonymity**, so they may behave in ways they wouldn't offline
- the cyber bully cannot see the immediate effect on the victim, and therefore they may not realise the effect the bullying is having
- other people (such as teachers or parents) may not see the cyber bullying and therefore not be in a position to stop it
- it can be hard to escape the potential 24/7 harassment
- cyber bullying can have large audiences when readily shared with groups or posted on a public forum
- bullying comments and images posted on the internet are in most cases permanent because of their difficulty to erase.



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anonymity
not revealing true identity or real name

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Cyber bullying safety tips

KIDS HELPLINE
Help is available at Kids Helpline: 1800 55 1800, or online at www.kidshelpline.com.au. For life threatening or critical situations call 000 or 112.

Some safety tips to consider when dealing with cyber bullying:

- tell a trusted adult (parent, teacher, relative) if someone is posting inappropriate comments or sending messages that are making you or a friend feel uncomfortable or upset
- check your privacy settings on Facebook and other social media
- block the sender of inappropriate messages and report them to your ISP (internet service provider)
- treat others as you would expect to be treated and don't share comments, photos or content that may upset or hurt someone
- stand up and speak about incidents of bullying. If you know bullying or cyber bullying is going on, support others and report it to a trusted adult.

WORKBOOK>>
Worksheet 6.5

Sexting and 'selfies'

sexting
sending provocative or sexual photos, messages or videos, via a mobile phone or by posting online

cyber stalking
use of technologies such as mobile phones or the internet to intimidate, control, manipulate or humiliate the recipient

Taking 'selfies' and sharing them with your friends is something that you probably do without thinking much about it. But taking selfies of a sexual nature or taking similar photos of others is known as **sexting**, which has serious legal and social outcomes. When an image has been sent or shared, you lose control over who sees it and shares it. Images and messages can spread rapidly when they are shared more than you expected them to be. This can have a serious impact on your reputation, now and well into the future. Images can also potentially be used for cyber bullying, **cyber stalking**, harassment and, in extreme cases, assault.



Alamy/Nick White/Cultura Creative

A Year 7 student is upset when a 'selfie' she sent to her boyfriend is forwarded to hundreds of others in her school

face 2 face

WHAT IF ...?

With a partner, discuss the following scenario. A Year 8 boy asks his girlfriend to take a photo of herself topless. Although the boy says he will be the only person to see the photo and swears he won't show anyone, the girl says no. He pesters her and says that if she really loved him, she would do it. After a few days of worrying and being made to feel bad about not doing it, she takes the photo and sends it to her boyfriend. After a couple of months, they split up and he decides to post the photo on Facebook with some negative comments about her. The girl tells her mother about what has happened.

- Is it a good or bad thing that the girl told her mother about what has happened?
- Should the girl's younger siblings be told what is going on? If so, what would be the best way to do this?
- Should the family inform the school, police or other authorities?
- What long-term impacts could this type of behaviour have?
- What does it mean when you read or hear that 'images last forever and can't be erased'?

WORKBOOK>>
Worksheet 6.6

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SEXTING AND THE LAW

Students may be committing a criminal offence when taking and/or sharing sexual images of themselves or their friends who are under 18. Creating and/or distributing sexual images with **minors** may be regarded as production and/or distribution of child pornography. This is true even if the people in the image agree to it being taken. Punishments vary by state and territory and on a case-by-case basis.

PERSONAL SAFETY PLANS

minor
a girl or boy younger than the legal age for an adult (18)

While it's important to be safe online, there are many other situations that may arise in your daily life, whether you are on your own or out with friends, where some practical skills and strategies for looking after yourself are important to know.

Strategies for personal safety

These strategies, known as your personal safety plan, include developing your confidence so that you are less likely to become a victim and knowing what to do if you are in an unsafe situation. The following section presents some tips for keeping yourself safe in various situations.

Travel with friends

Where possible and practical, travel with at least two or three friends. The saying of 'safety in numbers' applies. If you, or your group, are threatened, there are more opportunities for seeking assistance.



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Safety in numbers

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review & reflect

SAFETY IN NUMBERS

Discuss situations when walking together might actually decrease safety.

When might a group of teenagers attract negative attention for their behaviour? How might walking through a shopping centre or down the street be considered dangerous?

Stay alert

- If you appear distracted, you are more likely to be targeted. Attackers will target people who look less able to defend themselves.
- Stay awake on public transport – sometimes it is tempting to close your eyes or have a quick sleep but this will leave you very vulnerable. If you feel yourself dozing off, open a window to get some fresh air.
- Don't listen to music or talk on your mobile as you walk home as this will reduce your awareness of what is going on around you. Being aware of your surroundings will also help you identify places or people who might be able to help you if necessary.

Look confident

- The more confident you look, the less likely you are to be attacked.
- Walk with your hands by your sides and stride out confidently and with purpose. Look ahead rather than down at the ground so that you are aware of what is going on around you.
- Find comfortable and secure ways to carry your bags, such as wearing the strap over your shoulder and across your body.

Act on your feelings

- If someone is making you feel uncomfortable, or you suspect that you are being followed, don't ignore it.
- Cross the road if you think you are being followed. If the person continues to follow you, go into a shop, petrol station or somewhere where there are lots of people and tell someone what is happening. You should then either phone home and ask to be picked up or call the police.

Stay in touch

- Make sure that people know where you are, where you are going and when you are due home so that they can raise the alarm if you are not home by the time you specified.
- Ensure that you carry your mobile phone, if you have one, at all times, but keep it hidden from sight in a pocket or bag.
- If you and your friends are travelling home late at night, text each other when you get home. If someone doesn't check in when expected, tell an adult.

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Stay in the light

- Choose well-lit areas with other people around, wherever possible.
- Use main roads with good street lighting as much as possible when walking home after dark. You are not such an obvious target if other people can see you.
- Meet friends in a familiar and safe environment that you all know. If one of you is waiting alone, it is much better to do so in a busy, well-lit place than in a dark park or on a street corner.
- Stick to major routes and roads and don't take short cuts.
- Walk facing oncoming traffic and do not walk near the kerb.

Stay close

- When using public transport, stay close to people who can help you.
- Travel in carriages or sit where there are groups of people who could help you if needed.
- Arrive at the station, depot or bus stop as close as possible to the departure time of the train or bus and stand in well-lit areas close to other people.
- When using a taxi, give clear directions to where you want to go. If you are not on the agreed route, stop the taxi. If feeling unsure, insist on being taken to a safe place and end the trip.

WORKBOOK>>
Worksheet 6.7



Newspix/Craig Greenhill

Friends 'sticking together' and looking out for each other

PUBLIC TRANSPORT

1. Go to your local public transport website and create a list of the top 10 strategies suggested to increase safety while using public transport.
2. Of the top 10 strategies, choose five that you think are the most important. Discuss with your classmates why you have chosen these five.

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Carry some essentials

There are a few things you should carry with you at all times, just in case things go wrong:

- at least a couple of $1 coins and a $10 note so that you can always make a phone call or catch public transport or a taxi if you are feeling anxious
- emergency contact numbers – these should be stored on your mobile phone, but make sure you also have them written down.

Look out for your friends

At major events such as concerts, parties and outings, look out for each other by following these guidelines:

- never leaving valuables unattended at the beach, in parks or at major events. Offenders watch the movements of people in public spaces to pick their targets. Make it obvious that you are alert and not alone.
- staying with your group, especially in large crowds during parties, concerts, festivals, etc. When you decide to leave, do so in groups of two to three.
- not taking too many belongings and bags with you, as they can be difficult to care for. Some venues may not allow you in with bags. Keep belongings in the middle of your group and always have one person stay with them.
- avoiding getting into arguments – logic and common sense are affected by alcohol or illicit drugs
- calling an ambulance immediately if a friend is seriously affected by alcohol or drugs. Police are not necessarily called when an ambulance is requested so don't be scared about this happening.
- giving yourself enough time to get to and from where you want to be, especially when relying on public transport.

Three steps to keep you safe

The following three steps can minimise your chance of harm in risky situations.

1. **Think** about any potential for a situation to become unsafe or risky. Listen to what your body is telling you: faster heart rate, increased sweating, 'uneasy feelings'. In most cases, if a situation doesn't feel right, then it probably isn't and needs a quick evaluation.
2. **Evaluate** the level of risk associated with a situation. Quickly try to think ahead about what might happen. Quickly decide whether the situation is risky, but under control, or if it is too risky and potentially harmful for you and your friends.
3. **Act** quickly to remove yourself from situations where you think your safety could be placed at risk and that things could go wrong for you or your friends. By planning ahead, you probably will respond in a safe and positive way.

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EXERCISING SAFELY

Regular physical activity is vital for good health. While there is a risk of injury with any type of physical activity, the benefits of being regularly active far outweigh the risks. Rules, regulations and guidelines relating to physical activity usually exist for a good reason, that is, to keep you and your friends safe and to avoid injuries so that everyone can enjoy the experience.

Sometimes rules may not be directly related to a sport or activity but need to be followed anyway. For instance, if you're inline skating, skateboarding or riding a bike, you need to pay strict attention to all traffic laws and accept recommendations regarding protective gear and warm-ups. Proper techniques and equipment also promote safety.

Listen to your body

Injuries are more likely if you ignore your body's signals of fatigue, discomfort and pain. You can avoid injury by following some simple suggestions:

- see your doctor for a full medical check-up before embarking on any new fitness program. You should also consult your doctor or physiotherapist if you have a pre-existing injury but want to start a new fitness program.
- cross-train with other sports and exercises to reduce the risk of overtraining
- make sure you have at least one recovery day, preferably two, every week
- exercise at an appropriate intensity for your fitness level. It takes time to increase your overall level of fitness. Training too hard or too fast is a common cause of injury.
- allow time for injuries to rest – trying to 'work through' the pain will cause more damage to soft muscle tissue and may delay healing.

Warning signs

If you experience any of the following symptoms, stop the activity and seek help:

- feelings of discomfort or pain
- chest pain or other pain that could indicate a heart-related issue, including pain in the neck and jaw, pain travelling down the arm or pain between the shoulder blades
- extreme breathlessness
- a rapid or irregular heartbeat during exercise.

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Alamy/Riedmiller/Caro

Physical activity, exercise and sport are all positive but can be 'too much of a good thing' if done excessively

WEB

TOO MUCH EXERCISE?

Sometimes teenagers engage in obsessive or compulsive exercise, which can be both unhealthy and unsafe. Use the internet to find at least two articles that examine excessive or compulsive exercise by teens. Also find an article about this behaviour presented by a medical organisation. Combine the article information and that provided by the medical organisation into a one-page fact sheet on excessive teen exercise.

Prepare for activity – warm-up

Before any exercise session, it's a good idea to gradually warm up your muscles for about 5 to 10 minutes to get you ready for your workout and prevent injury. The type of activity done in the warm-up should use the major muscle groups that will be used in your forthcoming activity.

Your warm-up could begin with a low-intensity activity such as a brisk walk or light run, followed by stretching that mimics the movements that are likely to occur during the activity. Stretching should start after your muscles have been warmed, as stretching cold muscles is less effective and could lead to low-level injuries.

WORKBOOK>>
Worksheet 6.8

Cool down

It is also important to stretch after activity, to assist recovery. A thorough cool down can really reduce muscle soreness and stiffness. In the last five minutes of your workout, slow down gradually to a light run or brisk walk. Finish off with 5 to 10 minutes of stretching (emphasise the major muscle groups you have used during your activity).

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Drink lots of water


Getty Images/Sam Edwards

You can lose around 1–2 litres of fluid for every hour of exercise and physical activity. Dehydration happens well before you feel thirsty and may have some serious symptoms, including increased errors, poor judgement and general tiredness, cramps, headaches, heat stress and heatstroke.

Here are some tips to avoid dehydration:

- regularly drinking fluids for several hours prior to exercise and ensuring that you drink at least 500 mL an hour before exercise
- drinking at least 150 mL every 15 minutes during exercise
- during exercise or activities, take advantage of all breaks in play to hydrate
- after exercise, have plenty to drink to ensure you are fully rehydrated.

BEING SAFE OUTDOORS

Being outdoors is a great way to combine physical activity and being with friends. Even though most of the things that you do outdoors might seem harmless, there are some safety issues to think about. These include sun safety, water safety and having the right equipment.

Sun safety

Exercising in hot weather puts additional strain on your body. When your body can't keep itself cool, you may be affected by a heat-related illness, such as heatstroke or sunstroke. Sweating is the body's natural reaction to heat and is designed to cool your body down. When you get too hot, your **core temperature** rises, sweating is no longer effective and you may develop a heat illness.

core temperature the temperature of the vital organs of the body (brain, heart, lungs, kidneys), measured internally

Heat illnesses

Symptoms of heat illness can include irritability, weakness, headache, feeling sick and cramps. You can avoid heat illness by following these tips:

- drinking plenty of water before, during and after exercise
- wearing lightweight, light-coloured, loose-fitting clothes

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- protecting yourself from the sun with clothing such as long-sleeved tops, full-length pants, a hat and sunglasses
- exercising in the cooler parts of the day – not between 10.00 a.m. and 4.00 p.m., which is usually the hottest part of the day
- not exercising as hard on hot days. Take frequent breaks and drink water or other fluids every 15 to 20 minutes, even if you don't feel thirsty.

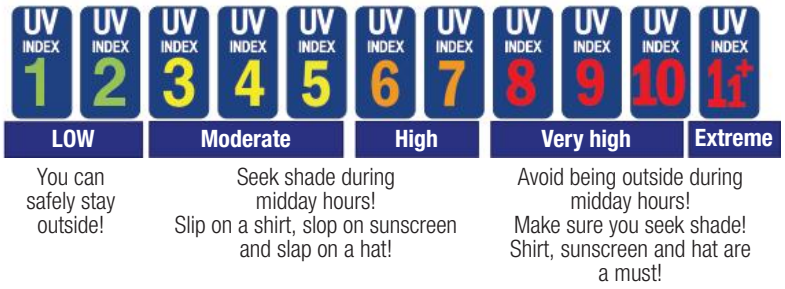
U.V.R is B.A.D.

Ultraviolet radiation (UVR) is bad news for your skin. It's the part of sunlight that causes sunburn, skin damage and ultimately skin cancer. Every bit of UVR exposure that you receive adds up over time; this is known as cumulative exposure. There are three types of UVR:

1. UVA: causes sunburn and skin damage such as wrinkles and discolouration
2. UVB: causes sunburn and skin cancer
3. UVC: does not reach the Earth's surface but can be produced artificially, for example, by arc welding equipment.

UVR
UVR damages your skin quickly. Your skin gets damaged as soon as you're exposed to UVR, not just when sunburn appears.

The UV Index was developed by the World Health Organization to provide an international scale of the sun's UV strength. It measures ultraviolet radiation (UVR) from the sun on a scale of 1 to 11+. The higher the number, the stronger the radiation and the faster your skin will be damaged and burn.



The World Health Organization's recommendations on sun protection according to the UV Index

The best way to protect your skin from UVR is to make sure you use the following five methods of sun protection every day, whenever you are outside:

1. shade: get in it when you can
2. clothing: cover up as much as possible
3. hat: make it broad brimmed

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4 sunglasses: wraparound are best. Find a pair that meets the Australian standard AS/NZS 1067:2003.

5 sunscreen: SPF30+. Apply it generously 20 minutes before you go outside and remember to reapply every two hours.

WORKBOOK>>
Worksheet 6.9



Protect yourself in five ways from skin cancer

SUN FACTS

- All your time in the sun adds up.
- UVR has nothing to do with light or temperature, so it can't be seen or felt.
- UVR is there even when it's cloudy.
- UVR can be reflected by light onto your skin, bouncing off shiny surfaces such as water, sand, snow and concrete.

Water safety

Australians are known for their love of the water but unfortunately, every year people drown or are injured in the ocean, swimming pools, lakes and rivers. State governments and safety authorities spend millions of dollars on campaigns to teach people how to be safe in and around the water to reduce these, mostly preventable, drowning deaths.

Pool safety

Toddlers and young children under four years of age are especially likely to drown around the home and in home swimming pools. Constant supervision of children around water is essential:

- supervision means constant visual contact, not occasional glances
- even in a supervised public pool, never take your eyes off young children swimming and if they are under five, you must be in the water with them
- if you leave the pool or water area, even for a moment, take young children with you

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Getty Images/Laurie Noble

Patrolled beaches can still be dangerous, especially if you swim outside the flags

- make sure there is a resuscitation chart where you can read it quickly
- don't leave paddling pools, baths, basins, sinks, buckets or troughs full of water after you have finished using them.

Beach safety

Swim between the flags

Any beach can be dangerous. You must always swim between the red and yellow flags, which indicate the area where the beach is patrolled by lifeguards. When swimming between the red and yellow flags, always look back to the beach to check that you are still between the flags.

As beaches are not patrolled every day of the year, and some are never patrolled, it is important to remember these guidelines:

- check with an adult where it's safe to swim
- never swim alone
- read and obey the water safety signs that warn people of likely risks and dangers.


Courtesy of Life Saving Victoria

Water safety signs, from left to right: No swimming, No fishing, No surfing, No diving, No bodyboards, No boating


Courtesy of Life Saving Victoria

Danger awareness signs, from left to right: Caution shallow water, Beware cliff edge, Beware deep water

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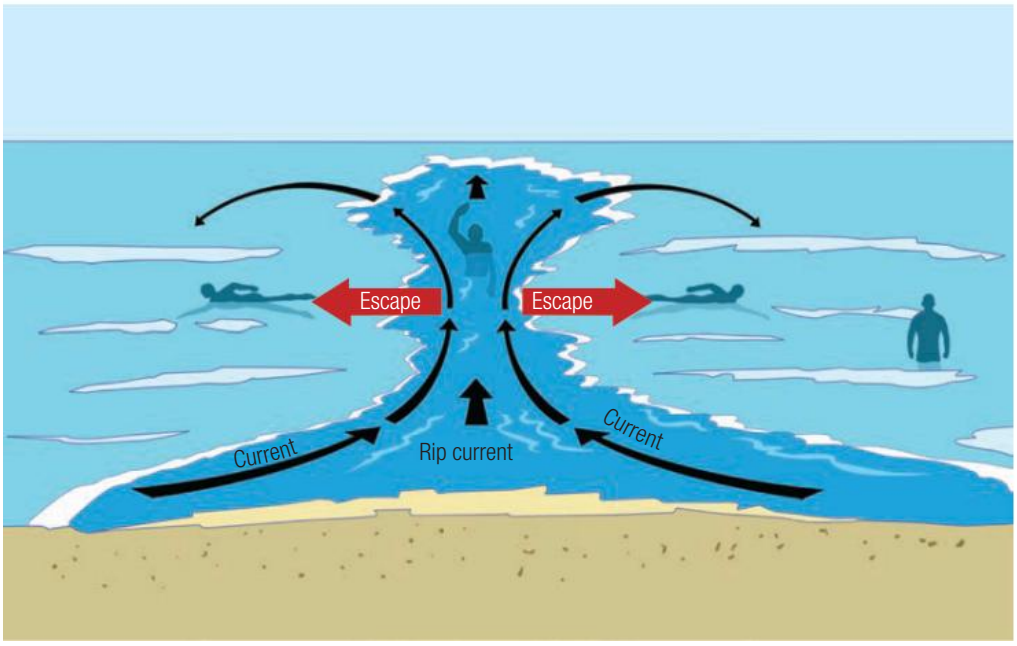
Rip currents

A rip is a strong water current running out to sea from a beach. Rips can easily and suddenly sweep swimmers out to sea from shallow water, sometimes several hundred metres offshore. Rips are not easy to spot, but may show some of the following signs:

- murky brown water caused by sand and seaweed being stirred up off the sea bed
- foam and debris on the surface of the water, moving out to sea
- waves breaking on both sides of the rip but not inside the rip (the rip may seem calm and inviting)
- water that is darker than the surrounding water, indicating it is deeper.

What to do if you find yourself in a rip current:

- try to stay calm and don't fight against it. Try to float with the current and attract attention for assistance.
- if you have a surfboard or bodyboard, stay on it and try to attract the attention of a lifeguard or another surfer
- if you are a strong swimmer, you could try to escape the rip current by swimming parallel to the beach.



How a rip current works

Safety when surfing and bodyboarding

At a patrolled beach all surfers must surf outside the black and white quartered flags. These flags are sometimes used to create a buffer zone between the swimming area (between the red and yellow flags) and the board riding areas. No surfboards are

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allowed between the black and white quartered flags. Surfers can contribute to their own and others' safety by following some simple rules:

- always let someone know where you are going
- never surf alone
- assess the conditions thoroughly – check with local authorities and the weather forecast
- stay aware of the conditions, as they can suddenly change
- use the correct equipment – leg rope and nose guard for surfing, wrist strap and fins for bodyboarding
- if you get into trouble, stay on your surfboard or bodyboard – it will keep you afloat
- if you are caught in a rip, stay calm and stay with your board. Try to attract attention and if possible, paddle parallel to the beach, then catch a broken wave back to shore.
- be aware of other people in the water and don't surf or bodyboard too close to swimmers.

WORKBOOK>>
Worksheet 6.10

Inland water safety

Many people drown in Australia's rivers, lakes and dams or are paralysed after diving into shallow water. The best way to check whether it's safe to swim is to ask someone who knows the area, such as a resident, previous holiday maker, caravan park owner or park ranger.





DIVING ACCIDENT

Using the internet, search for a media article about a person injured while diving into shallow water. Then discuss the following as a class:

- how their life has changed since the accident
- how the accident could have been avoided
- why most accidents of this type involve young men.

Lake safety

Lakes may look calm but are often very dangerous because of strong winds, which can create choppy conditions, and strong currents, which are likely wherever a river enters a lake. Another potential danger of lakes is that the water can be much colder than you expect. Suddenly being immersed in cold water can cause distress and shock. If you feel cold, get out of the water immediately. Always wear a personal flotation device (PFD) such as a lifejacket when boating or doing water sports on a lake.

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iStockphoto/SimplyCreativePhotography

Lakes and rivers can look deceptively tranquil but can present serious dangers

River safety

Rivers can be just as dangerous as lakes and the ocean. Conditions can change rapidly after heavy rain or the release of water from storage areas. What is safe one minute can be dangerous a few minutes later.

There are a few simple strategies for keeping yourself safe while having fun in rivers:

- always wear a personal flotation device (PFD) such as a lifejacket when boating or doing water sports on a river
- never swim in fast-flowing water. Check the speed first by throwing in a twig to see how fast it travels.
- if you are caught in a strong current, float on your back and travel downstream, feet first, to protect your head from hitting any objects
- be aware that there are likely to be objects under the water that you cannot see, such as trees, branches, rocks and discarded rubbish
- don't stand near the edge of overhanging river banks – they can be unstable and could crumble away.

The right gear

Most sports and activities need some type of equipment to be played; you need boards to surf, balls for football, bats for cricket and so on. But you also need protective equipment, such as mouthguards, shin pads, helmets and lifejackets, to reduce the risk of injury and allow you to play safely. Protective gear absorbs the impact of falls or collisions or helps you to stay afloat.

ISBN 9780170376181



Alamy/david pearson

Choose the right sports shoes for the activity and the playing surface

Safety tips for equipment

Sports equipment and safety equipment can only do their job if they are used correctly and are kept in top condition. Here are some tips for making sure your equipment does the best job for you:

- use the correct grip on bats and racquets, etc. Holding a tennis racquet the wrong way can increase your risk of an injury to your elbow.
- use equipment appropriate to your sport or activity and your size and age. As you grow, the equipment you use may also need to change.
- wear the right type of shoes for your sport and replace them before they wear out. Rock climbing requires special footwear, as do a whole range of other sports such as netball, basketball, cricket, hockey and athletics.
- wear the same protective equipment during training that you wear during competition
- check your equipment regularly and replace if worn out or damaged. If you are unsure how to maintain or check your equipment, ask your coach or sporting association.

WORKBOOK>>
Worksheet 6.11

face 2 face

THE RIGHT SHOE

In pairs, discuss the following questions.

1. In what ways are shoes made specifically for netballers different from those worn by footballers?
2. How are shoes worn by soccer players on synthetic surfaces different from those worn when playing soccer on grass?
3. How do basketball shoes increase safety for players?
4. Many students wear 'runners' to school on free dress days but shouldn't participate in sport or physical education classes wearing these shoes. Can you give reasons for this?

WEB

PARTS OF A SHOE

Choose a specific type of sports shoe (e.g. racing shoe, football boot, tennis shoe). Identify as many basic parts of your chosen shoe as possible. You should try to outline at least four features. How does each part provide safety for the wearer?

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BASIC FIRST AID

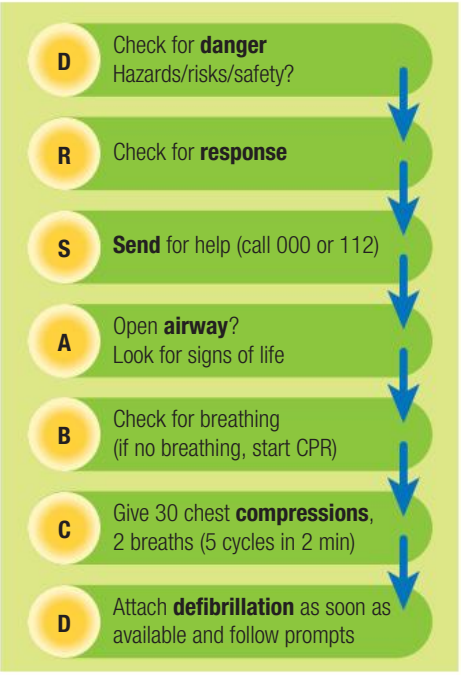
You may have heard the saying, 'failing to plan is a plan to fail'. Everyone, including young people, should plan ahead. This includes thinking about how to reduce any risks involved in what you are doing and how to respond if things go wrong.

Young people account for a high percentage of patients in hospital emergency departments because they sometimes overestimate their ability, make poor decisions or are pressured by friends into doing things they otherwise wouldn't.

Having some basic first aid knowledge and knowing how to respond automatically and appropriately in an emergency can prevent things from getting worse and can even save someone's life.

The DRSABCD action plan

'DRSABCD' is an easy-to-remember action plan that will guide you through an emergency situation. It helps the first aider to assess levels of consciousness and breathing in an injured person first and then to decide on what type of basic life-support measures are needed.



DRSABCD life-support flow chart

D = danger

Always ensure that the area is safe for you, the injured person and any bystanders before approaching an accident or emergency. If you can, remove the source of the risk or danger, or remove people from it. Only do this if there is no risk to you. For example, if you sense that an argument might be getting out of control, you might try to calm the people down. If that is not possible, move away from the dangerous situation.

R = response

If it is safe to approach, first assess whether the person is conscious or unconscious. Consciousness refers to the person's awareness of and response to their surroundings.

To assess an injured person, use verbal and touch techniques. To do this, give a simple command such as 'open your eyes, squeeze my hand' (verbal), and squeeze both shoulders firmly (touch). If you are dealing with a child or infant, firmly rub their breastbone instead of grasping their shoulders.

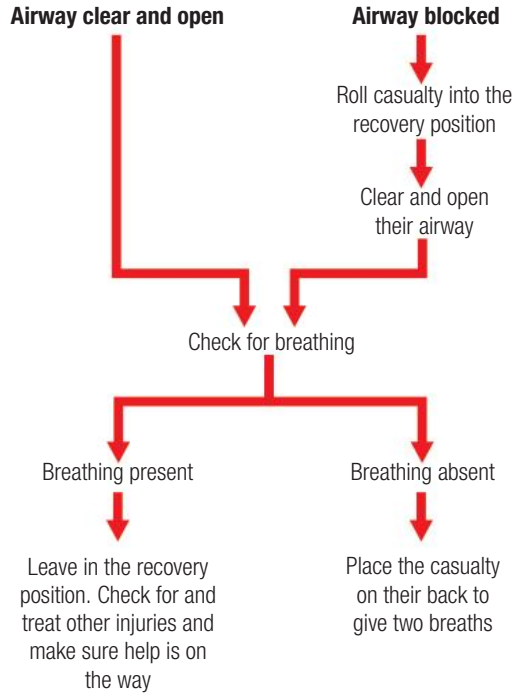
FIRST RESPONDERS

An unconscious person is not aware of their immediate surroundings and cannot protect him/herself from further danger. People who are first to reach them become their most important life support.

ISBN 9780170376181

Never shake a small child. A person who fails to respond to these techniques is unconscious. Your action plan depends on the level of consciousness:

- **if the person is conscious,** assess for and manage other injuries or illnesses and continue with the DRSABCD action plan
- **if the person is unconscious,** roll them onto their back and call 000 or 112 (on a mobile phone) and assess the airway.



Steps for assessing airways

S = send for help

Call 000 or 112 for an ambulance or ask another person to make the call while you proceed with checking the airway, breathing and possible needing to start CPR.

A = airway

Recovery position

If the injured person's air passages are not clear (they may contain food, vomit, blood or other fluids), they must be turned into the recovery position so that you can clear the airway. These instructions show you how to put the injured person into the recovery position.

EMERGENCY NUMBER FOR MOBILES

Dial 112 on any digital mobile phone to contact an emergency service. Dialling 112 connects you to the same call service as 000. You do not need to use a SIM card, PIN or phone credit to activate the mobile, but it must be in an area that has phone service coverage. Dialling 112 from a fixed-line telephone in Australia will not connect you to emergency services.

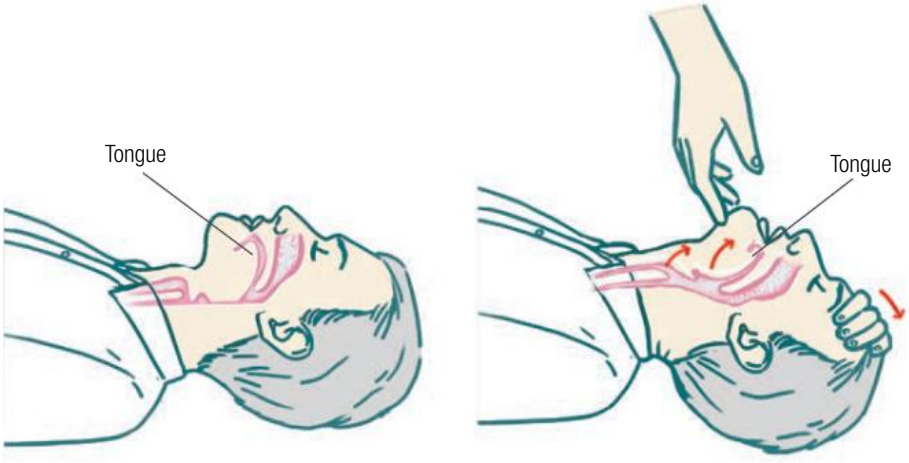
TABLE 6.2 Recovery positions

 Recovery position 1	**1** Kneel beside the injured person (the patient). **2** Place the patient's arm, the one furthest away from you, straight out at 90 degrees. **3** Place the patient's other arm across their chest. **4** Bend the patient's knee that is closest to you.
 Recovery position 2	**5** Place one hand on the patient's bent knee and the other hand on their shoulder. **6** Gently roll the patient away from you. **7** Ensure that the patient's bent knee touches the ground. **8** Place the patient's upper arm across the lower arm.
 Recovery position 3	**9** Ensure the patient's head is tilted back and their face is turned slightly downward. This will allow fluids to drain from the mouth. **10** If possible, put a rubber glove on your hand, then put two fingers in their mouth and sweep the mouth clear of any foreign material, if required. Once the airway is clear and open, assess for signs of breathing.

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Clearing the airway

If an unconscious person is lying on their back, they may not be able to breathe properly because their tongue blocks the airway. This is potentially life threatening. Gently tilting a person's head back and lifting their chin up at the same time allows their tongue to move out of the airway and allow them to breathe. Very gently move the head backwards, especially when there is the possibility that the person has a neck, back or spinal injury. If the person has fallen, or their head has been injured, this is extremely important.



An unconscious person lying on their back may have their airway blocked by their tongue (left). Lift the chin upwards by placing your fingers under the chin. This lifts the tongue from the back of the throat and opens the airway (right). Tilt an adult's or child's head fully back to further open the airway. Babies' heads should not be tilted backwards as that may cause further blockage to the airway.

B = breathing

Oxygen is vital for life. Lack of oxygen over an extended period will cause the heart and brain to stop working. To find out whether the injured person is breathing, you should look, listen and feel for signs of breathing:

- **look** for movement of the lower chest for 10 seconds
- **listen** for the sound of regular breathing
- **feel** air escaping from the mouth or nose with your cheek.

If the person is not breathing or not breathing normally, begin cardiopulmonary resuscitation (CPR).

C = cardiopulmonary resuscitation (CPR)

CPR is recommended for a person who is unconscious and not breathing or not breathing normally. The purpose of CPR is to keep oxygen and blood circulating around the body until emergency medical help arrives. CPR is a combination of mouth-to-mouth breathing, which forces air into the lungs, and chest compressions, which keep blood circulating around the body.

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TABLE 6.3 What life support you should give, and when

Condition	Breathing?	Basic life support (BLS) requirements for an adult
Conscious	Yes	Place the injured person in a comfortable position, assess and manage their other injuries, and closely watch that they stay breathing.
Unconscious	Yes	Turn the injured person into the recovery position (see Table 6.2), call for help, keep their airway open and closely watch that they stay breathing. Assess and manage their other injuries.
Unconscious	No	With the injured person on their back, give two breaths. Check for signs of life.
No signs of life	No	Cardiopulmonary resuscitation (CPR) is needed. Start CPR with 30 compressions and two breaths. Work towards giving 100 compressions in one minute.

TABLE 6.4 Recommended CPR for adults, children and infants

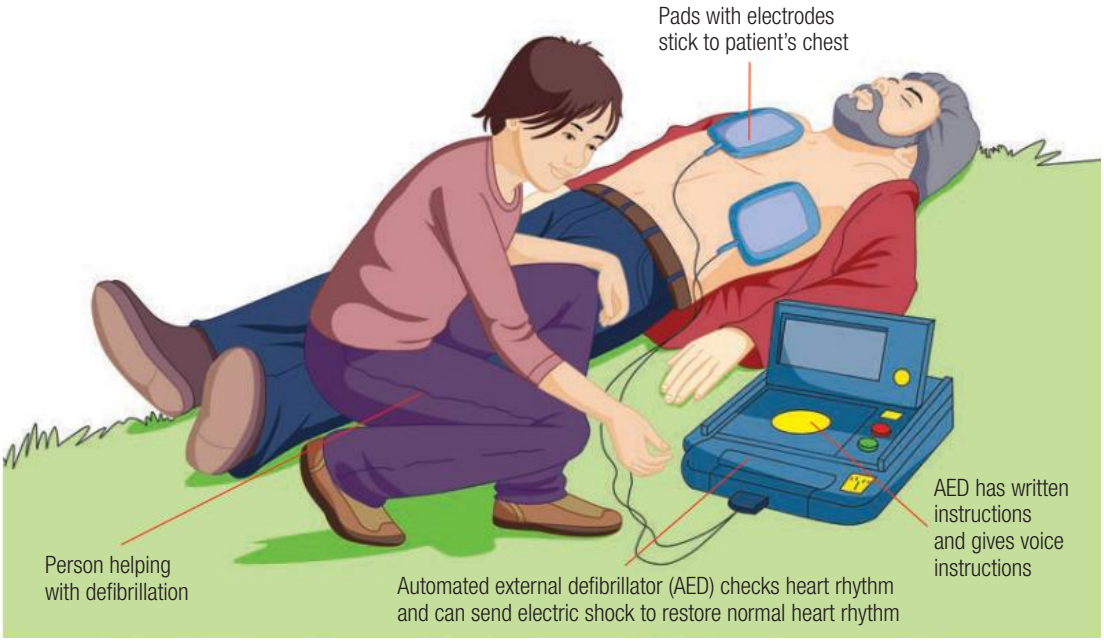
	CPR	Method of compressions	Depth of compressions
Adults and children 9–17	30 compressions and two breaths	Two-handed pressure over middle of chest	One-third of the depth of the chest
Child (1–8 years)	30 compressions and two breaths	Two-handed pressure over middle of chest	One-third of the depth of the chest
Infants (0–1 year)	30 compressions and two breaths	Two-finger pressure over middle of chest	One-third of the depth of the chest

Note: This is a guide only. Aim to give 100 compressions each minute.

D = defibrillation

An automated external defibrillator (AED) is a device used to restore normal heart rhythm to patients whose heart has stopped (cardiac arrest). An automated external defibrillator is applied outside the body. It automatically analyses the patient's heart rhythm and advises the first aider whether or not a shock is needed to restore a normal heartbeat.

WORKBOOK>>
Worksheet 6.12



Using an AED is simple – follow the voice prompts and you could save someone's life!

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The AED is very simple to use. The first aider follows a set of voice prompts with visual guides. Don't be afraid and always remember it's better to do something than nothing in these situations. Once you have used DRSABCD and assessed that a person is conscious (they have a heartbeat and are breathing), their other injuries or conditions (e.g. bleeding) may need your attention.

Sport injuries

If you play sport, you may have had a common sports injury such as a sprain, strain or knock. A sprain happens when you overstretch or tear a **ligament**. The joint (e.g. an ankle) is affected, but there is no dislocation or break in the bone. Symptoms include rapid pain, swelling, bruising and a warm feeling at the injured site. A strain is an injury to the muscles or **tendons** and has similar symptoms to a sprain. Strains tend to happen through overtraining or overuse, often when muscles 'overstretch'.

ligament
fibrous tissue that connects two bones, especially at a joint (knee, ankle, etc.)

tendon
a structure that connects muscle to bone

The treatment for sprains, strains and other sports injuries depends on the injury and on the amount of damage. Mild injuries may only need first aid. Some sporting injuries and sprains may need assessment and treatment from a doctor or paramedic. Some sprains need a cast or rigid protection to assist with recovery. Serious sprains and strains may require surgery if the body is damaged so much it is unlikely to repair itself.

If the injury is not serious, stop what you are doing, move to a safe place (or ensure where you are is safe). Follow the **RICER** steps for a quick recovery from minor sprains, strains and other sporting injuries:


Science Photo Library

An ankle sprain can cause strain on the Achilles tendon

WORKBOOK>>
Worksheet 6.13








R = rest	I = ice	C = compression	E = elevation	R = referral
Rest reduces further damage. Move as little as possible to avoid more injury. Don't put any weight on the injured part of the body.	Apply a cold pack or ice to the injury for 20 minutes every two hours. Continue this treatment for the first 48 to 72 hours. Ice cools the tissue and reduces pain, swelling and bleeding. Place a cold pack wrapped in a towel onto the injured area. Do not apply cold packs directly to the skin. Extra care must be taken with people sensitive to cold (such as children) or with blood circulation problems.	Wrap with a flexible crepe or elastic bandage, covering the injured area and the areas above and below. Compression reduces bleeding and swelling. Ensure the bandage is not too tight.	Elevate the injured area to stop bleeding and swelling. Place the injured area on a pillow for comfort and support.	Refer the injured person to a qualified professional such as a doctor or physiotherapist for precise diagnosis, ongoing care and treatment. A full recovery is then more likely.

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COMPRESSION FIRST?

Even though RICER is easy to remember and appears in most first aid books or manuals, more and more sports trainers and physicians are applying compression first and then ice over this. The advantage is that direct contact with the skin is avoided and when the ice is removed, the compression limits blood flow and minimises further damage.

Getting better

If you've been injured and you try to come back to sport and physical activity too soon, you run a greater risk of reinjuring yourself, maybe more seriously than before. Don't let anyone, including your parents, friends, teachers or even coaches, pressure you into returning to training or competition before you have fully recovered. Your doctor, physiotherapist or sports trainer will give you specific advice on when you should return to your sport or activity.

concussion
a brain injury that occurs following a knock to the head. It can alter brain function and cause unconsciousness.

Taking time to heal is particularly important if you've had a **concussion**. Lots of athletes try to return to sport or activities too quickly after getting a concussion; some footballers even try to return to the field after a short time out because they can't see any evidence of an injury and they think they're fit to keep playing. But jumping back into the game too soon puts a player at greater risk of suffering another concussion, as the brain can still be healing. Repeat concussions can lead to dangerous and sometimes delayed brain injury. Always get clearance from a medical expert to resume sport or physical activity if you've had a concussion.

review & reflect

HEAD INJURIES

1. Discuss why people who regularly fight are placing their brains at high risk of a delayed brain injury.
2. If you are at a party and see someone struck in the head, but they seem to be alright, how should you care for them?

Asthma

People with asthma have **hypersensitive** airways in their **respiratory system**. When exposed to certain **triggers** such as dust, pollen or exercise, the airways become narrow so it is harder to breathe out. An asthma attack can develop over a few minutes or a few days. The symptoms of a mild asthma attack include chest tightness, coughing, wheezing and shortness of breath. These symptoms can quickly worsen to include gasping for breath, inability to speak, little or no improvement after using inhaler medication and blue colouring around the lips. If a person is having an asthma attack, you should commence asthma first aid.



iStockphoto/davidf

Asthma puffer with spacer

hypersensitive
extremely sensitive

respiratory system
the body organs involved with breathing, including the nasal passages, windpipe and lungs

trigger
an event that sets off another event

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Asthma first aid

The following four steps are known as the 4 × 4 first aid plan and are an easy way to remember what to do if you need to help someone who is having an asthma attack.

STEP 1 Sit the person upright, be calm and reassuring. Do not leave the person alone.

STEP 2 Without delay shake a blue reliever puffer, using a spacer if available. The spacer increases the amount of medication inhaled into the lungs. Give four separate puffs, one puff at a time. Ask the person to take four breaths from the spacer after each puff.

STEP 3 Wait four minutes. If the person still cannot breathe normally, give four more puffs.

STEP 4 If there is still no improvement, or you are concerned at any time – call 000 or 112 immediately. Tell the operator the person is having an asthma attack. Keep giving four puffs every four minutes while you wait for emergency assistance.

ASTHMA FACTS

- More than 2 million Australians (about 1 in 10 adults and 1 in 9 children) have asthma.
- More boys than girls have asthma but after age 15, it is more common in women than men.
- Asthma is more common in Aboriginal and Torres Strait Islander people than other Australians.

Source: National Asthma Council Australia, www.nationalasthma.org.au

Bleeding

Bleeding is usually associated with cuts and abrasions but injuries to the body can also result in bleeding inside the body (internal bleeding). These can be minor (bruising) to massive (life-threatening bleeds). The purpose of first aid for severe external or internal bleeding is to slow the loss of blood until emergency medical help arrives. Always use gloves if available when treating someone who is bleeding.

Minor bleeding

Small cuts and abrasions that are not bleeding much can be managed fairly easily. Press down with your hand for about 30 seconds to stop the bleeding, then clean the wound with water or saline solution if available. If you cannot clean the wound properly, seek further medical help. Cover the wound with a clean dressing such as a bandaid or a gauze pad and bandage. Be aware that deep, narrow cuts (e.g. from stepping on a nail, or a cat bite) may cause **tetanus**. If you are not sure if your tetanus immunisation is current, see your doctor.

tetanus
a serious disease caused by bacteria that enter the body through a cut or wound

Nosebleeds

Bleeding from the nose is not usually severe, unless it is associated with a head injury such as being hit with a hockey stick, punched during a fight or falling heavily on your head. First aid suggestions include the following:

- sit the person upright and ask them to tilt their head forward (resist the temptation to tilt the head back to slow or stop the flow of blood as this sends

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Alamy/Angela Hampton Picture Library

Always tilt the head forward to reduce backflow of blood from a nosebleed

it down the nasal passages and into the roof of the mouth and may cause breathing difficulty)

- use the thumb and forefinger to pinch the nostrils shut and hold for at least 10 minutes
- release the hold gently and check for bleeding. If bleeding continues, pinch the nostrils shut for another 10 minutes.
- get medical help if bleeding continues beyond 20 minutes.

Severe external bleeding

Even a small cut can result in severe external bleeding, depending on where it is on the body. This can lead to shock, a serious, life-threatening condition where the injured person no longer has enough blood circulating around their body. To manage severe external bleeding:

- check for danger before approaching the injured person and if possible, send someone else to call for an ambulance
- lay the person down with the injured area above the level of their heart (if possible)
- ask the person to apply direct pressure to the wound with their hand or hands to stem the blood flow. If they can't do it, apply direct pressure yourself.


Newspix/Michael Klein

Major blood loss is often associated with shock

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- if possible, pull the edges of the wound together before applying a dressing or pad. Secure it firmly with a bandage.
- do not remove any object embedded in the wound. Apply pressure around the object.
- do not remove initial dressings, even if they become saturated. Add fresh padding over the top and secure with a bandage.

Internal bleeding

The most common type of visible internal bleeding is a bruise, when blood from damaged blood vessels leaks into the surrounding skin. Some types of injury can cause visible bleeding from an opening such as the mouth and ears but some internal injuries can cause bleeding that remains inside the body; for example, within the skull or abdominal cavity.

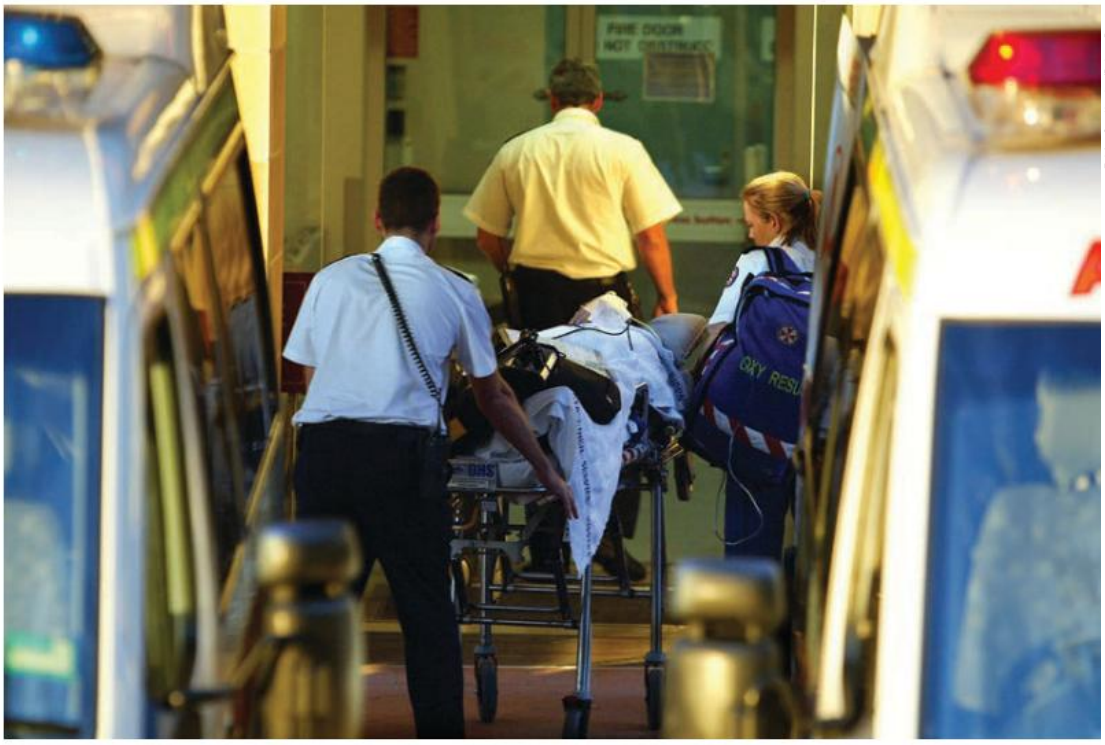
Listen carefully to what the person tells you about their injury – where they felt the impact, for example. The signs and symptoms that suggest concealed internal bleeding depend on where the bleeding is inside the body, but may include the following:

- pain at the injured site
- swollen, tight abdomen
- nausea and vomiting
- pale, clammy, sweaty skin
- breathlessness
- unconsciousness.

First aid cannot manage or treat any kind of internal bleeding but you can help by treating or preventing shock and calling for medical assistance:

- check for danger before approaching the person
- if possible, send someone else to call for an ambulance
- check levels of consciousness
- lay the person down on their back if conscious
- cover them with a blanket or something to keep them warm
- if possible, raise the person's legs above the level of their heart
- don't give the person anything to eat or drink
- offer reassurance. Manage any other injuries, if possible.
- if the person becomes unconscious, place them on their side. Check breathing frequently and be ready to begin cardiopulmonary resuscitation (CPR) if necessary.

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Fairfax Syndication/Robert Pearce

Suspected internal bleeding needs urgent medical attention

BLOOD RULES

Most sports have a 'blood rule', which requires any person who is bleeding to be removed from the field so they can be treated and also to protect others around them from any transfer of blood. If any blood spills on the court, field or playing surface, efforts should be made to minimise the risk of cross-contamination and infection to others by cleaning it up.

Protect yourself and others

Protect others and protect yourself as well. Any break in the skin will not only allow blood and other fluids to be lost and possibly contaminate first aiders helping out, but will also allow germs to enter the body. If the wound is minor, the aim of the first aider is to prevent infection. Severe wounds may be very daunting to deal with but the aim is to prevent further blood loss and minimise the shock that could result from the bleeding.

Any open wound presents a risk of infection. It is important to maintain good hygiene procedures to stop cross-infection between you and the injured person:

- if possible, wash your hands with soap and water before and especially after administering first aid. Dry your hands thoroughly before putting on gloves.
- first aid kits contain gloves. Always put on gloves beforehand if available. If not, improvise and try to provide a barrier between yourself and the casualty's blood (if practical and possible).
- do not cough or sneeze over the wound.

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CHAPTER REVIEW

WORKBOOK>>
Worksheet 6.14

- Young people must identify their own personal network of trusted adults who they can turn to if they are not feeling safe.
- Sometimes situations can become unsafe or risky. Listen to what your body is telling you with symptoms such as elevated heart rate, increased sweating and uneasy feelings – in most cases if you don't feel right in a setting or situation, it probably isn't safe and requires a quick evaluation.
- Act quickly to remove yourself from situations where you feel your safety could be at risk and things could go wrong for you or your friends.
- In positive relationships, both people have an equal say in decision making. They feel free to be who they are and say what they think without fear, anxiety or risk of punishment.
- Emotional, physical and sexual abuse involving young people needs to be stopped by the intervention of a trusted person that you have identified in your support network. It's not your fault!
- Bullying occurs when a person, or group, use their power over another person or group to threaten or force them to do something. This behaviour is unsafe and needs to be stopped before people are hurt.
- Social networking is a great way to stay in contact with friends and family. This can be very important for socially or physically isolated individuals, such as those with a physical disability or students living in rural or remote areas.
- Social networking needs to be used appropriately because it's easy to forget who you are communicating with online. Before posting anything online, think about who will be able to access or see it.
- In most cases content that is posted online stays there forever and is very difficult to remove.
- Cyber bullying is more likely to happen to children who are also bullied offline. All forms of bullying need to be stopped.
- It is important to avoid injury and maintain good health while exercising and playing sport. Learning how to avoid injuries by using the right equipment, protecting yourself outdoors, warming up and stretching, and staying hydrated when you exercise are some of the basics you should know about.
- Around water, check it's OK to swim, never swim alone and obey the water safety signs.
- Protective equipment – such as mouthguards, shin pads and helmets – can greatly reduce the risk of injury by absorbing the impact of falls or collisions and should even be worn during training.
- Young people account for a high percentage of patients in hospital emergency departments because they sometimes overestimate their ability, make poor decisions or are pressured by peers into doing things they otherwise wouldn't.

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THE GREAT OUTDOORS

7

ISBN 9780170376181



Getty Images/Dan Welsh

In this chapter **you will learn about the benefits of incorporating outdoor activities in your everyday life.**

By the end of this chapter, you should be able to:

- ➜ understand what outdoor recreation is and the benefits of being active in the outdoors
- ➜ understand minimal impact in outdoor recreation activities and be willing to apply these when participating in activities outdoors
- ➜ use basic skills to participate in a variety of outdoor and challenge activities such as Ultimate Frisbee, Ultimate disc golf and various initiative and team challenges
- ➜ read a map, plan and navigate a route through various environments using existing routes or tracks
- ➜ understand what orienteering is and develop those skills
- ➜ participate in a range of initiative games, in pairs or teams
- ➜ create team challenges and find solutions to challenges
- ➜ evaluate how you performed in each activity.

Outdoor recreation	**228**
Recreational activities in natural/outdoor settings	**229**
Movement challenges	**237**
Orienteering challenges	**251**
Initiative games	**258**

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OUTDOOR RECREATION

In this chapter you will have the opportunity to explore ways in which you can use the outdoor environment where you live and go to school. This might be to just play a game on the way home in the local park or to have a more structured approach in challenging yourself to get involved with recognised outdoor physical activities such as surfing or mountain biking. The focus will be on participating in activities that challenge you individually and/or as a member of a team. It will also remind you of the importance of teamwork and looking after the environment in which you live. You will develop skills in various settings and the confidence to build on these skills so that you can challenge yourself further physically. When working in a team or group it may challenge how you interact with your peers to complete a task.


Corbis/Scott Smith


Corbis/Ben Blankenburg

face 2 face

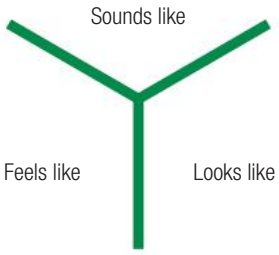
CLASS DISCUSSION

What does the great outdoors mean to you? Your responses will largely depend on where you live. People who live near the coast (the majority of the population of Australia) will experience a different range of activities from those in inland areas. It also will depend on how you have interacted with your local area and your experiences further afield, for example, places you might have been for holidays.

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POSTERS

In pairs or small groups and using a 'Y chart' graphic organiser, explore what the great outdoors means to you in terms of what it looks like, feels like and sounds like. Present your information in a poster to be displayed around the room. Examine each poster and identify differences in how people, even in the same area, view the great outdoors. What are the similarities and differences between the views that are displayed?



A Y chart graphic organiser

critical + creative thinking

SCAFFOLD>>
Y chart

RECREATIONAL ACTIVITIES IN NATURAL/OUTDOOR SETTINGS

The word 'recreation' was first used in the 14th century. It meant 'refreshment or curing of a sick person'. In the past, people spent their time going to work, completing daily chores, eating and sleeping. There was very little free time left to relax or do anything else. This 'free time', traditionally called 'leisure time', is time that is free from obligations (such as paid and unpaid work) and doesn't include tasks that are necessary for existing, such as sleeping and eating.

As technology and society have evolved people still work long hours but technology has provided more leisure time. For example, travelling using a car, train or bus has reduced the time taken to get to work or go shopping. As society has evolved, so have the number of activities that people can choose to do in their leisure time. People can use this time to play sport, watch TV, read a book, participate in a hobby or play games on the internet. The list of leisure-time activities is endless, as are the reasons why people choose to do these activities. They range from wanting to use up excess energy by playing sport or physical training, to wanting to relax and unwind from a stressful day.

WORKBOOK>>
Worksheet 7.1

Recreational activities are activities that people choose to do in their leisure time. They can be active and inactive, indoor and outdoor, healthy and unhealthy. Generally, recreation activities are non-competitive but some more adventurous recreational activities have a more competitive element to them.

As well as the traditional active recreation activities, there are some more extreme or adventurous recreational activities that are typically more demanding physically, mentally and technically because of the more extreme environments they occur in and/or because of the length or difficulty of the event. Some examples are ice climbing, glacier climbing, ultra marathons, Ironman triathlons and extreme obstacle events such as 'Tough Mudder'.

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BEING ACTIVE

For each of the following outdoor environments, think about which 'active' activities are usually associated with the environment. List as many as you can:

- aquatic environments, including lakes, rivers/creeks and beaches/sea
- bush environments
- alpine/mountain environments
- urban/park environments, for example, '**parkrun**'.

parkrun
free, weekly 5 km timed runs held in parks around the world



EXTREME FUN

Using the internet, list as many extreme recreation activities as you can find. Select one of these and investigate the following:

- how and when the activity started
- what is involved and what makes it 'extreme'
- other key interesting facts.

Create a one-page fact sheet about your investigation to promote the extreme activity.

Benefits of being outdoors

Being involved in active outdoor recreation or adventure activities has many benefits, mainly for the individual but society benefits as well. If people have a passion for the outdoors, they are more likely to look after it and **advocate** for it. These benefits are in four areas:

advocate
to support, speak out about or recommend something

- physical: improvements to physical health
- social: relationships with family and friends or peers
- emotional: such as self-esteem and mental wellbeing
- spiritual: awareness of being part of a bigger system (universe).

Individual benefits

Some benefits to an individual of outdoor recreation:

- connection with other people and communities
- enhanced capacity to nurture self
- positive impacts on cardiovascular health, cancer prevention, diabetes and mental health
- increased skills (physical, problem solving, self-awareness).

Community/social benefits

Participation in outdoor recreation and adventure recreation contributes to many positive outcomes:

- improved quality of life
- healthier families
- enhanced health outcomes
- improved physical, mental, social, community and environmental health and wellbeing.

ISBN 9780170376181

Environmental benefits

Two benefits to the environment of outdoor recreation are increased individual connections to nature and an enhanced awareness of the natural environment.

MEMORIES

review & reflect

Think of some memorable times you've had outdoors. (Do not include sporting activities). Can you describe what you gained from the experience? It might have been a fun day because everyone was happy, or you were challenged because you had to walk up some steep hills, or you saw some amazing views. Sometimes, the benefits that can come from experiences like this are overlooked, and you might have to dig deeply in your memories to identify particular benefits.

Complete a table like the one provided, identifying benefits for six activities.

Outdoor experience/activity	Physical benefits	Social benefits	Emotional benefits	Spiritual benefits

SCAFFOLD>>
Memorable activities

CASE STUDY Researchers find time in wild boosts creativity, insight and problem solving

THERE'S new evidence that our minds thrive when we get 'away from it all'. Research conducted at the University of Kansas, USA, concludes that people from all walks of life show startling cognitive improvement — for instance, a 50 per cent boost in creativity — after living for a few days surrounded by nature.

Researcher Ruth Ann Atchley said the 'soft fascination' of the natural world appears to refresh the human mind, offering refuge from the demands of modern life.



inmagine.com

'We've got information coming at us from social media, electronics and cell [mobile] phones,' said Atchley. 'We constantly shift our attention from one source to another, getting all of this information that acts like alarms, warnings and emergencies. Those things are bad for us. They use up our resources to do the fun types of thinking and other mental processes humans are capable of — things like creativity, or being kind and generous, along with our ability to feel good and be in a positive mood.'

'Nature is a place where our mind can rest, relax and let down those threat responses,' said Atchley. 'Therefore, we have resources left over that we can use to be creative, to be imaginative, to problem solve, allowing us to be better, happier people who interact in a more productive way with others.'

Atchley led a team that conducted initial research on a backpacking trip in Utah with the Remote Associates Test, an exercise used for decades by psychologists to gauge creative intelligence.

Intrigued by positive results, the researchers partnered with Outward Bound, the Colorado-based nonprofit [organisation] that leads educational expeditions into nature for people of many backgrounds. About 120 participants on outings in places like Alaska, Colorado and California completed the 'RAT' test.

'We worked with a number of backpacking groups that were going out last summer,' Ruth Ann Atchley said. The data collected across age

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groups —regular people from age 18 into their 60s — showed an almost 50 per cent increase in creativity.'

Best of all, she said that the benefits of nature belong to anyone who immerses themselves completely into wilderness for an amount of time equivalent to a long weekend.

'There's growing advantage over time to being in nature,' said Atchley. 'We think that it peaks after about three days of really getting away, turning off the cell phone, not hauling the iPad and not looking for internet coverage. It's when you have an extended period of time surrounded by that softly fascinating environment that you start seeing all kinds of positive effects in how your mind works.'

Question

Identify and list the physical, social, emotional and spiritual benefits that the researchers found in this study.

Adapted extract from University of Kansas Online, http://archive.news.ku.edu/2012/april/23/outdoors.shtml

WORKBOOK>>
Worksheet 7.2

Promoting minimal impact

Natural environments provide an excellent way for people to learn about themselves, the world they live in and how humans and nature interact with each other. The places you choose to go outdoors to camp, to walk, to ride, to climb, to paddle, to fly and to sail are very special. The uniqueness of the place adds to the outdoor activity experience. As more people discover the pleasures of recreation in the outdoors, it becomes more apparent that the bush, beaches and waterways need care and protection to ensure that they are available to many more generations to enjoy.

minimal impact reducing the potential damage to the environment

It is the responsibility of everyone participating in outdoor recreation to follow a **minimal impact** code of practice. By observing a few simple rules, everyone can make a difference and your special outdoor places will stay special.

Seven principles of minimal impact

Minimal impact can be promoted by following some basic steps. 'Leave no trace Australia' recommends seven principles to follow when using the outdoors.

leave no trace AUSTRALIA

Courtesy of Leave No Trace, www.LNT.org.au

1. Plan ahead and prepare – take time before your trip to be clear about your intentions and prepare carefully for all aspects of the trip.
2. Travel and camp on durable surfaces – whenever possible be aware of the damage you can cause to plants and nature. Use established paths, tracks and campsites.
3. Dispose of waste properly – 'pack it in, pack it out' is a useful saying. Any rubbish that you carry into the bush must also be taken out with you.
4. Leave what you find – people visit natural areas for many reasons and it is vital that these areas remain undisturbed for the next visitor.
5. Minimise campfire impacts – ensure campfires are only used in designated areas, if they are to be used at all.

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6 Respect wildlife – your visit will have some sort of impact on wildlife so keeping this to a minimum will contribute to peaceful coexistence.

7 Be considerate of your hosts and other visitors – be aware of other people using the natural environment and the traditional owners of the land.

LEAVING NO TRACE

review & reflect

Select an activity in an outdoors environment you are familiar with. For each of the seven principles of minimal impact, provide an example of how it could be applied to the activity.

BROCHURE

critical + creative thinking

You have been asked by the school principal to promote minimal impact to Year 7 and 8 students. You must create a brochure and/or a story that will get the message across so that students understand how to look after the environment they live in so that it will be there for future generations to enjoy.

CASE STUDY Minimal impact guidelines for schools (Parks Victoria)

THE following tips will help you get the most out of your visit while minimising the impact on the environment.

Planning

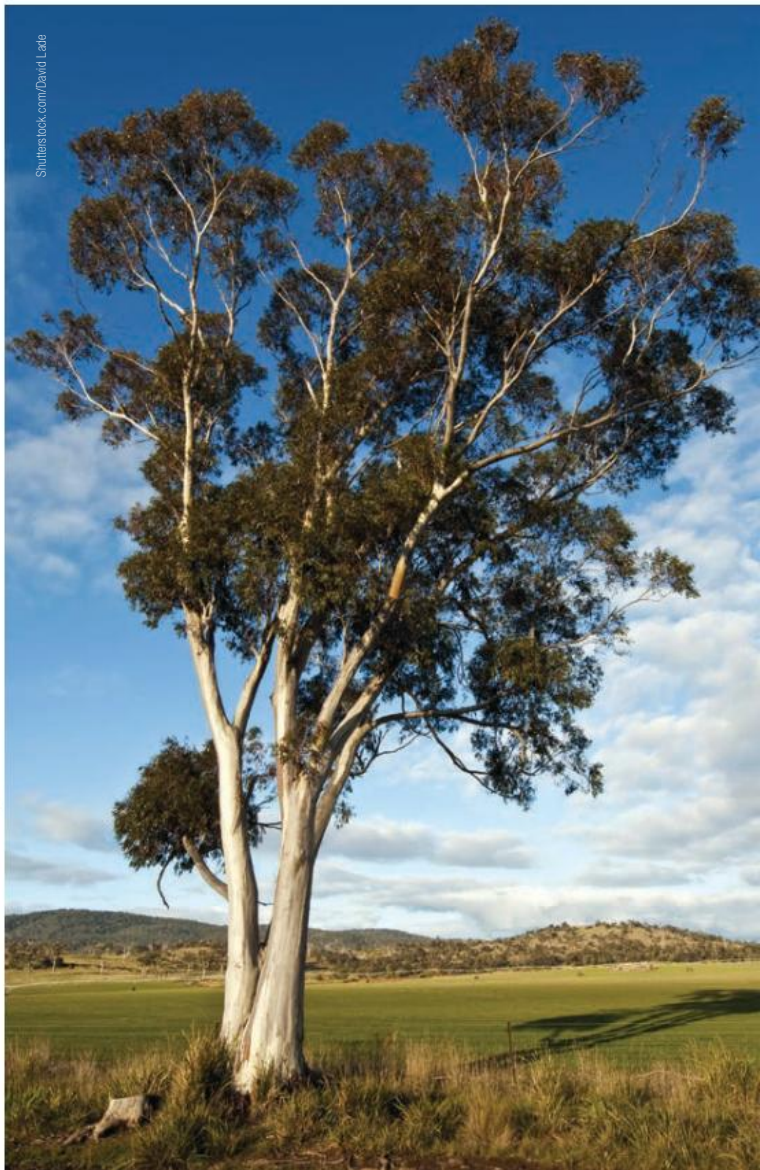
- Find out about any specific regulations for the area you will visit.
- Prepare for extreme weather, hazards and emergency.
- Ensure you are aware of the minimal impact guidelines.
- Pack all equipment you will need, such as plastic bags for carrying out waste.

On arrival

A park ranger may tell you about minimal impact and safety messages, and about the features of the park.

- Stay on established tracks at all times.
- Observe and listen.
- Leave things where they are.
- Remember: healthy animals only eat their natural food; don't feed any animals.

All native plants, animals, rocks, historical and cultural remains are protected by law in national parks. Ensure that they remain undisturbed.


Shutterstock.com/David Lade

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Tread lightly

Staying on the track minimises erosion, limits spreading of diseases and weeds, and keeps you from getting lost.

- Stay on the track at all times. Even if they are rough or muddy, don't widen tracks or take short cuts. Using the sides of a track or cutting corners increases damage, erosion and visual scarring. Walking through muddy sections keeps the impact to a narrow area.
- Keep groups small. Smaller groups have a lower impact.
- On rougher tracks, stay on rocks and hard ground wherever possible. Avoid stepping on any plants.
- Cutting new tracks is illegal.
- Do not mark tracks with stones, tape or other materials. This is unsightly and can confuse other park users.
- Avoid the spread of soil diseases by cleaning boots, tyres and camping equipment before entering a new area.



Alamy/Sigrun Eriksen


iStockphoto/migin

Rubbish

You may find bins in some parks. Bins full or overflowing with rubbish attract animals looking for food. Animals can get sick eating rubbish and the rubbish may be spread throughout the park. To avoid this, it is best to take your rubbish home with you, even if there is a bin provided.

- Pack to minimise rubbish. Don't take potential rubbish such as bottles, cans and excess wrapping.
- Take a plastic bag or container for your rubbish.
- Carry out all rubbish including food scraps and lolly wrappers.
- Pick up rubbish you may find along the way.
- Make sure animals can't get to your rubbish bag – plastic bags full of rubbish are a target for animals looking for food. When camping, take care especially at night.

Human wastes

Human wastes can contaminate waterways and cause disease.

- Use toilet facilities where they exist, even if you don't really need to go.

In areas without toilets:

- Take a hand trowel and choose a spot at least 100 metres away from campsites and creeks or rivers.
- Use a different area each time. This spreads the impact over a wider area.
- Dig a hole 15 cm deep. Bury all faecal waste (excrement) and paper, mixing it with soil to help decomposition and to discourage animals.
- Carry out sanitary items.

Happy camping!

Source: Minimal impact guidelines for schools, Parks Victoria

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LEAVE NO TRACE

After reading the minimal impact guidelines for schools created by Parks Victoria, critically evaluate the information. Do you think it covers all the principles of 'Leave no trace Australia' (pages 232–33)?

critical + creative thinking

WORKBOOK>>
Worksheet 7.3

Mountain biking

To ensure that the outdoors and natural areas are used in a **sustainable** way, a number of organisations and activity groups have created their own minimal impact guidelines and codes of conduct. An example for mountain biking is provided.

sustainability maintaining/conserving the natural environment and not depleting the natural resources

Mountain biking offroad code

1 Minimise conflict

- Be polite and respect other users of the reserve. Warn others if you are behind them and how many are in your group.
- Pass others with care; slow down and say hello.
- Always give way to horses, walkers, runners and other users of the track.
- Keep left.
- Slow down when approaching blind spots like corners.

2 Minimise risk

- Keep control of your bicycle. Ride at a safe speed, especially on fire roads.
- Ride within your ability and according to the track conditions.
- Look after yourself. Always take a spare tube, bicycle pump and tyre levers.
- Carry water and food as needed. Carry a mobile phone and tell someone your intended route.

3 Minimise environmental impact

- Ride on designated multiuse and MTB trails only.
- Leave only tyre prints.
- Avoid skidding. Skidding reduces your control and damages the track.
- Stay on the track. Cutting corners and track widening destroy the bush environment.
- Don't ride on wet or muddy trails.
- Carry your rubbish with you, including punctured tubes.

Source: Mountain Biking Offroad Code, Gap Creek Trails Alliance, www.qorf.org.au/01_cms/details.asp?ID=476



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PROMOTING SUSTAINABLE RECREATION

1 In pairs or small groups design a way of promoting an understanding of sustainable outdoor recreation in your local area. Focus on an activity that is popular in the area or that you are interested in. This might involve collaboration with local conservation groups, council and schools.

2 Look at your local area in terms of recreational use.
   a Is there land that could be used differently or more effectively as an area for recreational activities?
   b Is there any land in the local area used for recreation that is of cultural significance to the local Indigenous communities?

LOCAL STRATEGIES

1 Using Google Maps, locate your house and make a list of all the outdoor recreational options available to people in your local area. These might include local parks, bike or walking tracks, state forests, sporting fields, national parks, rivers, creeks, dams or lakes.

2 From this list identify how these resources could be used by the local population to be active. For example, a local dam could be used for water sports; a local park offers various recreational opportunities. Identify any Indigenous connections with these local recreational areas.

3 Select one local area that you believe has the potential to be used by the local population. List a number of recreational uses for this area. For example, part of a park could be used as a BMX track. Select one of the options from your list and create a map that shows the key features that you would like to see in that area.

WORKBOOK>>
Worksheet 7.4

4 Before presenting this to the class, ask a classmate to evaluate your strategy and provide suggestions and feedback. In reply, you will need to evaluate their comments and justify why you agree or disagree.



Corbis/Patrick Pleul

A typical geocache

Geocaching

Geocaching is an outdoor 'treasure hunting' activity that was first established in 2000. The participants use a Global Positioning System (GPS) receiver or mobile device and other navigational techniques to hide and seek containers, called 'geocaches' or 'caches', anywhere in the world.

A typical cache is a small waterproof container containing a logbook in which the geocacher enters the date they found it and signs it with their code name. After signing the log, the cache must be replaced exactly where it was found. Larger plastic storage containers or ammunition boxes can also contain items for trading, usually small toys or trinkets.

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There is a lot of information on the internet about geocaching. Watch some videos to get a good idea of what it's all about.



WORKBOOK>>
Worksheet 7.5

MOVEMENT CHALLENGES

Movement challenges do not need to be complex nor in extreme environments. Games that require little equipment are often the best. Chapter 8 (pages 275–85) has some more information about games and equipment.

WORKBOOK>>
Worksheet 7.6

Ultimate Frisbee

Ultimate Frisbee is a game played with simple rules and minimal equipment. It is a fast, free-flowing game that combines elements of netball, soccer, gridiron and touch footy. It is a considerable challenge to place an accurate pass to a partner. Building your skills and learning to use the frisbee in different ways requires patience and practice. It's also a great workout with a lot of running and jumping.



Newspix/Simon Chillingworth

Rules of Ultimate Frisbee

- Two teams of seven players each play on a rectangular field with two end zones.
- The objective is for the team with the frisbee to pass it up the field without dropping it and catch it in an end zone to score a point. The other team tries to intercept the frisbee or knock it down.
- The frisbee may be moved in any direction by passing it to a teammate. Once a player has the frisbee, they are not allowed to run with it and they have 10 seconds to throw it.

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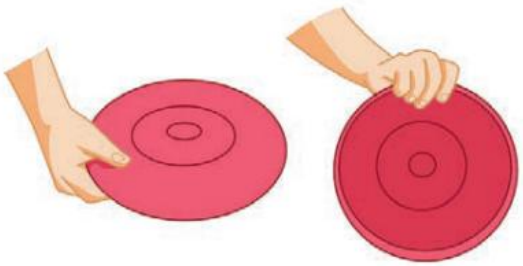
- The game is self-refereed. If a player committing the foul disagrees with the foul call, the play is redone.
- Players can substitute after a score and during an injury timeout.

Frisbee grips

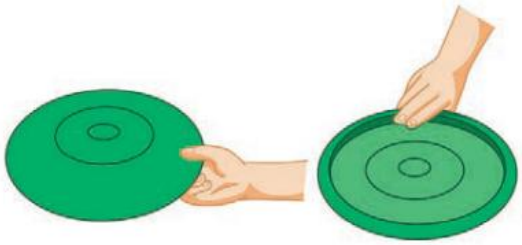
A frisbee is a light plastic disc with a lip. It is designed to fly aerodynamically when thrown with rotation and can be caught by hand.

Backhand grip: use for a backhand throw. Fingers are curled under the frisbee's rim and the thumb is placed on top of the frisbee.

Forehand grip: use for a forehand throw. The index and middle fingers are extended under the frisbee. The ring finger and little finger support the outside of the frisbee. The thumb is on top of the frisbee.



Backhand grip



Forehand grip

Throws

Backhand throw: the back of the hand faces the target, as in a tennis backhand. This is the most common throw, and most powerful.

Forehand throw: the frisbee is thrown on the same side of the body as the throwing arm, like a tennis forehand.

Hammer throw: the frisbee flies upside down. Use a forehand grip and throw from above the head facing the target, like a tennis serve.



Backhand throw



Forehand throw



Hammer throw

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Roller throw: the frisbee hits the ground then rolls. It can be a backhand or forehand throw and the inside edge of the Frisbee should hit the ground before the outside edge. (Not a legal throw in Ultimate Frisbee.)

Skip (bounce) throw: the frisbee hits the ground then bounces up off the ground and keeps flying. It can be backhand or forehand, and the outside edge of the frisbee should hit the ground before the inside edge. (Not a legal throw in Ultimate Frisbee.)

Fake throw: when a player pretends to pass to create space and deceive the opponent.

Footwork: pivoting

This is a footwork movement to change direction, where a player keeps one foot still and steps with the other.



Pivoting

Attacking skills

Leading: sprinting strongly to the frisbee, either directly forward or diagonally to the free space (away from the defender or opponent).

Dodging: evading an opponent. Moving a few steps away from the intended catching position, then placing the outside foot strongly on the ground and pushing off in the desired direction to evade an opponent or receive a pass.

Defending

Guarding a player who may or may not have the frisbee. One-on-one defending techniques include defending in front, from the side or from behind.



Leading



Dodging



Defending

Catching

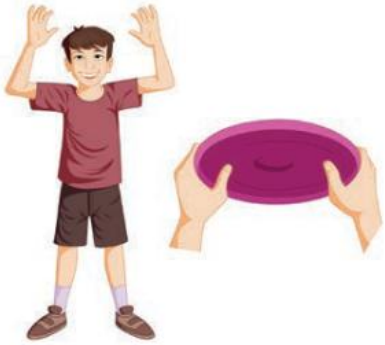
Pancake catch: the frisbee is caught with one hand on the bottom and one hand on the top. This is the easiest method of catching.

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Two-handed catch: the frisbee is caught in two hands that are side by side. If the frisbee is above shoulder height, the player's fingers will be on top of the frisbee (and thumbs underneath), otherwise their fingers will be underneath the frisbee (and their thumbs on top).



Pancake catch



Two-handed catch – above shoulder



Two-handed catch – below shoulder



One-handed catch

One-handed catch: the frisbee is caught with one hand. If it is above shoulder height, the player's fingers will be on top of the frisbee (and their thumbs down), otherwise their fingers will be underneath the frisbee (and their thumbs on top).



MORE ABOUT ULTIMATE FRISBEE

Search the internet for more information about Ultimate Frisbee. Most states have their own associations, with websites that provide a range of information, including Ultimate Victoria, Ultimate Frisbee NSW and the Queensland Ultimate Disc Association. To get a good idea of what the game is about, watch some videos that show the game being played. Do a search for 'How to play Ultimate Frisbee by Brodie Smith' to find some videos produced by a professional player.

Ultimate disc golf

Disc golf is an individual sport that combines the rules of golf with throwing a flying disc (golf disc). While the game is similar to golf, the fact that the disc flies through the air makes it an entirely different challenge. A range of discs are used, from putters to midranges or drivers or even discs that go straight, left or right. Players can change discs for each throw to increase the fun. And then, like other outdoor sports, there is the challenge of coping with changing weather conditions, such as wind and rain.

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Disc golf has a number of benefits over golf, including the following:

- it is easy to learn
- it is suitable for people of 10 to 95 years, and for some disabled players
- it is inexpensive – you only need one disc, which costs less than $20
- most courses are in public parks, so it is free to play
- it is environmentally friendly – no watering of greens or fairways needed.



ULTIMATE DISC GOLF

Complete a web search for some videos of Ultimate disc golf. Disc golf can be easily adapted for school using your ovals and court areas to create your own course. The rules of the game and a link to a video clip of the 2010 Scandinavian Open can be found at http://ffl78vic.nelsonnet.com.au. This will help you in the next activity.



DISC GOLF CHALLENGE

Aim: To design and participate in your own disc golf course

Equipment for each team:

5 plastic hula hoops

5 markers/domes of the same colour or shape

5 flexi poles (useful but not essential)

a frisbee for each player

Method:

The class is divided into teams of four or five.

Each team has a different starting point and finish point.

As a team, decide on the distance to each 'hole' (metres), and where each hole will be placed in relation to obstacles. (You may decide to place a hole behind a tree or the goal posts).

A 'hole' is marked by a hula hoop.

Design a score card with the names of your team members, number of holes, distance between holes (metres) and a column for the number of throws.

Designate a scorer for each hole so that everyone takes on the responsibility of scoring.

Decide who will throw first and play the course, recording the number of throws it takes for each hole.

A hole is completed when the frisbee lands in the hoop. (Hoops can be attached to a fence or tree so that they are not all lying on the ground).

At the end of each hole, record who was first, second, etc.

At the last hole, the winner is the player who has taken the fewest throws for each hole.

When this course has been played once, there are several options:

1. each team can swap play another team's course to see if they can beat the score.
2. team challenge: each team completes each course. The scores are then added up and the team with the fewest total throws is the winner.

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review & reflect

DISC GOLF CHALLENGE REFLECTIONS

In pairs reflect and evaluate on your participation in the disc golf activity. Use a table like the one provided to assist in this process.

Planning and participation	What was successful and why	How I could improve

SCAFFOLD>>
Reflection table

1. What strategies were most successful, and why?
2. What responsibilities or roles were fulfilled as part of playing disc golf?
3. What benefits have you gained from this experience? Can you identify similar benefits to other activities – such as physical, social and emotional?

Movement challenges with a twist – using your senses!

At any particular moment in the day your brain is flooded with a billion bits of information that it simply cannot cope with or process. So the brain decides on what is the most important information and discards the rest. The next challenge involves heightening your awareness of certain things that are usually taken for granted, for example, your sight. Research has shown that when one or more of your senses are removed, one or more of your other senses works harder to compensate for the loss. In the next challenge your sight will be removed. How will you cope? Will your other senses compensate?

UP + MOVING

HUG A TREE CHALLENGE

Aim: To see how well you can use your other senses when you are blindfolded

Method:

To begin, you need to get into pairs. The blindfolded partner is guided to an object that is 20 to 30 metres away. If outdoors, trees are ideal because they are unique in their texture and shape. However, any object is fine as long as it is distinctive. When you are leading your partner to the object, try to make the journey as difficult as possible, twisting and turning so that they become disoriented. The return journey should be equally confusing for them.

Once introduced to the object, the person has 20 to 30 seconds to familiarise themselves with it. They must use their sense of touch and smell as well as their hearing. The experience will be even better if the object has a peculiar shape or surface that will help the blindfolded person identify the difference between it and other objects.

Once your partner has explored the object, ensuring they are still blindfolded, bring them back to the start point. Remove the blindfold and ask them to identify and relocate the object with their eyes open. Obviously the sighted person should not provide any clues until the object has been found. Swap roles and repeat again. If possible, time how long it takes for the partner to locate the object.

When both of you have completed the task twice, discuss what factors helped the blindfolded students to identify the secret object. What parts of the object were hardest to identify?

Variations: Repeat the activity in groups of three, where two students are blindfolded and joined together so they have to work as one. This will create interesting discussion and variations of distances and direction!

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Communication in movement challenges

Communication is about giving and receiving messages. It can be verbal (spoken) and non-verbal. Some examples of non-verbal communication, often called 'body language', are eye contact, facial expressions and posture.

Being able to communicate effectively is important. Communication in a team environment is essential to the success of the team. A team is communicating successfully when everybody understands each other, can express their own opinions and ideas, and everyone listens and is open to what others have to say. Simple and clear messages are the key to successful communication.

WORKBOOK>>
Worksheet 7.7

WHAT'S WRONG WITH THIS?

review & reflect

Identify the poor communication skills in each of the following scenarios:

- you are looking at your phone when someone is trying to tell you something
- you are talking over the top of someone when they are trying to tell you something
- you are yawning and looking uninterested when someone is trying to tell you something.

There are many principles of effective communication, including speaking slowly and clearly so that people can understand you. Have you ever been in a noisy classroom when there is so much noise that you cannot even hear yourself think? Perhaps in those times you wish you could use sign language. However, it is possible to have a conversation with one person and ignore all the other noise. The next activity puts that theory to the test.

HOG CALL CHALLENGE

UP + MOVING

Aim: To effectively communicate with your partner so that you can find each other when you are both blindfolded

Method:

Find a partner.

Each pair must agree on two words they are going to use to communicate with (it could be Coca + Cola or peanut + butter). Agree which person says which of the two words.

When the class is ready, each pair announces their two words and partners move to opposite ends of the gym or playing field and each puts on a blindfold.

Focus your attention on the two words that you and your partner agreed to.

Once you are in the start position you will begin to shuffle away from your original position. You now need to assume the 'bumpers up' position, which means walking with your hands up in front of you in case you bump into somebody or something.

From the starting position, you call out the agreed word, then listen and walk towards the matching word until you find your partner, who will also be listening for your agreed word. So if one partner was 'peanut', she would be calling this out, and the other one would be calling 'butter', until each partner finds the other.

Once you find each other you can take off your blindfolds and watch the other pairs trying to find each other. (A more difficult variation is to use animal noises!)

Reprinted with permission from playmeo. To access more interactive group activities, go to www.playmeo.com.

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review & reflect

HOG CALL REFLECTION

What did you learn from this process about effective communication?

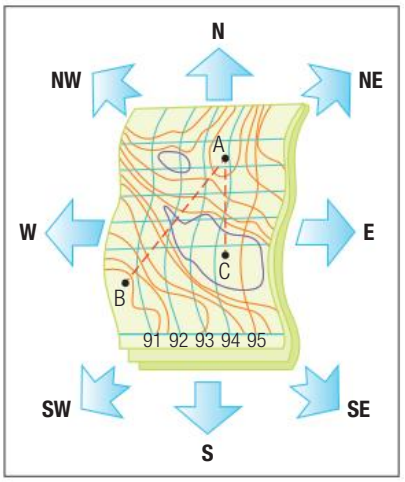
Developing navigation skills

navigation the process of finding a way to get from one place to another

At some time in the future you may explore the great outdoors by bushwalking, cycling, canoeing, kayaking, horse riding or cross-country skiing. Any trip into an unknown environment requires successful **navigation** from the starting point to the destination, and if necessary a return route. This becomes more challenging in mountainous or remote regions.



Mountain biking following a track requires navigation skills



Directions on a map

Where you have grown up may have an impact on your navigation skills in certain areas. For example, it could be a significant challenge for students from the bush to travel to the city and navigate across the city using various methods of transport and visiting various points of interest. Often people from the city will spend time in the countryside, such as in national parks and state forests, where they will camp, bushwalk and use other forms of recreation. In both city and bush environments it is important to be able to use a map and read directions.

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Basic map-reading skills

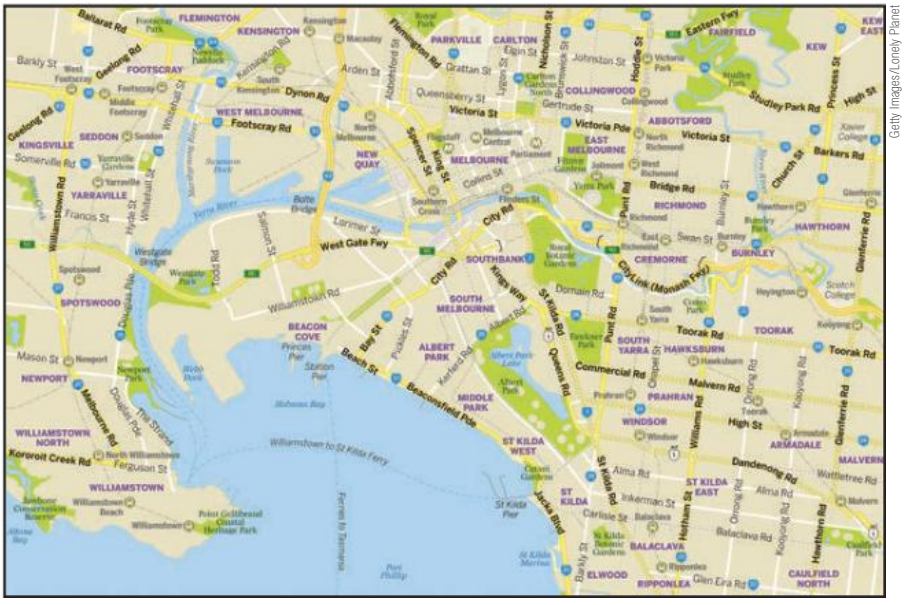
A map is simply a diagram of an area of land that shows all the important features and landmarks such as roads, valleys, hills and buildings. All these features are placed at the correct location and the correct 'scale distance' apart. Maps are used to indicate the direction from one place to another. The four cardinal points of the compass are used to indicate direction. These are north, south, east and west. The half cardinal points are used to more accurately indicate a direction. These are north-east (NE), south-east (SE), north-west (NW) and south-west (SW). The top of the map is always the north, the bottom the south, the right-hand edge the east and the left-hand edge the west. Whenever two places are considered, the first and most important aspect is the direction 'from' and 'to' those places.

Scale

Maps are usually much smaller than the area they represent; the size of the reduction is the scale of the map. Map scale is an important factor in deciding what type of map to use. The larger the scale of the map, the more detail it has, so the easier it is to navigate. However, the larger the scale, the less area it can cover in one sheet of paper. If the scale of the map is too large you will be continually 'walking off' the edge of the map.

Scale is normally expressed as a ratio. A scale of 1:25 000, which is a common scale for a map, means that 1 cm on the map represents 25 000 cm (250 metres, or a quarter of a kilometre) on the ground; 1:50 000 means 1 cm on the map represents 50 000 cm (500 metres, or half a kilometre) on the ground (smaller scale). Generally the larger the scale, the easier it is to navigate because there is more detail. As a general rule, the faster you travel, the smaller the scale of the map. Walkers will use 1:25 000 and 1:50 000 scale maps, but a cyclist might use a larger one because they are likely to cover more distance.





Comparison of scales: the map of Australia on the left is a small scale compared to the map of Melbourne on the right, which is at a larger scale.

Shutterstock.com/Globe Turner
Getty Images/Lonely Planet

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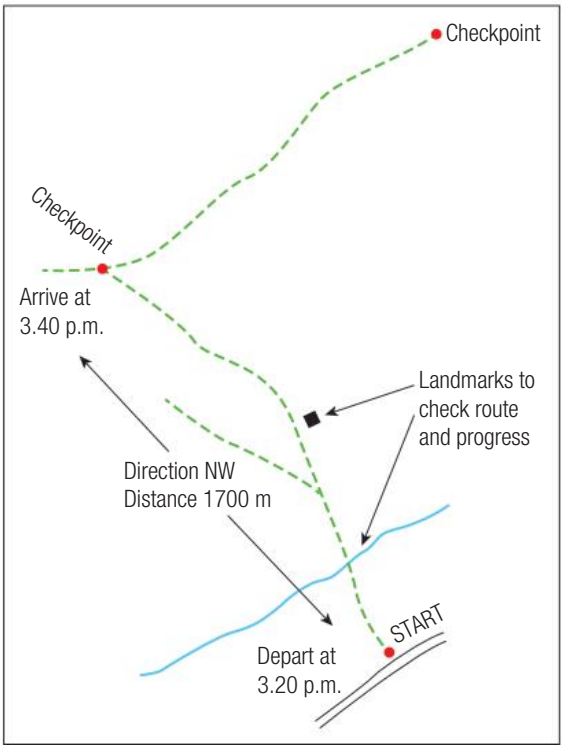
Distance

It is vital to be able to measure the distance between two places on the map quickly and accurately. The usual method is to use a piece of string and lay it along the proposed route from the start point to the end. Then lay the string straight along the scale rule on the margin of the map, ensuring that one end starts at zero on the scale. Alternatively you can use a straight edge of a piece of paper, marking the paper at each sharp turn and then laying it along the scale line and reading off the distance. Or you can use Google maps or a similar program.

Time

When you plan your next walk, paddle or cycle, in addition to identifying the route, the landmarks and path or road junctions will enable you to pinpoint your positions. You also need to measure the distance between those junctions when you change direction or take another path or road.

A normal walking pace along roads or footpaths might be around 5 kilometres per hour, meaning it will take about 10 to 12 minutes to walk a kilometre. Before you begin, make sure you are travelling in the correct direction (identify landmarks to pinpoint your position), then note the time and complete the next section of your journey. Keep on repeating this procedure until you reach your destination. Compare the actual time that it took to walk each section with your estimated time. You can now work out the average time that it takes you to walk a kilometre or 500 metres. You can then better estimate how long your next walk will take, depending on the terrain.



Time required to travel 1700 metres is 20 min

Time required to travel 1000 metres is $20 \times \frac{1000}{1700}$

$= 11.76$ min or

≈ 12 min per kilometre

$= 6$ min per 500 metres

$= 1.2$ min per 100 metres

1 Set map and locate position
2 Recheck start position
3 Note direction (NW)
4 Note distance 1.7 km/1700 m
5 Note landmarks to track position and progress
6 Note time
7 Travel using set map to point direction when required

Distance and time

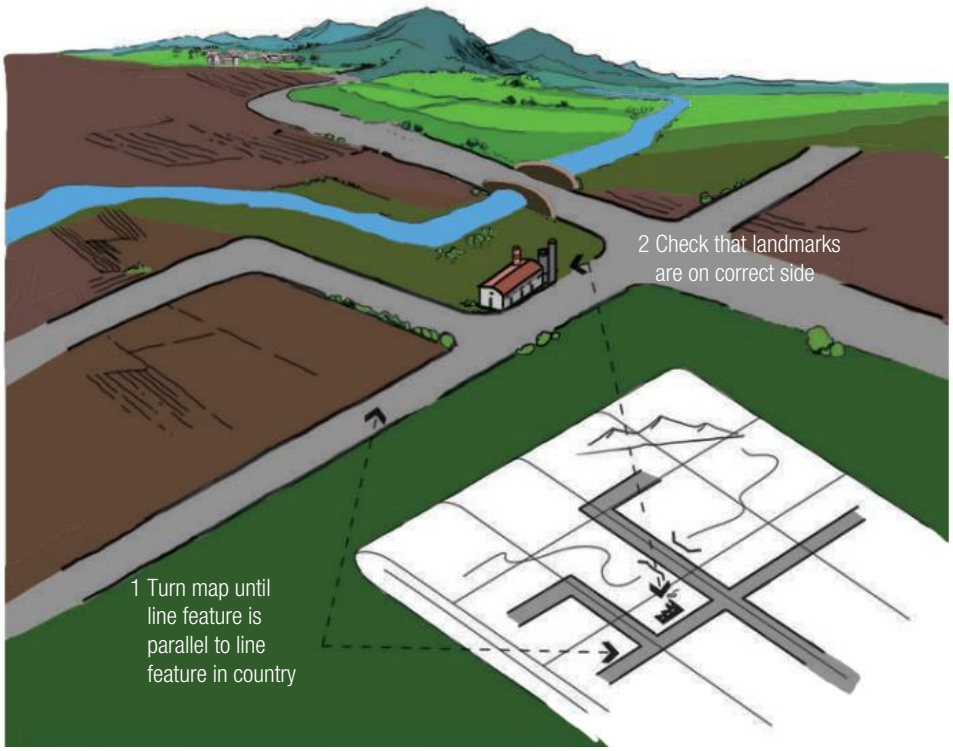
ISBN 9780170376181

Measuring distance by relating it to travelling time is effective for a cyclist, canoeist, rower, horse rider or even a cross-country skier. You just need to work out, from a past trip, the average time it takes you to complete a kilometre.

Orientation

Using a road or river

Use a line feature such as a road, path, ridge, river or anything that has a line or direction on your map. Holding your map horizontally, turn it around until the feature on the map is parallel with the feature on the ground. Your map should now be correctly set (oriented) and all the other landmarks and features should also be in the correct direction on the map. This is useful when you are not entirely sure where you are but you have a rough idea of the area you are in. It is still possible to have the map entirely the wrong way around, so check that the landmarks are on the correct side of the features you have identified.



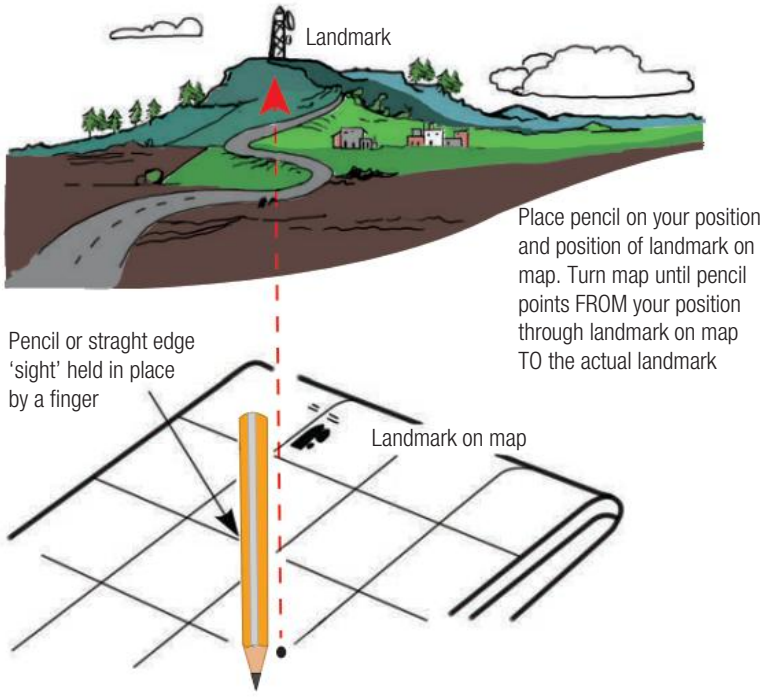
Orienting the map using a line feature

Using a landmark

Another method is to use a landmark or feature. For this method you must know where you are. Find your position on the map, look around the landscape and find a feature that is marked on the map, e.g. a farmhouse. Lay a pencil or straight edge, through your position on the map, then holding the map horizontally turn the whole map around until you can sight along the straight edge from your position on the map, through the spot feature on the map to the spot feature on the ground.

Knowing where you are at any time is important – pinpointing your position using features on the map and the ground allows you to track your position whether

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Orienting the map by landmark. Sometimes it is easier to orient the map from a hill or higher point. You must know where you are or your approximate position.

you are on a bike, walking or canoeing. This skill can be practised on a bus, train or in a car as long as you have a map of the area you are travelling through. The only difference is that it will happen a lot faster on a train, bus or car.

Grid references

Maps are generally covered with lines running east to west called 'eastings' and lines running north to south called 'northings'. On 1:25 000 and 1:50 000 scale maps, the distance between the grid lines always represents 1 kilometre of actual country. Each line is identified by two figures ranging from 00 to 99. In a six-figure grid reference,

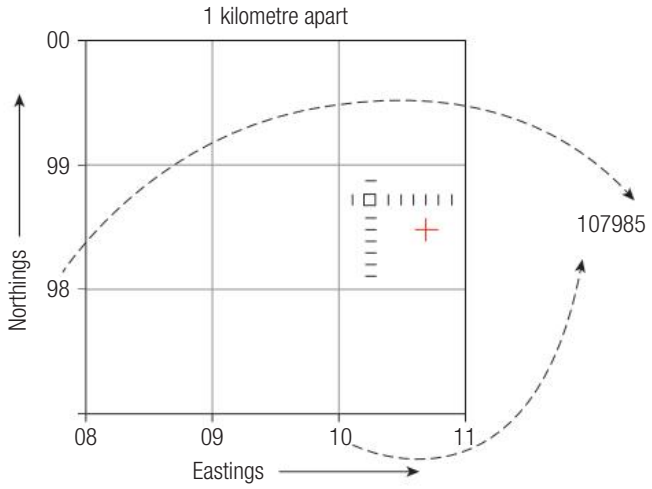
Alamy/Wave Royalty Free/Design Pics Inc



Using a vantage point

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the first three figures indicate how far to the east the place is while the second three figures show how far north the position is. The first two figures in each group of three are read from the map while the third figure is measured. If you remember that the letter E comes before the letter N in the alphabet, you will have no difficulty remembering that eastings come before northings. Using a six-figure grid reference, you can work out where a place is located to within 100 metres. Practise until you are comfortable with reading grid references.



Using a grid reference

MAP-READING CHALLENGE

1. Find a basic map or a plan or sketch of your school.
2. Rule some grid lines on top of it at a scale of 1:5000 (1 cm to 50 metres or 20 cm to every kilometre). The scale can be modified depending on the size of the school grounds.
3. Each group will be given five or six identifiable markers.
4. Write the grid references on your map of where you placed these markers. Once all groups have placed their markers out on the course, and marked them on the map, groups will then swap courses and the aim will be to find all the markers using the six-figure grid references provided on the map.
5. Initially these markers could be large and bright, but as players become more skillful in reading the map they can be a bit smaller and more difficult to find. This will challenge groups to make sure that their reading of the map references and observation is more acutely developed.

Route cards

The basic skills of navigation can easily be applied around a town or surrounding areas. However, if you go into the country or bush, being more prepared about the route you take is an important part of ensuring your safety and is a necessary part of preparation for schools and other groups before they venture into more challenging locations. Route cards are one method of preparing your route.

A route card helps to break up the journey into sections or 'legs' on the basis of direction. Whenever there is a major change in the direction at a path junction, you start another leg. The start of each leg can be regarded as a 'checkpoint'. Each section on a route card allows you to plan your route carefully. It allows for the route to be checked and to be followed by someone else. It also allows you and your group to constantly check your position and if you do get lost because you missed a path or track, then you should be easily able to backtrack to the last checkpoint.

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ROUTE CARD (Use one per day)			Names of group members								Name of group or unit Address Ph:	
Day of the week	Date	Day of venture 1st, 2nd, etc.										
Leg	Place with grid ref Start	General direction or bearing	Distance in km	Height climbed in metres	Time allowed for leg	Time for stops or meals	Total time for leg	Estimated time of arrival (ETA)	Setting out time	Details of route to be followed	Escape to:	
1	TO											
2	TO											
3	TO			DO							DO	
4	TO											
5	TO			NOT							NOT	
6	TO											
7	TO			USE							USE	
8	TO											
	Totals									Supervisor's name, location, ph. number		

SCAFFOLD>>
Route card

A sample route card for use in planning a route in more demanding environments



Tracking a planned route is the same whether you travel by water or on land

Once you have everything prepared for your trip you can follow these instructions to use the route card successfully, no matter what method you are using to get from point A to point B.

- Before you start, locate your position on the map and orient the map or vice versa. Recheck your position to make sure. Note and check the landmarks or features that will enable you to pinpoint your position as far as your first checkpoint. If this is not possible, note a feature before that checkpoint, such as a bend in the river that the path is following.
- Note the direction you are travelling in, using a compass or the compass on your smartphone.
- Estimate the time required to reach the next checkpoint.
- Record the time and then depart using your map to point the direction.
- Track your position on the map by means of landmarks.

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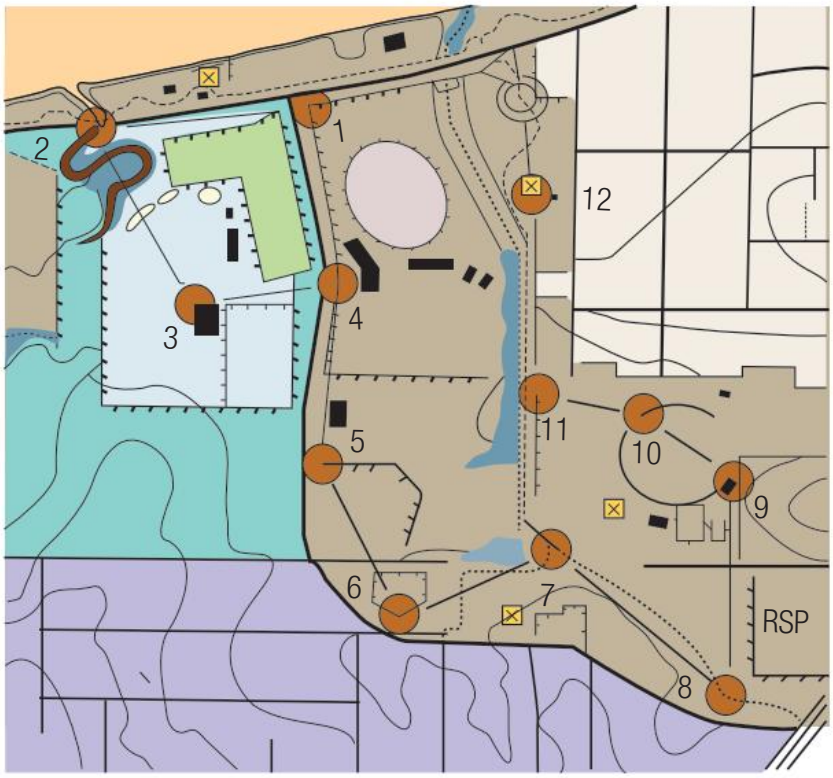
- Try to avoid stopping but use your map all the time to anticipate the detail and features on the ground. You will find paths and entrances, and trails that were not on the map, which will confuse you. This is why you need an idea of how long it will take to get to the first checkpoint and the direction you will be travelling in.
- Always look back at every major change of direction and take in the scene from the opposite point of view from which you are heading.
- Before setting off on the next leg, repeat the same procedure as you did at the start of the journey.

This process is essential to successful navigation. It is much easier to track your position constantly than to sort yourself out if you get lost. Route planning and following a planned route is the same whether you are mountain biking, canoeing or on a horse. If you are in a national park, there is plenty of information about where and what you can do and key information about safety. Follow the link for more information about preparation and planning for trips: http://ffl78vic.nelsonnet.com.au.

ORIENTEERING CHALLENGES

Orienteering is a good way to work on your navigation and map-reading skills. Begin with small areas and as your skills improve, you can progress to more difficult terrain.

Orienteering is a combination of outdoor adventure with map reading and navigation. It involves navigating though the bush, parks or streets with a specially produced map and orienteering compass. The aim is to locate checkpoints (controls) on various features along the way, such as a boulder, track junction, bench seat or street lamp. Controls are generally identified by distinctive orange and white flags.



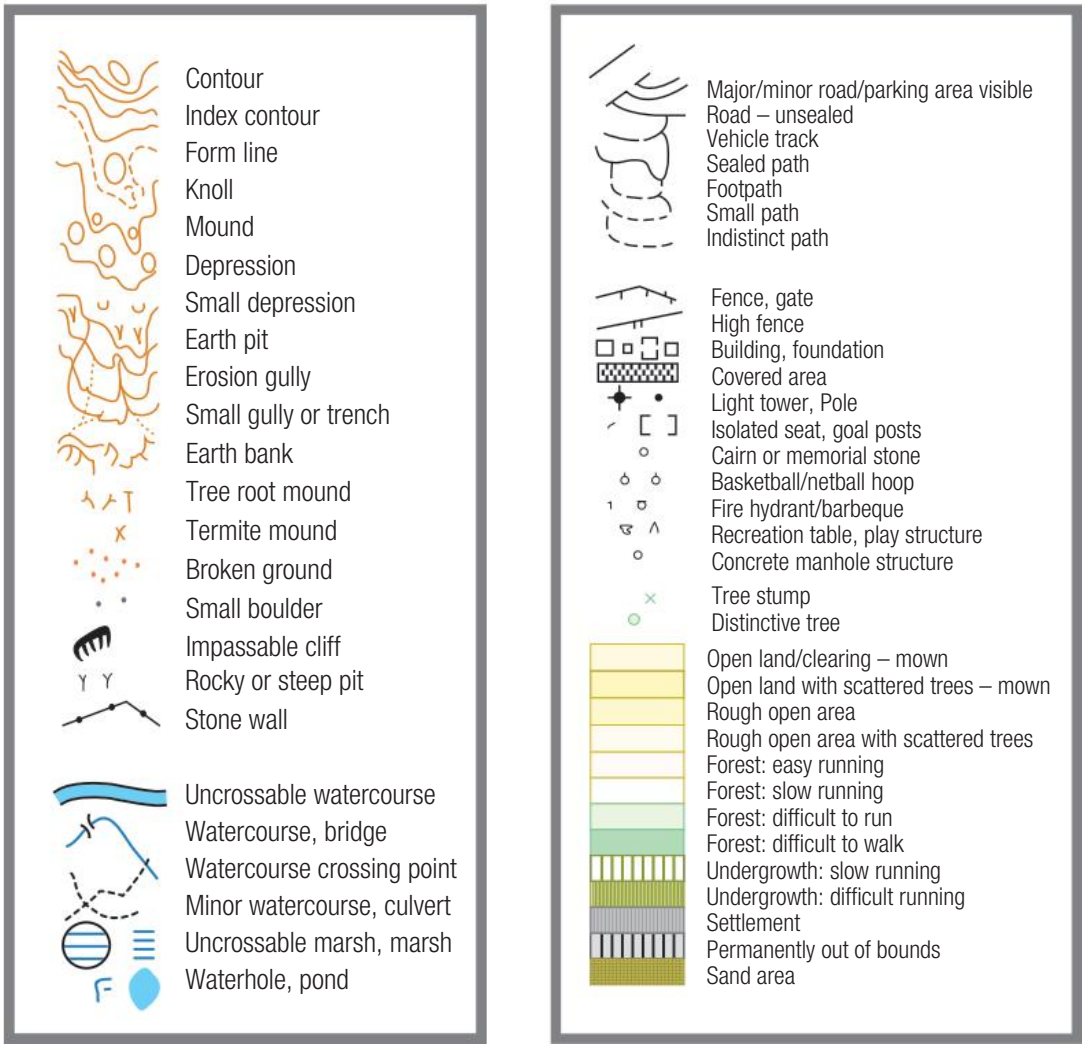
A sample course map from Orienteering QLD 2012

ISBN 9780170376181

The skill in orienteering is in finding the best route between controls. It is a stimulating mental challenge as well as a fun physical activity and it doesn't need much equipment. Each event may offer several courses, with differing lengths and levels of difficulty, to cater for a variety of skill levels.

A typical course might have plenty of control sites and might change direction several times. It is important to have handrails for participants to follow between consecutive control sites. Roads, paths, fences, edges of playing fields and drains make suitable handrails. The start and finish should be located in the best spot for good supervision.

The illustration provided shows the basic features or legends that are found on orienteering maps. These are different from normal maps, but the map-reading skills required are the same.



Sample legends from orienteering maps

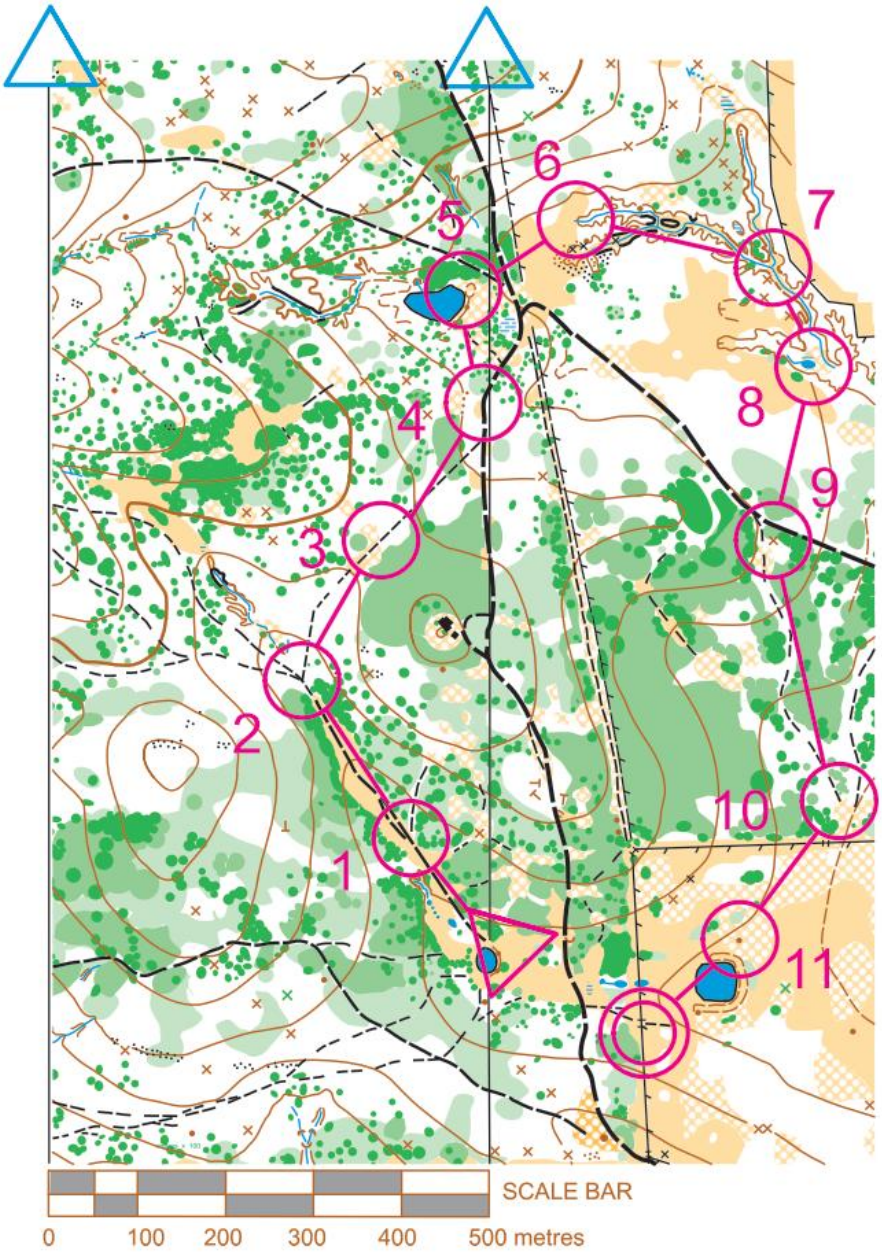
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face 2 face

BEGINNER'S LUCK

This activity is designed to introduce you and a partner to the concepts of orienteering, using the map provided.

Follow the course on the map below with your finger as your partner reads the story. Swap roles every few paragraphs and make sure you keep up with the action.



Source: Orienteering Australia, www.orienteering.asn.au

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The clue descriptions

Start at clearing

1 (41) Track junction

2 (42) Track junction

3 (43) Saddle

4 (44) Track bend

5 (45) Pond, deep, NE edge

6 (46) N watercourse, W end

7 (47) Watercourse junction

8 (48) Pond, shallow, S edge

Follow pink streamers

9 (49) Termite mound, N side

10 (50) Track, SE end

11 (51) Mound, NE side

140 metres to the finish

'Beginner's luck' – the story

Evelyn had never orienteered before. Well maybe that isn't totally correct. You see, Evelyn's dad had been an orienteer since he was a young boy, but when they moved to the country there was no orienteering club. Evelyn's dad was a high school teacher who taught outdoor education as well as several other subjects. When he wanted to teach orienteering, he had to draw the maps, hang the flags, and be the start and finish official. It was lots of work, and he was a single dad, so Evelyn had no choice but to help him. So Evelyn did actually know a bit about orienteering.

When they moved back to the city, Evelyn begged her father to take her orienteering.

The start was in the clearing on the northeast side of the small dam. The race was being timed with an electronic timing system. This meant Evelyn would be able to compare her times on each leg of the race with other children. As she punched the electronic unit at the start Evelyn looked at the map. 'I have to run north-west to the track junction', she thought.

Running came naturally to Evelyn; she was the cross-country champion for her age at her old school in the country. She didn't wait for her dad. In fact she was at control 2, the next track junction, before she thought to look around to see if her dad was keeping up. He wasn't! So Evelyn used this chance to plan ahead.

At control number 2 the track splits three ways: west to a saddle, north-west up the gully and north-east to a different saddle. The track Evelyn was on was in a large gully between two parallel features. This means both features look the same. In this case a saddle below a spur with a knoll to the south-east. A saddle is a low point in between two higher points – from the air it looks like a horse-riding saddle. A knoll is a small hilltop and is shown on the map as a circular contour – the brown lines.

Evelyn could read an orienteering map confidently so she chose her path and started running north-east towards the saddle where control 3 was located. Her dad was still puffing up the hill. Evelyn called out, 'Hurry up you slow coach!' and didn't stop. She kept running, downhill now to control 4 at the track bend. She punched and kept running, taking the minor track to the dam, then following the dam edge to control 5 on the north side of the dam.

Her dad caught up while Evelyn had a short rest and a drink from the water bottle she was carrying. Then she planned her next leg. 'We are halfway', Evelyn thought to herself. 'Across the track at the junction, there should be a break in the fence.' The map showed that control 6 was on the end of an erosion gully, but not the gully with the car wrecks and the rocks that she could see. She needed to find the northern gully, which was hidden from view by trees.

Evelyn was not fooled. She ran to the track junction, through the fence and straight to control 6. Staying above the eroded watercourse, she dodged the bushy lantana as she followed the creek to the watercourse junction. She had realised that the thick brown lines indicated erosion all along the watercourse, so she needed to find a gap in the erosion where she could slide on her bottom down into the watercourse. She found such a spot, a tiny break in the erosion, hidden from view by lantana bushes and only 30 metres to control site 7.

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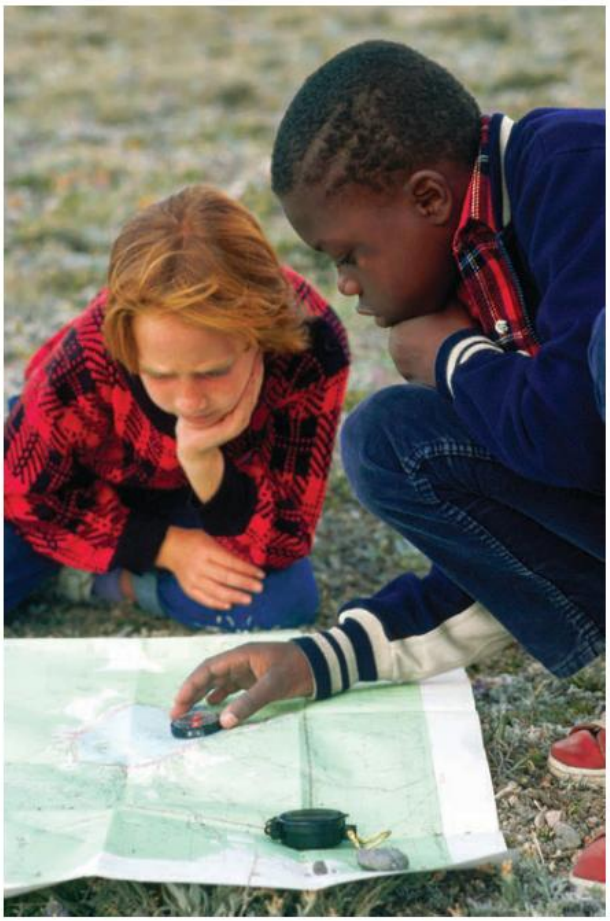
Her dad was not keeping up! He just couldn't make decisions that quickly, and Evelyn wasn't waiting for him. She followed the watercourse south-east, to control 8.The pond was easy to spot as it was full of water because of all the recent rain. The flag was on the far side of the pond, which slowed her down a bit as she had to go around it. Evelyn decided to take the northern route around the pond as there was lantana on the southern side. Although she still had to be careful not to get stuck in the muddy marshy edge.

From control 8 a trail of pink streamers lead the way through the trees to control 9, which was on the termite mound, south-east of the track junction. Evelyn nearly forgot to stop to punch the flag because her mind was elsewhere. In fact, she was thinking about the next leg of the race, a minor track through lots of thick vegetation, mainly scratchy lantana, which ended at the fence.

She found flag 10 but couldn't see how to get through the fence to control 11 on the other side. Then Evelyn spied a gate with a sign on it, 'Please shut this gate'. From there she could see flag 11 beside the mound. Then it was just a sprint around the north-west of the dam to the finish on the south of the gate in the western fence.

The finish official gave Evelyn her time: 11 minutes 58 seconds. Great! Evelyn couldn't wait to compare her split times with the other children.

The other children were playing near the big dam, skimming stones. As Evelyn approached them, a boy called out 'How fast did you run?' 'Just under 12 minutes, what about you?' All the other children were surprised. 'Beginner's luck!', called out one of the boys. The next fastest time was 13 minutes and 28 seconds. 'You can't join our club!' called out another boy, 'We don't want you beating us!' 'Well I am joining your club, so you'd better run faster!' Evelyn called back. 'Perhaps you and I could make up a relay team to race against kids from another club!' Everyone thought that would be a good idea.



Corbis/Phil Schermeister

Using a map to navigate

The next activity contains some simple orienteering suggestions that can be followed as a class with your teacher. They do require some preparation (e.g. maps, controls and time placing these out).

WORKBOOK>>
Worksheet 7.8
Worksheet 7.9
Worksheet 7.10

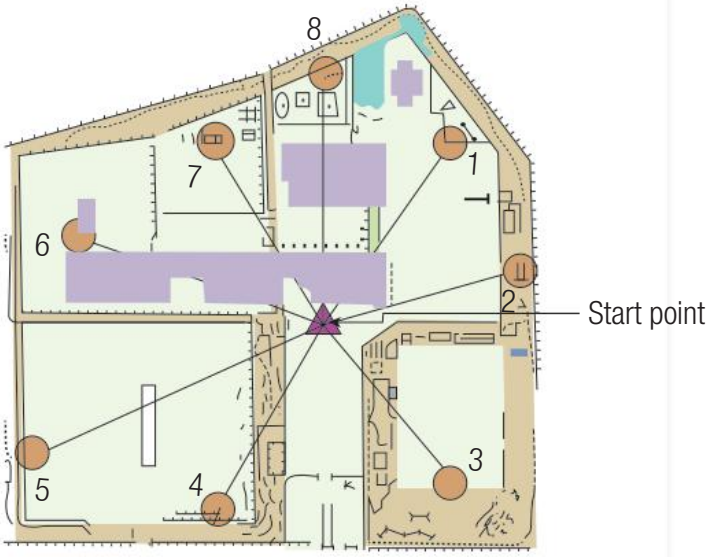
ISBN 9780170376181

STAR RELAY

A small area of the school grounds or local park area may be used for a first orienteering activity. The markers (controls) can be placed in this area. Depending on the size of the controls and the terrain, it may not be necessary to mark them on a map. As the area becomes larger, more skills (physical and mental) are required to find the controls.

Equipment required:

- **Map:** showing the boundaries, fences, buildings, tracks and paths, large trees and vegetation, and ALL the other small features (posts, poles, bins, seats, tables, etc.)
- **Orienteering equipment:** coded punches or coloured pencils, coded control markers (flags or discs). Markers can be made from tin can lids that the class can spray red and white; wire can be used to set them up more permanently.
- **Control cards:** to record the coded answers. These can be created on the computer and printed off.



A star relay for orienteering

What to do:

- Place eight controls out into your designated area and mark the map as shown in the example illustration.
- Number 1 has code #1 START at the triangle.
- Work in pairs; each person has a map and they share a control card.
- Student A navigates to #1, punches the card and returns to the start, hands the card to Student B who then navigates to #2, and so on until all controls have been visited.
- To avoid overcrowding at #1 control, different students start at different numbers, and then continue in a clockwise direction until all the controls have been visited.

MAP MEMORY

Tape one map onto the table (at the start). Study the map and memorise where to go next; you cannot take the map with you.

WORKBOOK>>
Worksheet 7.11

ISBN 9780170376181



Corbis/Pauline St. Denis

Students planning their route to the next control point



Alamy/Chris Howes/Wild Places Photography

Finding the next control point in orienteering

Summary of key orienteering skills

1. Orient the map: one of the key aspects of orienteering is to ensure that you relate the map to your surroundings (see pages 247–8). Maps always have a north arrow.
2. Identify and recognise the features: as you use maps more often, this skill becomes more natural and you can even do this while you are running.
3. Make decisions about which way to go. Frequently, this will depend on what is in front of you; sometimes there will be a track that may be quicker or you could avoid a steep hill.

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4 Use 'handrails' (line features such as fences or the sides of buildings) to lead you towards the control. As the maps become more detailed this will assist you in reaching the controls quickly.

5 Use 'attack points' (identifiable features close to the control) to lead you to the control.



CREATE YOUR OWN ORIENTEERING COURSE

In pairs create your own orienteering course with a combination of different challenges for the other students in your class. Different challenges might mean smaller controls; controls placed in more difficult positions; or a time challenge to see which team can complete the course in a specified time. You will need to design the challenge, then trial the course by running it, to see if it can be achieved in the allocated time.



HOW DID I GO?

In pairs or individually, reflect and evaluate on your participation in orienteering activities, especially the activity in which you designed your own course. By evaluating how you performed, you can learn about how to improve various aspects of teamwork, planning and performing.

These questions may help your evaluation.

1 What responsibilities or roles did you take on? For example, who designed the course or created the controls? Who decided the best strategy to take to complete the course?

2 Think about this process and describe how your role or a combination of roles led to your team being successful.

3 How can you transfer some of the skills that you learnt in orienteering to other learning situations?

WORKBOOK>>
Worksheet 7.12

INITIATIVE GAMES

Initiative games have been created to develop skills of decision making, taking charge, carrying out a plan and leadership. In these games you must act to solve a problem or a particular challenge. These activities usually involve movement, some sense of risk or an unknown outcome. They require many skills from participants to complete the task, with the outcome of better cooperation and interaction between the players.

After an initiative game it is important to reflect on how you performed in the activity and what you learnt from the experience. Often the teacher will give you open-ended questions designed to draw out your learning for a specific focus such as cooperation or communication. These questions will get you thinking deeply and making judgements about the process that you went through.

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MINEFIELD



This initiative game involves communication and trust. It can also be modified to challenge you in other ways.

Aim: To walk from one side of a field to the other, blindfolded, avoiding the 'mines' by listening to the spoken instructions of their partner

Equipment:

balls

objects of different sizes

blindfolds

Method:

Work in pairs. One person is blindfolded and cannot talk (this is optional). The other person can see and talk, but cannot enter the field or touch the person. An appropriate area will be half an oval or a basketball court.

The boundaries will be clearly marked and the area will be covered by a range of balls or other objects (mines) that have to be avoided. Be sensitive to the needs of your blindfolded partner. Trust exercises require a serious atmosphere to help develop a genuine sense of trust and safety.



A participant playing Minefield

You have a short period (e.g. three minutes) of planning time to decide on your communication commands.

Rules:

- Don't allow blindfolded people to bump into each other.
- Decide on the penalty for hitting a 'mine'. It could be a restart (serious consequence) or time penalty or simply a count of hits, but without penalty.
- It can help your partner if you develop a unique communication system, so they can easily pick out your voice. When you swap roles, make sure you find out what your partner found most difficult, and see if together you can improve your communication.
- Have at least one go each, possibly more, until you both feel really capable of guiding your blindfolded partner through the 'minefield'.

ULTRA CHALLENGE!



Once everyone in the class has played Minefield, consider if it is possible to adapt the rules and modify the challenge, while still being safe, so that it challenges you and your partner in different ways.

1. Physical – how could the method of moving through the minefield be made more challenging? Think about the size and quantity of obstacles.
2. How could you make communication more challenging?
3. Competition – which pair is the quickest or hits the fewest mines?

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Newspix/Matt Turner



Participants in a blindfold trust game

review & reflect

MINEFIELD REVIEW

In pairs, reflect on the game of Minefield and answer the following questions.

1. How much did you trust your partner (out of 10) at the start?
2. How much did you trust your partner (out of 10) at the end?
3. What is the difference between going alone and being guided by another person?
4. What did your partner do to help you feel safe and secure?
5. What could your partner have done to help make you feel more safe or secure?
6. What communication strategies worked best?
7. As the challenges became more physical and the communication more challenging, how important was your partner's auditory (spoken) feedback about your movements?
8. How can you transfer what you have learnt in this experience to other activities? For example, would it apply to a team game? To bushwalking or rock climbing?

UP + MOVING

STEPPING STONES

Two of the most difficult skills to master are discipline and focus. Most people are good at these in short bursts of time but generally it takes a lot of practice to develop these skills over a long period of time. Before you start this next challenge think about some of the important attributes to being successful as a group or team. Briefly discuss how these can have an impact on a team when they are challenged!

Aims: To promote teamwork, communication and trust; to encourage creativity; to develop coordination and focus

Method:

You will be placed in groups of about five or six and you will be standing behind a line that represents the safety zone. Your challenge is to move to the other safety zone, about 15–20 metres away. You can only move across the 'forbidden area' between safety zones by using a stepping stone.

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Rules:

- Every player must be in contact with the stepping stones at all times.
- If a stone is left untouched while your team is crossing the forbidden area, it will be taken away from your team.
- If someone touches the forbidden area then the whole team must start again.
- If someone touches the forbidden area and happens to be the only person touching a stepping stone at that time, then that stepping stone will also be removed.
- You have a set time to complete the challenge. (Depending on the time available, two or more teams will be competing at the same time).
- If the stepping stones are higher than the floor, be careful not to fall off as you move from one step to another.
- Your team has approximately five minutes to plan their strategy. Good luck!

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STEPPING STONES REFLECTION



Spread out in pairs or groups of three from the group that you were in. You will need to respond to the following question with your partner:

1. What was your group best at in the last challenge?

   Now change partners and share your thoughts again with another member of your group. As a class you can volunteer your thoughts to the question based on the discussions with your partners.

2. What does your group need to improve on for the stepping stones challenge?

   Discuss this again and then repeat as above. Finally, the whole class can discuss their thoughts about this question, based on the discussions with their groups.

3. Before you started this challenge you discussed what skills are needed for successful teamwork. Which of these skills did you use in completing the stepping stones challenge?

   Repeat your discussion as above.

4. Can you think of variations to increase the difficulty of the challenge? For example, would a shorter time make a difference? Or if each team has to carry something with them (for example, a medicine ball)?

MADAGASCAR



Aim: To build communication and teamwork

Method:

You are involved in a new company that has decided to relocate its main office. Because your company has done so well it requires new staff. The office relocation will involve you standing on a tarp and turning the tarp over while standing on it. Your new staff are represented by markers/domes spread around the tarp. You will have to collect these as part of the challenge.

Rules:

- Your team must all be standing on the tarp to begin. Then, with no one touching the floor, the tarp has to be turned over completely to the other side.
- Any touches onto the floor by your team will result in the team having to start again. Each member of your team will be given a stepping stone.
- Team sizes will vary according to the size of the tarp (a 2- by 3-metre tarp will have 8 to 15 people).
- Once you have turned your tarp over, you must collect all the new employees (domes or markers) by using only the stepping stones in your team. The group must be in contact with every stepping stone at all times; any 'untouched' stepping stones will be removed.

WORKBOOK>>
Worksheet 7.13

ISBN 9780170376181

- ➜ If someone happens to touch the floor, they must return to the tarp and they lose their stepping stone.
- ➜ Stepping stones can be used on the floor when the group is attempting to flip the tarp over.

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TRAFFIC LIGHT DEBRIEF



Now that you have attempted this challenge it is time to see how and what your group experienced from the challenge. Each group is given three coloured markers and each of these represents the following:

- ➜ red = things you would like to stop happening in the group
- ➜ yellow = things that you are not sure about
- ➜ green = things that you would like keep going.

As a group, think about your performance in the previous activity and consider one thing about how the group worked together. Stand next to the coloured cone that best represents your thoughts about the challenge. Allow everyone in the group to give their explanation of why they are standing there.

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ISBN 9780170261562 ISBN 9780170376181

CHAPTER REVIEW

WORKBOOK>>
Worksheet 7.14
Worksheet 7.15
Worksheet 7.16
Worksheet 7.17

1. What does the 'great outdoors' mean to you?
2. What are the different types of outdoor recreation?
3. What are the benefits of being outdoors?
4. What are the main principles of 'Leave no trace Australia' in relation to use of the great outdoors?
5. When camping or visiting a national park what are some ways that you can have a minimal impact?
6. Why is it important to have a route planned before you undertake a journey in more physically challenging or more remote country?
7. What is orienteering? How does orienteering help with navigating and using a map?
8. What are initiative games?
9. What have you learnt about yourself when you have been blindfolded or have had to complete a certain challenge?
10. What are some important attributes for a team to be successful?
11. What have you learnt about your experiences in a team-based challenge?

ISBN 9780170376181

PLAYING THE GAME AND BEING A GOOD SPORT



‘Sport is very important for building character because when you’re involved in sport your individual character comes out, your determination, your ability to be part of the team and the acceptance of the collective effort is extremely important in developing your country.’

NELSON MANDELA (2002)

ISBN 9780170376181



iStockphoto/QUO Images

In this chapter **you will learn about games - how to play them, how to create them and how to get the most out of them.**

By the end of this chapter, you should be able to:

- ➜ classify different types of games
- ➜ recognise the characteristics of an enthusiastic and competent sportsperson
- ➜ modify games to suit a wide range of different abilities
- ➜ understand the significance of games in different cultures
- ➜ apply movement skills to solve strategic and tactical problems in different games and sports.

Becoming a competent, literate and enthusiastic participant	**266**
Key features of physical education	**275**
Modifying games	**294**
Creating your own games	**304**

ISBN 9780170376181

BECOMING A COMPETENT, LITERATE AND ENTHUSIASTIC PARTICIPANT

One of the goals of Health and Physical Education in Australia is to provide you with the tools and information that you need in order to become a competent, literate and enthusiastic sportsperson.

The roles of sport

United Nations (UN) an international organisation founded after World War II. Its aim is to maintain peace and security and to improve living standards and human rights around the world.

If you ask yourself the question, 'What is sport?', you will probably come up with a different answer from that of your classmates. Sport means different things to different people. Far from being just the games played at lunchtime or on the weekend, or the football, basketball or cricket matches that are on TV, sport has a much wider meaning when its role is examined beyond your local community or internationally.



Alamy/Gallo Images/Foto24

Nelson Mandela presenting the 1995 Rugby World Cup to the South African captain, François Pienaar

The **United Nations** views sport as a way of promoting peace, because it disregards the borders of countries, religion, wealth and social class. Sport can be a way to strengthen social bonds and promote friendship, peace, acceptance, tolerance and justice.

There is more to Physical Education than learning how to play different games and learning new skills. 'Games' are learnt so players can become skilled and thinking participants in a 'sport'. However, while sports may share similar strategies, tactics and skills, each sport carries its own unique culture, customs and traditions in order to promote the ideals set out by the United Nations.

The modern Olympic Games are a good example of the United Nations ideals in practice. Pierre de Coubertin, the 'father' of the modern Olympic Games, probably understood these

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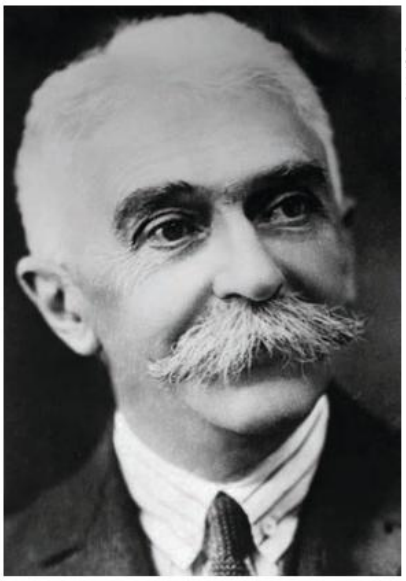
concepts better than most. He once said, 'May joy and good fellowship reign, and in this manner, may the Olympic torch pursue its way through ages, increasing friendly understanding among nations, for the good of a humanity always more enthusiastic, more courageous and more pure'.

CASE STUDY Pierre de Coubertin, 1863–1937

PIERRE Frédy, Baron de Coubertin was born into a noble family in Paris, France. He was a keen player of many sports, including boxing, fencing, horse riding and rowing. He believed that through physical education and organised sport, people were able to improve not only their physical strength, but also their character and social skills.

Coubertin was an admirer of ancient Greece and became interested in reviving the ancient Olympic Games. He believed that sporting competition among **amateur** athletes from all around the world would help to promote peace and understanding across different cultures. He also believed that the benefits of sporting competition were in the competition itself, not in the winning.

In 1894, he organised what would become the first meeting of the International Olympic Committee. It was agreed at this meeting that an international games would be held every four years, with the first to take place in Athens, Greece, in 1896. He served as president of the International Olympic Committee for 29 years and was responsible for developing the Olympic ideals that are still in place today.



Corbis/© Bettmann

Pierre de Coubertin – 'father' of the modern Olympic movement

amateur an athlete who is not paid to compete

WORKBOOK>>
Worksheet 8.1

What are competent sportspeople?

Competent sportspeople are people who have a wide range of movement skills and games understanding so that they are able to participate in games and sports in a meaningful way. They understand and can carry out a range of tactics and strategies that are appropriate for their game of choice and they are a knowledgeable game player.

What are literate sportspeople?

Literate sportspeople understand and appreciate the rules, rituals and traditions of sport. They can tell the difference between good and bad sporting practices, and they are willing to act on that knowledge to improve the practice of sport.



Shutterstock.com/Neale Cousland

Samantha Stosur is an extremely competent sportsperson

EXTRA ACTIVITY>>
Anyone for Olympism?

ISBN 9780170376181

What are enthusiastic sportspeople?

Enthusiastic sportspeople participate in sport as part of a physically active lifestyle. They act in ways that preserve, protect and enhance their sport culture and help to make sport more accessible to all people within their society.

WORKBOOK>>
Worksheet 8.2



Alamy/Juice Images

How to become a competent, literate and enthusiastic sportsperson

Becoming a competent, literate and enthusiastic sportsperson involves understanding and participating in three key features of Physical Education:

- healthy competition
- positive sporting behaviour
- different sporting roles.

Healthy competition

Healthy competition means that everybody will participate in a wide variety of different sports and games. There are no boys-only or girls-only sports; everybody participates, regardless of their gender or sporting preferences. Every team will have a diverse mix of players who can each contribute to the team in a meaningful way and celebrate victories and losses together. Healthy competition means that no one team of players will ever dominate in every sport.

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Your teacher will ensure that competitions are close contests that will add to the excitement of sporting events.



Corbis/Christopher Cormack

Close competitions add to the excitement of sport

Positive sporting behaviour

Fair play and sportsmanship are very important behaviours. This means that you, your classmates and your teacher need to be constantly practising and reinforcing positive sporting behaviour during your Physical Education class.

POSITIVE ATTITUDES

review & reflect

Make a list of the behaviours demonstrated by people with a positive sporting attitude.



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Different sporting roles

You will be expected to participate in a range of sporting roles. Sport doesn't just happen! Lots of different people do a range of different jobs

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Alamy/Alan Edwards

A student umpiring a game

to allow you and others to participate in a sporting event. Very few people simply arrive at a sporting venue and begin to play. Teams need to train and practice, learn from coaches, arrange events to raise money for the club, design club uniforms and celebrate successes, both on and off the field. As well as being a player in your team, you may also be the captain, coach, trainer, manager, cheerleader, scorekeeper, journalist, equipment manager or another one of the important roles that need to be filled during a sporting contest.

Roles

What roles do you need to fulfil in order to become a competent, literate and enthusiastic sportsperson? There are three types of roles you will be expected to carry out during your Physical Education classes:

- player roles
- duty team roles
- team roles.

Player roles

EXTRA ACTIVITY>>
Respect the officials

The first and most important role is that of the player. Everybody in your class is expected to actively take on this role and make a significant contribution to the team and the competition. To do this successfully, everybody needs to make an effort in trying to learn new skills and techniques, playing hard and fair, supporting teammates, respecting the decisions of game officials, and respecting opponents, both on and off the field.

Duty team roles

Certain roles have to be performed so that a sport can function properly. These roles are usually carried out during the competition phase of a sporting event. It is important that you learn how to carry out some of these roles. Most sporting competitions require at least a referee/umpire and a scorekeeper. Additional duty roles may include assistant referee, touch judge, boundary umpire, judges and so on. It is the duty team's responsibility to manage fair participation during the sporting competition.

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Team roles

These are the non-playing roles that are necessary for teams to function. All the teams within your class will have students taking on roles other than player. Some of these roles may include coach, manager, trainer or fitness leader. It is important that you have a turn at a variety of these roles during your Physical Education lessons.

Table 8.1 is a summary of many of the different roles and responsibilities you may be asked to carry out during your Physical Education lessons.

TABLE 8.1 Sporting roles and responsibilities

Roles	Responsibilities
Player roles	
Player	• Try your best to learn new skills, tactics and strategies • Play hard and fair • Support your teammates • Respect the decision of officials • Respect your opponents
Duty team roles	
Referee/umpire	• Make rule decisions during a contest • Ensure the contest flows in a fair and just way
Scorekeeper	• Record and compile scoring sheets • Keep an ongoing account of the status of competition (e.g. when points were scored/saved and by whom) • Communicate scoring records to responsible team role holders (e.g. manager, etc.) and your teacher
Team roles	
Coach	• Provide team leadership and motivation for team members • Conduct and coordinate team practice and training sessions • Direct skill, tactics and strategy for the team • Decide on team line ups and substitutions to ensure play is equitable and fair • Work with your teacher to ensure all team members are learning and contributing to the team in a meaningful way
Captain	• Represent and lead the team on the field • Provide leadership and direction to the team on the field • Assist and encourage teammates • Ensure teammates maintain high levels of sportsmanship and respect for officials and their opponents
Manager	• Control the administrative functions of the team • Complete and submit all necessary forms for the team • Assist team members to carry out their necessary duty team and team roles where appropriate
Fitness leader	• Lead team warm-up, cool down and stretching sessions • Conduct fitness sessions during team training • Monitor team fitness improvements and gaps during the competition
Trainer	• Know the common injuries associated with a sport • Monitor first-aid kits and ensure they are adequately stocked • Notify the teacher of any injuries during training or competition and keep records of these • Assist the teacher in the event of a sporting injury
Journalist	• Compile records and statistics and publicise them • Contribute to regular school sport/PE reports • Write a match report after every match • Submit reports where appropriate

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Getty Images/Yellow Dog Productions

review & reflect

TEAM ROLES

1. Make a list of other team roles your teammates might be able to fill. For each of the new roles, list the responsibilities of the role. Ensure you consider the team coach and captain roles.
2. As a team coach, what skills will you need to be able to respond to the individual needs of your players?
3. As a team captain, what skills will you need to ensure that conflicts are effectively resolved within your team and also during matches?

Becoming a thinking and competent player

The most important role that you will be asked to carry out during your Physical Education lessons is that of a player. What does it take to be a thinking and competent player of games and sports?

Games and sports do not simply exist. They exist when people choose to construct an activity that is governed by a set of rules or laws. These rules outline why and how an activity should proceed or be played. Imagine you are standing in the playground of your school in an open area with a ball and some friends. Ask yourself, what gets a game started with that ball? What happens to determine what you do with that ball? How many players on a team? How you can move the ball? How do you score points? And so on. These types of rules are known as fundamental rules and they have a major influence on what a game or sport looks like and how it is played.

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review & reflect

SCHOOLYARD PLAY

Think of a game you play with your friends in the schoolyard and answer the following questions.

1. How does the game get started?
2. How many players can play?
3. How do you score points?
4. What special rules exist?



Farfav/Jon Reid

Schoolyard football often has its own unique rules

Fundamental rules

There are four types of rules that apply to games. These are called fundamental rules and they can be further classified according to the following guidelines:

- **scoring rules** relate to the skills involved in scoring points
- **players' rights rules** relate to the rights of players and fairness in scoring points
- **freedom of action rules** relate to the way that players can interact with the ball, which gives the game a specific character
- **physical engagement rules** relate to ensuring the rules of scoring, players' rights and freedom of action are respected through fair play and appropriate conduct.

Rules also apply to the time and space of the game. They set out how points are scored, what skills are needed (how to play the game) and how to be a successful participant.

When you change the rules of a game, the team strategy, tactics and the skills needed to achieve success are also affected.

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FUNDAMENTAL RULES

1. Make a list of all the rules you can think of that apply to your favourite sport or game.
2. Next to each of the rules in your list, identify which of the four categories of fundamental rules they apply to (scoring rules, players' rights rules, freedom of action rules, physical engagement rules).

How do competent players think?



Alamy/supershoot

Do I 'sweep' or 'block'?

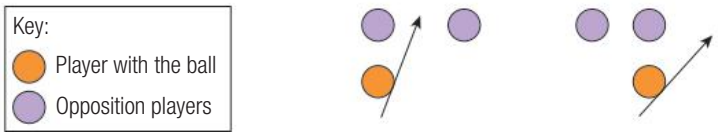
Have you ever noticed how many sports seem similar? Or that the skills and tactics you use in schoolyard games are also present in many other games and sports? That is because most sports and schoolyard games share similar skills and similar tactical objectives.

Tactical objectives

Tactical objectives are the thinking skills that go with every skill you use in a game. They are the decision-making and problem-solving skills you use to help you achieve the objective in any game, which is usually to win the game or score points.

Tactical decisions

The tactical decisions you have to make during game play are usually related to either what you need to do or how you are going to do it. When you are considering what to do in different game situations, you need to be able to recognise different 'cues' during a game and predict possible outcomes of your decisions. For example, there is no value in attacking a space near the goal if you can't see the cues or can't predict the chance of scoring or losing possession of the ball.



Two tactical decisions: moving into a space with opposition (left) or with no opposition (right)

When you are making a decision about how you are going to achieve the outcome you want, you first decide on the best way to achieve it, then you choose the skills and movements you need. For example, where a large space is available but time is limited, a quick action may be best; when you have more time but accuracy is vital, some patience and control before acting may be best. Such situations often arise near the scoring zones in games such as football, netball, basketball and hockey.

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Newspix/Steve Tanner

Do I shoot or pass?

KEY FEATURES OF PHYSICAL EDUCATION

There are several features of a Physical Education program that will allow you to develop into a competent, literate and enthusiastic sportsperson and they are closely linked to how sport and physical activity are conducted in community settings. These features include the following:

- having seasons
- having team membership
- participating in formal competition
- maintaining accurate records
- participating in crowning events
- participating in festivities.

In addition to these features, a competent, literate and enthusiastic sportsperson is able to modify existing games and even create their own. In order to be able to modify and create games, you need to understand how they are classified and what makes different types of games unique or similar.

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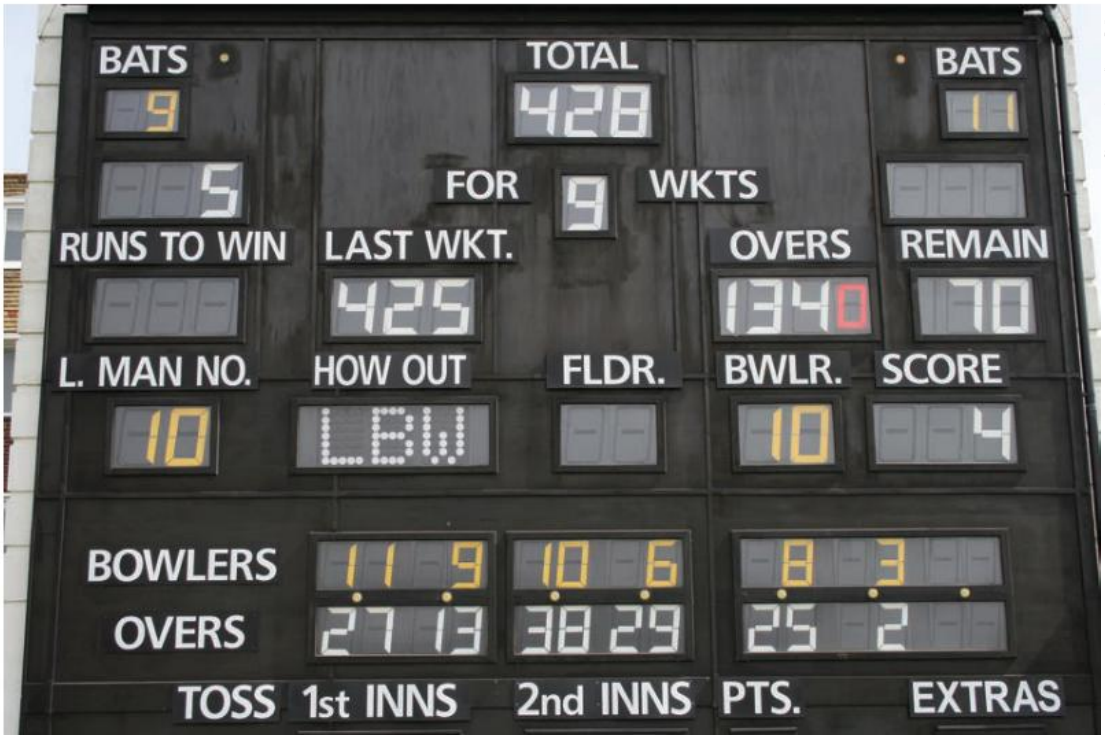
The games classification system

The games classification system categorises games of similar intent. Games of similar intent share similar tactical decisions. Specifically, the games classification system classifies most sports and games as being one of the following types:

- target
- net/wall
- striking/fielding
- territorial.

This system helps you recognise that skills and tactics learnt from one particular sport can in fact be transferred into other games of **similar intent**. It also removes any ill feelings you may have about a particular sport (for example, 'that's a boys sport' or 'I'm not good at netball'), instead allowing your knowledge to be shared across many different sports.

The games classification system also allows you to examine different sports in order of **tactical complexity** (from the simplest tactical problems to solve to the most difficult tactical problems to solve). Target games are the simplest in terms of tactical complexity, followed by net/wall games, then striking/fielding games. Territorial games are the most tactically difficult. In addition, the tactics you learn in the simpler games also appear in the more complex ones. In other words, there are tactics you will acquire in target games that will be used in all other game types. For example, many net/wall, striking/fielding and territorial games involve hitting a target of some type (for example, open space, a boundary line or a goal) in order to **score** points.



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SCORING

review & reflect

In one sentence for each, describe how you score points in the following games or sports.

- Soccer
- Netball
- Cricket
- Tennis
- Darts

The next section briefly examines the four types of games and how they are further classified according to the difficulty of the tactics.

Target games

The aim or similar intent of target games is to place a ball or other projectile near, in or on a target to achieve the best possible score. These games encourage and develop a high degree of precision in the skills of hand–eye coordination and concentration on a specific target. All target games can be classified as either 'unopposed' target games or 'opposed' target games.

Unopposed target games

In unopposed target games, the shot you play is not affected by that of your opponent. In other words, you will always play the best shot you possibly can in order to score the most points or win the game. Examples of unopposed target games are golf and archery.



Getty Images/Jan Greune



Getty Images/GARDEL Bertrand /hemis.fr

Golf and archery are both unopposed target games

Opposed target games

In opposed target games, your opponent's shot will affect the decisions you make regarding your shot and will limit the shots you are able to play. Examples of opposed target games are lawn bowls and snooker.

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Alamy/Kevin Wheal


Alamy/Jacky Chapman/Janine Wiedel Photolibrary

Lawn bowls and snooker are both opposed target games

face 2 face

OPPOSED OR NOT?

With a partner, identify each of the following target games as being either opposed or unopposed.

- Pool
- Darts
- Bocce
- Ten-pin bowling
- Quoits
- Marbles

Target games movement skills

Target games typically require you to master two types of movement skill. The first is stability, or balance. The second is object control skill, which is the skill required to send an object away from the body, such as throwing or striking.

UP + MOVING

FILM ME!

Using your smartphone or another video recording device, ask a friend to record you playing a target game during class. Review the footage and answer the following questions.

1. How balanced was my body during my shot?
2. What could I do with my body to improve my balance?
3. How effective was I in sending the object away from my body?
4. What could I do to improve sending the object away from my body?

face 2 face

TACTICAL DECISIONS IN TARGET GAMES

As a class, discuss some common tactical decisions you need to make when playing target games.

1. Which shot is most likely to score me the most points? Use examples from both opposed and unopposed target games.
2. Which target do I shoot at to score the most points? Use examples from both opposed and unopposed target games.
3. When do I play a shot for points or a shot to protect my points? Use examples from opposed target games.
4. How do I shoot at an obstructed target? Use examples from opposed target games.

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BLINDFOLD CHALLENGE



As a class but working in pairs, play one of the target games you have studied. One person plays the game blindfolded and the other person gives instructions and feedback for each shot their partner plays. Start with playing an unopposed target game before moving to opposed target games.

Consider the types of feedback that you need to give your partner. Specifically, you will need to consider feedback that meets these goals:

- ➜ improves your partner's skill execution
- ➜ informs your partner where their shot falls in relation to the target
- ➜ informs your partner of obstacles or opponent shots

WORKBOOK>>
Worksheet 8.3

Net/wall games

The aim, or similar intent, of net/wall games is to send a ball or projectile into an opponent's court so it cannot be played or returned by your opponent. Open space on the opponent's court is your target. You need to be able to place a ball or projectile into the open space of your opponent's court while covering and defending as much of the open space as you can in your own court.

iStockphoto/.shock



Alamy/Juergen Haaserkopf



Getty Images/Craig Cozart



Alamy/Hikupic



Tennis is played on hardcourt and clay surfaces; volleyball is played on wood and sand surfaces

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Most net/wall games are played on a 'court' but the surface of the court can be made of nearly anything, including concrete, clay, wood or even sand.

Net/wall games movement skills

Net/wall games require you to master three types of movement skill.

1. **Locomotor skills**, such as running, stopping and jumping.
2. **Stability skills**, including turning and guarding.
3. **Object control skills**, which are used to send an object away from you and then prepare to receive it back. They can involve striking with a racquet (tennis or squash), paddle (table tennis) or even your hand (volleyball or schoolyard handball). They can also involve throwing/toss skills (as in school wall-ball or a volleyball serve) and even kicking skills (as in Sepak Takraw).

The sequence of playing shots between players or opposing teams is known as a 'rally'.

review & reflect

SURFACES

1. List the different types of surfaces that the game of tennis is played on.
2. List the different types of surfaces that the game of volleyball is played on.

WEB

SEPAK TAKRAW

Do a web search to find out where the game of Sepak Takraw is considered a national sport. Then search for a video clip of some professionals playing Sepak Takraw.



123RF/Sippakorn Yamkasikorn

A game of Sepak Takraw in progress

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HANDBALL

review & reflect

During recess and lunchtime in most schools in Australia, you will find students (and some very keen teachers) playing handball. Make a list of all the rules you can think of that relate to playing handball at your school. For example:

- what happens if the ball hits a line?
- how many times is the ball allowed to bounce in each square?
- who serves?
- what rules govern the serve and a fair return?

HANDBALL 2

UP + MOVING

Using your smartphone or another video recording device, ask a friend to record you playing handball during class or recess.

Then swap roles.

Review the footage and answer the following questions individually.

1. How effective was I in covering the court space during the game?
2. What could I do with my body to improve my covering of the court space?
3. When did I look uncomfortable playing a shot?
4. What could I do with my body to be more comfortable in those situations?
5. How effective was I in sending the object away from my body?
6. What could I do to improve the way I send the object away from my body?

TACTICAL DECISIONS IN NET/WALL GAMES

review & reflect

1. What position on the court gives me the most opportunity to return the ball:
   a. on a serve?
   b. during a rally?
2. What shot should I play to move my opponent out of their court space?
3. When should I play a shot into the back of my opponent's court?
4. When should I play a shot into the front of my opponent's court?
5. When should I play a shot to the left or right of my opponent's court?
6. What are the advantages and disadvantages of playing a lob shot?
7. What are the advantages and disadvantages of playing a drop shot?
8. What are the advantages and disadvantages of playing a smash/spike?
9. What are the advantages and disadvantages of playing ground strokes to the left and right edges of my opponent's court?

WORKBOOK>>
Worksheet 8.4

Striking/fielding games

The aim or similar intent of striking/fielding games is to score more points than the opposition over a specified period of play (usually called an innings). Striking/fielding games typically involve two distinct phases of play. There is the offensive phase (when your team is batting) and the defensive phase (when your team is fielding).

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Scoring

When your team is in **offence** (batting), this is usually the only time during the game when you can score points against your opponent. You can usually score points (runs) in striking/fielding games by either of the following methods:

- running between or around a designated area, for example running between the wickets in cricket or around the bases in softball
- hitting the ball into a designated area of the ground, for example, hitting the ball into the boundary in cricket to score four runs or hitting the ball over the fence between the foul lines to score a run in baseball.

When your team is in **defence** (fielding), this is the only time you can prevent your opponents from scoring points (runs). You can usually prevent points being scored against your team in several ways:

- bowling/pitching a player out, such as hitting the stumps in cricket or pitching three strikes in softball
- catching the ball when a batter has hit it into the field, resulting in the batter being 'out'



Alamy/B. Leighty/Photri Images

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- preventing a player from reaching a scoring zone by tagging them or hitting a target with the ball, such as tagging a player between bases in baseball or hitting the stumps or throwing to first base before the runner gets there in cricket and softball respectively
- occupying sufficient open space as to prevent a batter from running to score points.

Striking/fielding games movement skills

The movement skills involved in striking/fielding games are complex and varied but may include the following:

- **locomotor skills** such as running, walking and jumping
- **object control skills** such as hitting a ball, stopping a ball along the ground or in the air (catching), throwing to a target and bowling or pitching.

Striking/fielding games encourage participation in various positions (strikers, runners, fielders, bowlers) by all players throughout the game.

TRANSFER TACTICS

From what you now know about striking/fielding games, what tactical decisions will you be able to transfer from net/wall and target games next time you play a striking/fielding game?



WORKBOOK>>
Worksheet 8.5

Striking/fielding games: tactical decisions

When batting, there are several types of tactical decisions that you are likely to face:

- what shot do you need to play in order to score the maximum number of points?
- when are you best positioned or capable of playing such a shot?
- what shots are safest to play based on the fielding and delivery you face?
- when do you choose to run/steal points?

When fielding, you are likely to face different types of tactical decisions:

- what fielding structure allows the team to cover the most amount of space?
- in which position do you need to stand in order to reduce the number of points this particular batter can score?
- what type of ball delivery is likely to get this batter out?
- what type of ball delivery is likely to reduce the number of points this batter can score?

Territorial (invasion) games

There are two types of territorial games but both have a similar aim or similar intent.

First, there are 'goal' territorial games where points are mainly scored by putting a ball into a goal or net. Examples of these include soccer, lacrosse, water polo, Gaelic football, basketball, netball and hockey.

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end zone
a section at either end of a sporting field where a player must cross or field the ball/projectile in order to score points

Second, there are **end zone** territorial games where points are mainly scored by taking a ball into a designated scoring zone. Examples of these include rugby, gridiron, Ultimate Frisbee and touch football.

Territorial games movement skills

All territorial games such as soccer, ice hockey, basketball, rugby and netball involve many locomotor skills such as running, stopping, turning, jumping and stability skills such as guarding.

Object control skills are also important in territorial games. They include sending away (kicking or throwing), receiving (catching and trapping) and retaining (dribbling and carrying).



Buroinjin and Keentan

BUROINJIN AND KEENTAN

1. Do a web search for the Australian Indigenous games of Keentan or Buroinjin.
2. Read about the game you chose. Identify the locomotor, stability and object control skills needed to play this game.
3. Now make a list of as many sports as you can think of that have similar skills and tactical decisions to the Indigenous sport you researched.

Territorial games tactics

Territorial games generally involve a lot of physical activity and provide opportunities to develop a variety of skills including locomotor movements, disposing of the ball, foot and hand–eye coordination and challenging other players for possession of the ball. Players are required to try to keep possession of the ball for as long as possible in order to attack open space to increase their opportunities of scoring. When they are not in possession, they seek to block their opponent's open

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space and try to regain possession of the ball. Territorial games require players to develop communication skills with team members and group decision making is important and vital for success.

WORKBOOK>>
Worksheet 8.6

How to design a season

Most sporting participation is based around seasonal participation. That is, sports are predominantly played during the winter or summer months of the year. In Australia, most territorial games, such as football and netball, are played during the winter months with the striking and fielding sports, such as cricket and softball, played in the summer months. Some sports are played all year round but are often broken up into several smaller competitive seasons so players can commit to playing for a set period of time. The idea of seasons is used in Physical Education to focus on learning about a particular sport or game type for a set period of time. In many cases, it is better to have only a few seasons during the year so you can explore a variety of roles within each activity.

<<SCAFFOLD
Planning table

The following table can be used to plan your next season of Physical Education with your teacher and class. You can use the table as a guide or you can use the scaffold at http://ffl78vic.nelsonnet.com.au.

TABLE 8.2 Example of a sporting season plan

Task	Description
Preseason	
Selection of sport or activity	• Decide on a sport or activity and how it will be modified (e.g. five-a-side soccer world cup). • Identify the sequence of competitions and specify the rules for each.
Space and equipment	• Reserve/acquire the equipment and fields/courts needed for each competition. • Reserve/acquire the equipment and fields/courts needed for training and practice.
Length of season	• Know the number of training and competition days available during the season. • Be sure to check the school calendar for excursion days and public holidays.
Teams	• Decide on the number of teams and how teams will be selected.
Roles	• Decide on the roles that need to be filled during the season.
Administration	• Create duty sheets, player contracts, score/statistic sheets and other documents that can be used to show evidence of your learning and participation during the season.
Team identity	• Choose team name, mascot, colours, war cry or team song, training space/location, etc.
Duty team roles and requirements	• Discuss and agree on duty team responsibilities (e.g. referee, scorekeeper, etc.). • Ensure equipment for duty teams is available. This may include score sheets, whistle, playing equipment, referee uniforms, etc.
Duty team roles	
Referee/umpire	• Make rule decisions during a contest. • Ensure the contest flows in a fair and just way.
Scorekeeper	• Record and compile scoring sheets. • Keep an ongoing account of the status of competition (when points were scored/saved and by whom). • Communicate scoring records to responsible team role holders (manager, etc.) and your teacher.

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TABLE 8.2 Example of a sporting season plan (continued)

Team roles	
Coach	• Provide team leadership and motivation for team members. • Conduct and coordinate team practice and training sessions. • Direct skill, tactics and strategy for the team. • Decide on team line ups and substitutions to ensure equitable and fair play occurs. • Work with your teacher to ensure all team members are learning and contributing to the team in a meaningful way.
Captain	• Represent and lead the team on the field. • Provide on the field leadership and direction to the team. • Assist and encourage teammates. • Ensure teammates maintain high levels of sportsmanship and respect for officials and their opponents.
Manager	• Control the administrative functions of the team. • Complete and submit all necessary forms for the team. • Assist team members to fulfil their necessary duty team and team roles where appropriate.
Fitness leader	• Lead team warm-up, cool down and stretching sessions. • Conduct fitness sessions during team training. • Monitor team fitness improvements and gaps during the competition.
Trainer	• Know the common injuries associated with a sport. • Monitor first-aid kits and ensure they are adequately stocked. • Notify the teacher of any injuries during training or competition and keep records of these. • Aid the teacher in the event of a sporting injury.
Journalist	• Compile records and statistics and publicise them. • Contribute to regular school sport/PE reports. • Write a match report after every match. • Submit reports where appropriate.

WORKBOOK>>
Worksheet 8.7

Team membership

Being a member of a team should create enthusiasm in your Physical Education classes. Ideally, teams or clubs should be established at the start of a season and you should retain your team membership throughout the season, if not the entire school year. It is your responsibility as a student and team member to contribute to planning, practising and competing as a team.

social meaning knowledge and learning that comes from contact with other people

Having a long-term team membership means that you will be able to benefit from the **social meaning** of your sporting experiences, as well as from the personal growth that often comes from positive sport experiences.

review & reflect

TEAMWORK

Reflect on the experiences you have had as being a member of a team (it doesn't have to be a sporting team).

Make a list of positive and negative experiences you had with that team.

Looking at your negative list, suggest what could have changed in order for that experience not to have been a negative one for you.

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Getty Images/Yellow Dog Productions

Being part of a team has social meaning for everyone

Picking teams

How can teams be picked to ensure balanced and healthy competition?

Pierre de Coubertin said, 'the most important thing is not winning but taking part; the essential thing in life is not conquering but fighting well'. Picking teams and making sure that balanced and healthy competition takes place in your Physical Education classes is an important part of successful learning; winning is not as important. If team selections are done well, early competitive experiences can inspire you and can drive you along a personal sporting journey. If team selections are done poorly, your competitive experiences can end the sporting journey before it has even begun.

To ensure teams are balanced, and to increase the likelihood of a healthy competition, there are a few things you and your teacher can do.

- Don't pick captains who then pick their teams. When this happens, people usually pick their friends or the talented athletes first. Nobody ever wants to be picked last, nor will they give their best efforts if they feel that nobody really wanted them on the team in the first place.
- Don't randomly assign students by number. This doesn't usually work. Physical Education classes are rarely large enough for balanced teams to result from this process.

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- Teams should be chosen by a teacher, based on a wide variety of athletic skills. The teams should stay together for as long as possible over the school year. This way, if a player is not very good at one sport, but has talents in another area, they will be able to contribute to the entire team's success.

review & reflect

CHOOSING SKILLS

Imagine your teacher has decided that you will be assigned to one team for the whole school year. During the year you are going to participate in four different sporting seasons: soccer, baseball, volleyball and golf. Design an activity that your teacher could use to ensure that the players of each team represent a wide variety of skills and therefore there will be an increased chance of healthy competition.

Formal competition

A typical sporting season has a schedule of formal competition and combined practice/training sessions. The team membership and formal competition together provide the opportunity for planning and goal setting.

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A COMPETITION SCHEDULE

Design your own competition schedule. Based on your Health and Physical Education timetable over the coming term, allocate which lessons could be used for team practice and training and which could involve a competition match. Ensure that you have the opportunity to play each team and you leave enough time for the final event and festivities.

WORKBOOK>>
Worksheet 8.8
Worksheet 8.9

Records

It is important to keep accurate records of training sessions and competition matches. Records can include statistics on shots for goal, points scored, times, blocks, steals, assists and so on. Keeping accurate records provides feedback for individual players, for your team and the class as a whole. Records also help your teacher assess your progress as a competent, literate and enthusiastic sportsperson. These records and statistics can also help to define the sporting traditions in your school and can be used for comparison by future classes. Record keeping can be done manually or electronically. The following are examples of sporting record-keeping forms for netball and Australian Rules football.

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SCORE CARD (sample)

TIME:
DATE:
VENUE:
GRADE:

Qtr				VS Total				Total
1	GS GA				GS GA			
2	GS				GS			
	GA				GA			
3	GS				GS			
	GA				GA			
4	GS				GS			
	GA				GA			
			Total				Total	

Progressive Score	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Centre Pass	
1	3
2	4

Name	1	2	3	4	Name	1	2	3	4
	GS					GS			
	GA					GA			
	WA					WA			
	C					C			
	WD					WD			
	GD					GD			
	GK					GK			
1					1				
2					2				
3					3				
4					4				
5					5				

Captain _____
Umpire _____
Scorer/Timer _____

Captain _____
Umpire _____
Scorer/Timer _____

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Statistics sheet (sample)

(to be completed by statisticians)

HOME TEAM

NO.	Player's name	Kicks	Handballs	Marks	Goals	Behinds
		1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10		
		1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10		
		1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10		
		1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10		
		1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10		
		1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10		
		1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10		
		1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10		
		1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10		

VISITING TEAM

NO.	Player's name	Kicks	Handballs	Marks	Goals	Behinds
		1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10		
		1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10		
		1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10		
		1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10		
		1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10		
		1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10		
		1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10		
		1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10		
		1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10		

Crowning event

Sport is all about finding out who is the best team or player for a particular season, and for others to mark their progress towards being the best. **Crowning** events create an opportunity for festivities and celebration, which are important aspects of play and sport.

crowning
reaching the end or high point

review & reflect

CELEBRATE!

Some examples of popular crowning events include AFL/NRL/A-League Grand Finals but there doesn't always have to be a Grand Final event. Make a list of sporting crowning events you are familiar with and the festivities and celebration that occur at them.

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Festivities

Sporting competitions are occasions for celebration, from the major festivals associated with the Olympic Games, to the Sunday football game, to the family event of a children's soccer match. In your Physical Education class, teachers and students should work together to create a continual festival that celebrates improvement, trying hard and playing fairly. This can be achieved with posters, team colours, player introductions, award ceremonies, digital recording and so on.



Corbis/Christian Kober/Robert Harding World Imagery

There are many ways you can make your team more festive and a special part of your schooling.

Names

Teams should have names. As a team, choose a name to define your vision. Don't use names that project violence, sexism, or are insulting or inappropriate in any way. Don't use names like Mount Carmel Missiles or Caloundra Killers. It's easy to come up with some fun and creative names for your team. One way is to think of a particular feature of the sport you are playing and add an adjective or place name in front of or after the sporting feature. For example; if you were studying water polo you might name your team 'The Goal Seekers' or the 'The Flying Dolphins'. Ice hockey is a sport known for its heavy body contact and rough play. However one of the most famous teams in that sport is 'The Mighty Ducks'.

NAME YOUR TEAM

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1. Make a list of all the different sports you will be exploring during Physical Education this year.
2. Next to each of the sports, think of an animal, object or action that has an association with that sport. For example, in Sepak Takraw, elite players will frequently do a bicycle kick in the air to spike the ball into an opponent's court. It looks like a 'flip'. So an action you might associate with Sepak Takraw is 'flipping'. An appropriate team name could be the 'Bathurst Flippers'. In Australian Rules Football, many of the teams are named after birds or objects that fly because of the jumping action players use to challenge for the ball or to take a mark. Team names include the Sydney Swans, Adelaide Crows, West Coast Eagles and the Collingwood Magpies.
3. Using the list, come up with a new and creative team name you might use when you are participating in one of these sports.

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Alamy/Chris Whitehead/Cultura Creative

Most sports fans have their own team rituals and chants

Rituals and chants

Many teams also engage in team rituals to prepare them for a big match or after they have had a successful game. You can increase the festivity of your team by having a team mascot or a team song you sing after every match. The team 'chant' or the team song of many sporting teams date back to the beginning of the club. Australians have a proud tradition of creating songs and chants in support of their favourite teams. So do European and South American football (soccer) teams. Recently, many teams have cheerleaders to encourage fans and teams to participate in songs and dances that motivate players but also celebrate achievements during a game.



TEAM CHANTS

Get some ideas for a team song by doing a web search of your favourite sporting teams and listening to their team song or chant.



WRITE A TEAM SONG

1. Pick one of your newly created team names and search on the internet for song lyrics that contain words that are in your team name.
2. See if you can change the words in the song to make them more appropriate to your team and their sport.

Display the results

Each team can also have their own bulletin board (or webpage) space to post their results, statistics or even photos of the team performance. You could even vote for a player of the week and post a profile of that player on your bulletin space.

Team colours

Most importantly, most teams get to choose their team colours and wear clothing that helps create team identity and promote festivity. You can be involved in deciding how your team colours can be used:

- choose the colour lanyard or vests your team wears
- choose a particular colour for headbands or wristbands

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- create your own dyed or screen-printed shirts. (Hint: speak to the art department in your school to help you with this.)
- design a logo that can be printed onto iron-on paper and attached to your sports uniform. (Check with your teacher and principal before you do this.)

Awards

Awards are always an important part of keeping sport festive. It is important for you and your teacher to find ways to recognise hard work, performance improvement, victories and fair play.

Here are some things to remember when you are planning to give awards to people in your team.

- Good performance doesn't just include players who perform well or teams that win. It can also include officials who referee tough games particularly well or duty teams that get fields or courts prepared really well.
- It is very important to recognise and celebrate fair play. Think about recognising the fair play of an opposition player on your bulletin board or website.
- If awards are given, many people need to agree with the giving of such awards. Maybe set up an 'awards committee' at the beginning of each season with members from each team involved in deciding who the big awards, such as 'Most Valuable Player' or 'Most Improved Referee' or 'Fairest Referee', will be given to.
- Coaches and managers who fulfil their duties should be recognised with an award. It is difficult to coach and manage people your own age, and you should recognise students who do these roles especially well.



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AWARDS

Make a list of the awards that you think should be offered for the following achievements. Try to add to the festivity by being as creative as possible with your award names.

1. Award names for achieving the goals of roles undertaken by classmates, including player, coach, manager, official, etc.
2. Award names specific to the sports listed below (e.g. 'Golden Boot' for most goals scored in a soccer season):
   - soccer
   - volleyball
   - archery
   - softball
   - basketball
   - plus three more sports of your own choosing.

MODIFYING GAMES

One of the more difficult tasks you will be asked to perform during your Physical Education lessons is to modify and create your own games. In order to have the skills to modify or create your own games, you will need to recall two of the concepts explored earlier in this chapter:

- the fundamental rules of the game
- the games classification system.

Modifying games using the fundamental rules

By simply changing one or all four of the fundamental rules in any game, you will change how the game is played. Remember, these are the fundamental rules:

- scoring
- players' rights
- freedom of action
- physical engagement.

Let's see what happens when each fundamental rule for a popular game is modified.

Modifying scoring

By simply changing the rule that governs who, when and how players can score, the way that a game is played can change dramatically.

For example, what would happen in a game of soccer if you also got points for kicking the ball over the crossbar? What would happen in a game of Australian Rules Football if a behind was worth more points than a goal?

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CHANGE THE SCORING RULES

review & reflect

How do you think the games would be played if you changed the scoring rules in either of the following sports:

- rugby, by awarding a point by kicking the ball over the dead ball line?
- golf, by adding an extra stroke to your score if you hit the ball off the fairway?

Modifying players' rights

Players' rights include equal chances to score points during a game. In some games, it means the number of turns each player is allowed to have, or how many balls or innings can be played. In other games, especially net/wall and territorial games, it means the right to start the game and to restart after a break down in play.

For example, what would happen in a game of cricket if a team only got to face 20 overs (as they do in 20/20 cricket) instead of the 50 overs normally faced in a one-day test? Why do the players play different shots? Why do the bowlers bowl differently?

What would happen in a game of Rugby League when you reduce the number of tackles each team is allowed? How would you play the game differently if you were given only three tackles instead of the normal six tackles?

CHANGE PLAYERS' RIGHTS

review & reflect

How do you think the games would be played if you changed the players' rights rules in the following sports:

- volleyball, with the team that loses the point getting to serve the next time?
- baseball, if batters were only allowed one strike instead of three?

Modifying freedom of action

Freedom of action rules are the special actions that a player in possession of the ball can do that other players cannot. These rules give a game its unique character. For example, if you compare the games of netball and basketball, they are similar in many ways. They both require teams to move a similarly sized ball up and down a court of similar size and put the ball through a similarly sized hoop to score points. But by watching a game of netball and basketball, you see how different the games really are – those differences are in the freedom of action that the ball carrier has in each of the games.

In basketball, players can move with the ball as long as they bounce the ball with one hand while they are moving. Once they stop moving and hold the ball with two hands, they must pass or shoot the ball. In netball, the ball carrier is not allowed to move more than one step once they have planted a foot on the ground. They can only move the ball by passing to teammates. In netball, not all players can shoot. Only the goal attack and goal shooter players are allowed to shoot goals; all the other players must pass. In both games, ball carriers cannot be touched by defensive players,

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Alamy/Alan Edwards


iStockphoto/strickke

Netball and basketball look similar but have very different rules about the way players can move with the ball

but extra freedom of action is given to a ball carrier in netball because defensive players are not allowed to come within one metre of the ball carrier. In basketball, defensive players can stand as close as they like, without touching their opponent, and can even try to take the ball from their opponent's hands.

review & reflect

CHANGE FREEDOM OF ACTION

What is the difference in freedom of action rules for the following players?

- ➜ a soccer goalkeeper versus a soccer field player
- ➜ a T-ball batter versus a softball batter
- ➜ a tennis server versus a volleyball server

Modifying physical engagement

To ensure games have appropriate behaviour and foster fair play and sportsmanship, the rules of physical engagement are also important. These rules ensure that scoring, players' rights and freedom of action rules are respected and that cheating and poor sportsmanship are discouraged.

For example, most of the football codes involve some body contact. The physical engagement rules ensure that any contact between players also provides some protection to the player being contacted. There are restrictions on how players can be tackled, how many players can be involved and where on the body contact is allowed.

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Other games also have physical engagement rules simply to ensure good sportsmanship. For example, according to the rules of tennis, players can be penalised for throwing or abusing their racquet during a match. Most sports restrict abuse towards officials and opponents.

Modifying games using the games classification system

When you want to modify a game or sport, you are not restricted to changing the fundamental rules of games. You can also change aspects of each of the games based on the games classification system (page 276).

The games classification system is a useful tool for modifying different sports because many share similar features. You can change these features to make a game more or less difficult to play.

Modifying target games

Target games can be modified to suit the various learning needs and skill level of different players.

Distance to the target

You can increase or decrease the distance to the target. When you increase the distance to the target, you also increase the level of skill and potential number of tactical decisions that will need to be made to hit the target.



In archery, the distance, position and size of the target can be modifed

Size of target

You can increase or decrease the size of target. Smaller targets are usually more difficult to hit and need greater skill and accuracy. But by making the target bigger, you also make it easier to hit.

Position of target

Another way you can modify a target game is by moving the position of the target:

- You can place the target behind an obstacle, which is common in sports like snooker and lawn bowls. When you place the target behind an obstacle, it requires greater skill and higher levels of problem solving and decision making to hit the target.

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➜ Moving targets are usually more difficult to hit than stationary ones. Some target sports such as trap shooting have moving targets, but you can modify any number of target games by making the target a moving one.

Balls and scoring

projectile
any object that can be propelled into open space, e.g. ball, frisbee, stick, boomerang

Finally, you can also increase the difficulty and the variety of skill required in target games by changing the weight and/or size of the **projectile** or introducing a scaled and/or bonus scoring system.



BURAN OR YANGAMINI

1 Go to the Australian Sports Commission website and search for the Australian Aboriginal game of Buran. Read the fact sheet about the game. Then, using each of the modifications you know you can make to target games, redesign the game to make it easier to play.



Buran is a competition based on accurately throwing a boomerang

OR

2 Also on the Australian Sports Commission website, you will find information about the Australian Aboriginal game of Yangamini. Using each of the modifications you know you can make to target games, redesign this game to make it easier to play.



Yangamini is an object-throwing game (usually marbles or coins)

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Modifying net/wall games

Net/wall games can also be modified to suit the various needs of players.

Modify the ball

The weight and/or size of the ball can be changed to make the game easier or more difficult to play. Think about playing handball at school. Instead of playing with a tennis ball, which is small and weighs a bit, the game would be easier if the ball was the size and weight of a volleyball. In the game of Sepak Takraw (page 280), many beginners would not be able to play with the **rattan** ball to begin with, so why not play with a balloon and then gradually pick a heavier ball (like a volleyball) then a soccer ball, then eventually a size 3 soccer ball (which is about the size of a rattan ball). Some children in Thailand play Sepak Takraw with a tennis ball!

rattan
fibre from a palm tree that is used to make a variety of products, including furniture, baskets and balls for Sepak Takraw



Shutterstock.com/Africa Studio

Comparative sizes of balls used for various sports

Tennis Australia runs a program for children called 'Hot Shots'. This program modifies the game of tennis to make it easier for children to learn. In Hot Shots, kids learning to play tennis use red, orange and green low-compression balls that don't bounce as high as the usual yellow tennis balls, making them easier for new players to hit.

Modify the racquet or bat

Another way of modifying net/wall games is to change the shape and/or size of the bat or racquet. Playing with an oversized racquet face can make the ball easier to hit. Many racquets and bats for net/wall games are now available with shorter shafts (handles) and smaller grips for younger, small players.

Modify the court

Many modified net/wall games will also change the size and dimensions of the court space to decrease or increase the difficulty of the game. In Hot Shots the courts are smaller, which makes them easier to play on because there is a smaller area to cover. It also helps new players to develop realistic footwork patterns and encourages use of all parts of the court. A tennis court is not even necessary for Hot Shots – it can be played on any flat, hard surface.

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Alamy/Zoonar/Bernd Leitner

Speedminton® is played without a net. The playing zones are usually marked by tape on the ground.

Speedminton® is a new game that modifies the traditional net/wall game of badminton. Speedminton® has no net or adjoining court space. It is a classic example of modifying court space to increase or decrease difficulty of skill and tactical decisions in net/wall games.

SPEEDMINTON

Do a web search for the game of Speedminton®. What equipment do you need to play this game?

Modify the net

A common modification to net/wall games is to adjust the net height. A very low net is easier to defend when players are close to the net; a high net is much more difficult. It is also harder to play offence shots like a smash on a high net.

Modify the rules

You may also choose to change the rules to allow (for example) more bounces before the ball is returned or increase the number of fault serves. In Sepak Takraw, very few people would be able to play this game at first if the ball was not allowed to bounce. Try playing it in your class with a volleyball, and allow the ball to bounce once or twice before another person has to kick it. If you play one bounce/no fault handball at lunch and recess, why not allow a new player (or the teacher) to have two bounces in their square and one fault serve?

Modify the team

Finally, you can vary the number of teammates or opponents in net/wall games. Increasing the number of your opponents increases the difficulty of you being able to play the ball into open court space. It also increases the chances for the opposing team to return the ball. A common modification in tennis is American Doubles. In American Doubles, the better player plays on the singles court against two players on the doubles court.

Modifying striking/fielding games

Modify the equipment

The size of the bats and balls used to play a striking/fielding game can be modified. As with net/wall games, a larger bat or ball makes it easier to hit and catch.

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Modify the field

The size and dimensions of the playing field can also be changed. This affects both the skills and tactical decisions needed to play. A larger field usually requires more skill to play a striking/fielding game because the fielding team must cover more open space and must pitch, bowl and throw further. For the batters, a larger field means they will have more open space to hit, but scoring points by hitting into designated scoring zones, such as into the boundary or over the fence, will be harder.

Modify hitting

Methods of hitting and delivery can be changed. Examples include having a bowler, allowing a bounce ball, hitting from a tee, allowing more time to hit (or allowing more strikes) and allowing more time to field the ball.

Modify the team

The number of players on each team can be changed. A fielding team with more people can cover more open space, and so improve its chances. In the same way, having more batting players gives a team more opportunities to score points.

Modify scoring

The scoring system in striking/fielding games can be controlled in many ways (e.g. bonus points for particular plays). To encourage players to try to play longer shots, the number of runs awarded for hitting the ball over the fence could be increased. To encourage fast running between the wickets in cricket or between the bases in



Corbis/Peter M. Fisher

Do you have your own rules for backyard cricket?

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baseball, each run between the wickets could be worth two runs or a point could be given for every base a runner is able to occupy. Point incentives could be awarded to the fielding (defensive) team or runs could be taken away from the striking team if the fielders catch a player out. This will also affect the type of shot the striking team is likely to play.

Modifying territorial games

Many modifications can be made to territorial games to suit the various needs of players.

Modify the equipment

The weight, size and shape of equipment can all be changed. This is common in modified territorial games (especially for juniors). It can be difficult to kick a full-sized football or throw a full-sized netball, so a smaller and lighter ball can help young players. Playing with a smaller or differently shaped ball can also increase the difficulty of territorial games for very skilled players. Try playing soccer with a tennis or rugby ball in your next PE class for a challenge!

Modify rules

Scoring targets, the way points are scored and other game rules (e.g. time allowed in possession, areas allowed in, types of passes and movements) can also be adjusted. Points are harder to score when targets or scoring zones are made smaller. It is the same in territorial goal games when you reduce the goal size and in end zone games when you reduce the scoring area.

If you change the point systems, this also changes the way the game is played. Why are field goals more likely to be attempted in a game of Rugby Union than Rugby League? Field goals are worth three points in Union and only one point in League, so players often shoot field goals in Union when their running attack loses momentum; in a League game they often only shoot field goals to break a deadlock.



CHANGING RULES

What scoring or game rules would you change in each of the following situations:

- ➜ if you wanted to encourage players to score in the middle of the end zone rather than on the wings (the sides) in a territorial game?
- ➜ if you wanted to encourage soccer players to shoot from further away?
- ➜ if you wanted to encourage netball players to pass to wing players more often?
- ➜ if you wanted to encourage more players to run with the ball instead of passing?

Modify playing area

To work on a specific tactic in a territorial game (e.g. short passing), you can change the size of the playing areas. Just as in net/wall games when you want to encourage drop shots, lobs or passing shots, changing the playing space changes player

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behaviour. Playing on a long narrow field encourages tight ball possession or long, high-risk passing. Playing on a wider field encourages the use of wing players to attack the opposition **flank** positions.

flank
the side

Modify teams

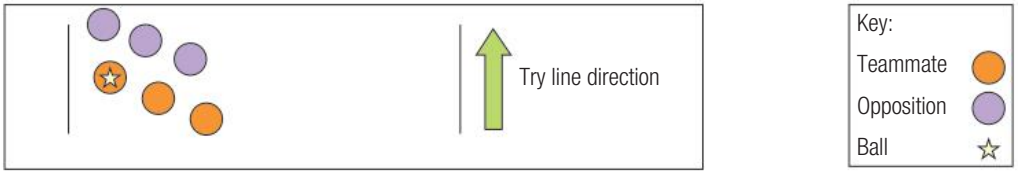
Another way to make territorial games harder or easier is to change the roles of players and/or number of teammates or opponents in any game. This is common in territorial games, as many attacking strategies rely on creating space and defensive strategies on reducing space. The easiest way to create more space for attacking players is to have fewer defenders on the field. The most successful attacking strategy in territorial games is to have at least two attacking players for every defender (overlap).

OVERLAPPING

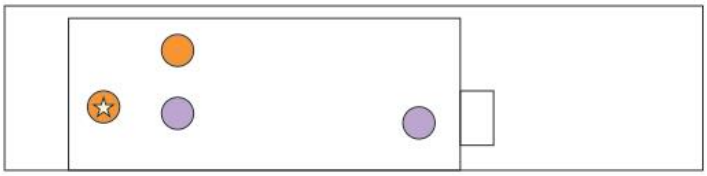
critical + creative thinking

For each of the situations shown in the following diagrams, where would an attacking player be best positioned to create an overlap opportunity?

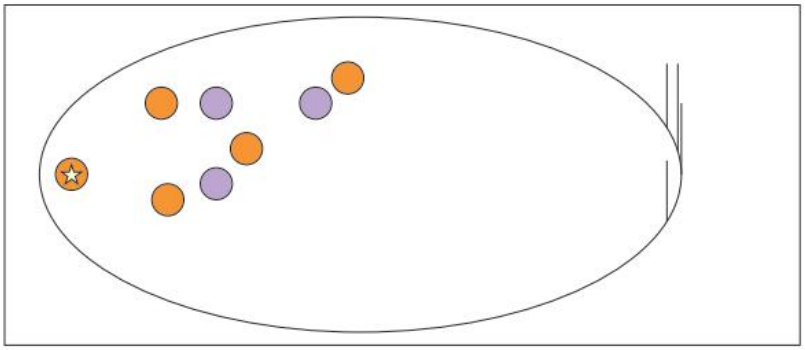
1 Rugby example



2 Hockey example



3 Australian Rules example



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CREATING YOUR OWN GAMES

During this chapter, you have explored what it takes to become a competent, literate and enthusiastic sportsperson. You now know how games can be modified for different reasons and the importance of games and sports in some other cultures. Now you are ready to apply your knowledge of movement skills to solve strategic and tactical problems in many games and sports.

Children have been making up games to play with their friends since the dawn of time. Some of the best games you play are probably these unorganised schoolyard games that you created with your friends, or games passed down from generations of students before you. Now is the time for you to go and create your own game or sport legacy at your school!

WORKBOOK>>
Worksheet 8.10



CREATE A GAME

In this activity, you will create your own game with three or four classmates.

1. Select a game type from the games classification system (pages 276–85).
2. List the scoring, players' rights, freedom of action and physical engagement rules for your game.
3. Collect the equipment needed to play your game and find a space to play. Remember, this is a schoolyard game so it is better to have a smallish space and as little equipment as possible.
4. Instruct the rest of your class on how to play your game and let them play it.
5. Watch how your classmates play your game and change it as necessary to make it more or less difficult for different players. Remember, you can modify similar types of games using the games classification system.
6. Start to construct role descriptions for other participants of your game, such as umpire, commentator, coach, etc.
7. See if you can get other students at your school to play your new game during recess and lunch breaks. Then you will know how successful your new game is. Who knows, you may have even started a new sport that will be played in schoolyards for years to come! Congratulations!

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CHAPTER REVIEW

WORKBOOK>>
Worksheet 8.11

1. Write a definition of a 'literate sportsperson'.
2. Write a definition of a 'competent sportsperson'.
3. Write a definition of an 'enthusiastic sportsperson'.
4. Name four of the roles that you could adopt in your favourite sport.
5. What are the four 'classifications of game'?
6. Name at least two sports from each of the games classifications.
7. What are the four fundamental rules of games?
8. Describe how two sports from the same games classification differ, based on your knowledge of fundamental rules (i.e. soccer and hockey, or cricket and baseball).
9. Why are most sports organised around 'seasons'?
10. What is a 'crowning event'?
11. Why are crowning events important to the culture of a sport?
12. Why is the maintenance of accurate records so important when participating in a sport or game?
13. Describe a 'festivity' associated with your favourite sport or sporting event.
14. Based on your reading and additional research, what role did sports and games play in traditional Australian Aboriginal society?

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9 ENHANCING PERSONAL FITNESS THROUGH LIFELONG PHYSICAL ACTIVITY



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In this chapter **you will discover that being active throughout your life has a major impact on your health and wellbeing.**

By the end of this chapter, you should be able to:

- ➜ understand how lifelong physical activities enhance your fitness and wellbeing
- ➜ identify health-related and skill-related components of fitness
- ➜ create a personal fitness plan
- ➜ explore opportunities for physical activity in your local area
- ➜ measure your body's response to physical activity.

Lifelong physical activity	**308**
Components of fitness	**310**
Measuring your body's response	**324**
Creating personal fitness plans	**326**
Exploring your local environment for physical activity opportunities	**332**

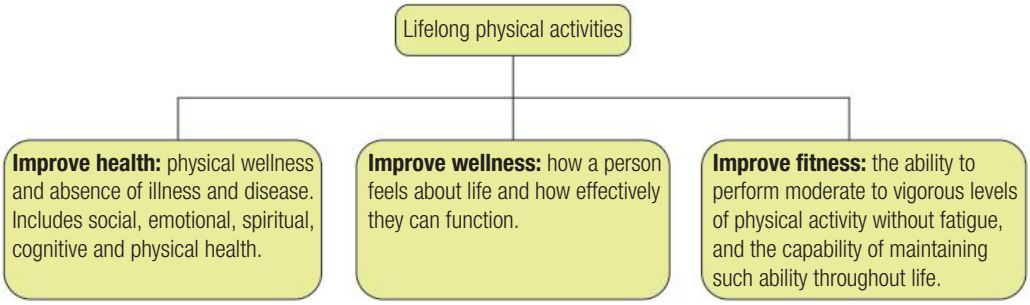
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LIFELONG PHYSICAL ACTIVITY


Corbis/Mike McGill

One of the aims of health and physical education is to develop your fitness, health and wellness through participation in lifelong physical activities. Sometimes the terms health and fitness are used interchangeably, but they are two different things. The term 'health' is used a lot in this book but the focus of this chapter is on lifelong physical activity and fitness. This diagram displays the link between lifelong physical activity and health, wellbeing and fitness.



Lifelong physical activities

Lifelong physical activities are also called 'lifestyle' or 'lifetime' physical activities, and they form the base of the physical activity pyramid (see Chapter 3, page 100). These are the types of activities that are part of your daily routine, including walking, skateboarding, BMX riding, playing games like foursquare, playing games with friends, kicking the football, gardening, performing household chores, playing tennis, throwing a frisbee, swimming, dancing, playing golf and canoeing. All modern health and physical education programs include a range of lifelong physical activities as well as team and individual sports.

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review & reflect

TRUE OR FALSE?

Think about several activities you perform on a regular basis. Evaluate whether or not they would be considered lifelong physical activities by writing true or false next to each statement in the checklist. You can fill it in online or in your workbook.

Lifelong physical activities:
1 will improve your health if you perform them regularly
2 should be performed daily
3 can easily fit into your daily routines
4 may feel light and easy for you while you are young, but they will make you work harder when you get older
5 are easy to perform even with a low personal level of fitness or skill
6 include sports and recreational activities that are easy
7 use more energy than just sitting down
8 should be kept up throughout your whole life
9 require very little equipment
10 can be performed anywhere, anytime and even on holidays
11 can be performed by yourself or with one or two others
12 are more likely to become part of your daily routine if they don't make you 'huff and puff' really hard

WORKBOOK>>
Worksheet 9.1

SCAFFOLD>>
True/false quiz

Feeling fit

People sometimes say they feel 'fighting fit', but what does this actually mean? To be 'fit' you need to think of your mind and body as if they are a high-performance race car. Like the engine in the racing car, your body needs high-quality fuel to perform. Your body is fuelled by food (as you read in Chapter 2); like an engine, it needs to be fine tuned and maintained, and this is achieved through regular physical activity.



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Feeling fit requires fine tuning, just like a high-performance race car

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<<WORKBOOK
Worksheet 9.2

Fitness is specific to the daily needs of each person: their occupation, sports and daily roles and routines. Every person has a different level of fitness and has different needs. For example a bricklayer who is physically active for most of their working day will have very different demands on their body than an office worker. Just as physical demands and fitness levels vary between people, so do the types of physical activities people participate in to maintain their fitness. There is no 'one size fits all' program to suit everyone. Training or physical activity programs need to be **tailored** specially to people's needs, interests, abilities and level of fitness.

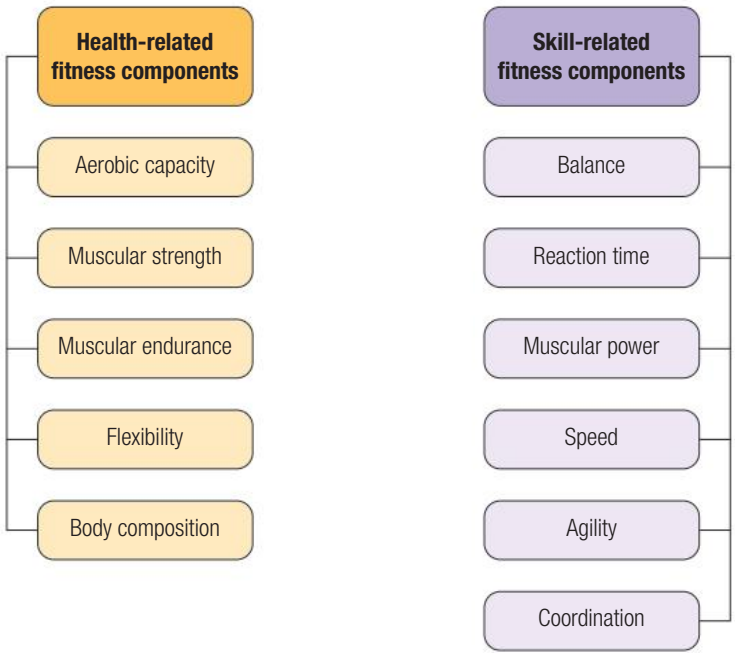
tailor
to create a program to suit the individual needs, interests and context of a specific person or group


123RF/Daniel Kaesler


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A person who does manual labour is far more active at work than an office worker

COMPONENTS OF FITNESS



Health- and skill-related fitness components

<<WORKBOOK
Worksheet 9.3

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DESIGN AN ACTIVITY

1. Bring a range of items from home such as a broom handle, towel, plastic bottles (such as empty milk containers), milk crates, tarps, buckets, boxes, long sports socks/stockings, noodles or inexpensive sporting equipment items (tennis balls, frisbees, skipping ropes). Use these items to create a physical activity you could do at home.
2. Later in the chapter revisit this activity to see if you can work out which health- and skill-related components of fitness are used in the activity you designed.
3. As a class, you could design a 'fitness circuit' consisting of several of the activities you have designed.

The ultimate exercise program

What would the ultimate exercise program look like? It would develop all five of the key health-related fitness components and the six skill-related components (see page 310). The ultimate physical activity program would be based on the physical activity pyramid (see Chapter 3, page 100).

Let's take a closer look at each of the components of fitness.



How can you recycle household items as fitness equipment?

WORKBOOK>>
Worksheet 9.4
Worksheet 9.5

Health-related fitness components

Aerobic capacity

Aerobic capacity is also called aerobic fitness, cardiovascular fitness, cardiorespiratory fitness or aerobic power. Aerobic capacity is often considered the most important health-related fitness component. It is the ability of the heart, blood vessels and the **respiratory system** to supply fuel and oxygen to the working muscles, as well as the ability of the muscles to use the oxygen for sustained exercise. Aerobic capacity should be the foundation of any physical activity program because a high level of aerobic capacity helps you to run, walk, cycle or swim. It also helps you to recover after high-intensity exercise.



Alamy/David R. Frazier Photolibrary, Inc.

Swimming is an excellent physical activity to increase aerobic capacity. What other components of fitness can be developed by swimming laps?

aerobic capacity the body's ability to supply oxygen to muscles, and the ability of muscles to use the oxygen

respiratory system the system of organs involved with breathing, including the nasal passages, windpipe and lungs

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chronic disease
a long-lasting disease that is not usually cured completely

Excellent lifelong physical activities for developing aerobic capacity are brisk walking (power walking), jogging, running, cycling, swimming, participating in aerobics classes and dancing. The health benefits associated with aerobic physical activities help to prevent **chronic diseases**.

Muscular strength and endurance

Muscular strength is the capacity of the muscle or muscle group to exert force against a resistance. In contrast, **muscular endurance** is the capacity of the muscle or muscle group to exert a force repeatedly against a resistance. Table 9.1 outlines the difference between these fitness components.

metabolism
the processes in the body that work together to use food for growth and energy

fatigue
physical and/or mental exhaustion that can be triggered by stress, medication, overwork, or mental and physical illness or disease

TABLE 9.1 Muscular strength versus muscular endurance

Having good muscular strength:	Having good muscular endurance:
• allows you to move objects or body parts with force (useful in sport and everyday life)	• allows you to exert a force repeatedly, such as running up 12 flights of stairs
• helps in weight loss and maintaining a healthy body weight, due to the increase in your **metabolism**	• allows you to repeat movements for a long period without too much **fatigue**
• allows you to control your own body weight when lifting or bracing against a force such as a football tackle	• helps to avoid injury
• is useful in sports such as weight lifting and in resistance training, or lowering something heavy and pushing.	• helps in activities such as rowing, cycling, swimming, push ups and sit ups.


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Muscular strength and muscular endurance are important for both sporting performance and everyday life

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MUSCULAR IMAGES

Go online to find images of athletes playing sport and of people doing everyday lifelong physical activities. Find images that depict the muscular strength and muscular endurance involved in each activity.

KEEP GOING!

As a class, participate in an activity that requires muscular endurance, such as crunches, step-ups, half squats, push ups, or walking or jogging up stairs.



Alamy/Action Plus Sports Images

Rowing requires muscular endurance of both the upper and lower body. Can you think of other physical activities that require muscular endurance?

Resistance training

To improve your muscular strength and muscular endurance, resistance training is ideal. Use free weights (dumbbells and barbells), bands, machines or your own body weight to place resistance on a muscle or a group of muscles. You will learn more about resistance training and circuit training in Years 9 and 10.

MUSCLE WEIGHS MORE THAN FAT

When you increase your muscular strength with resistance training you actually increase the size of your muscles. The extra muscle, although it weighs more than fat, burns more energy, which aids fat loss. That is why people often put on weight or stay the same when they start doing resistance (weight) training, even though their clothes may become looser.

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UP + MOVING

PUSH ME

This activity shows the difference between muscular strength and muscular endurance. Find a classmate with a similar body size and strength to you, or watch a pair who are similar.

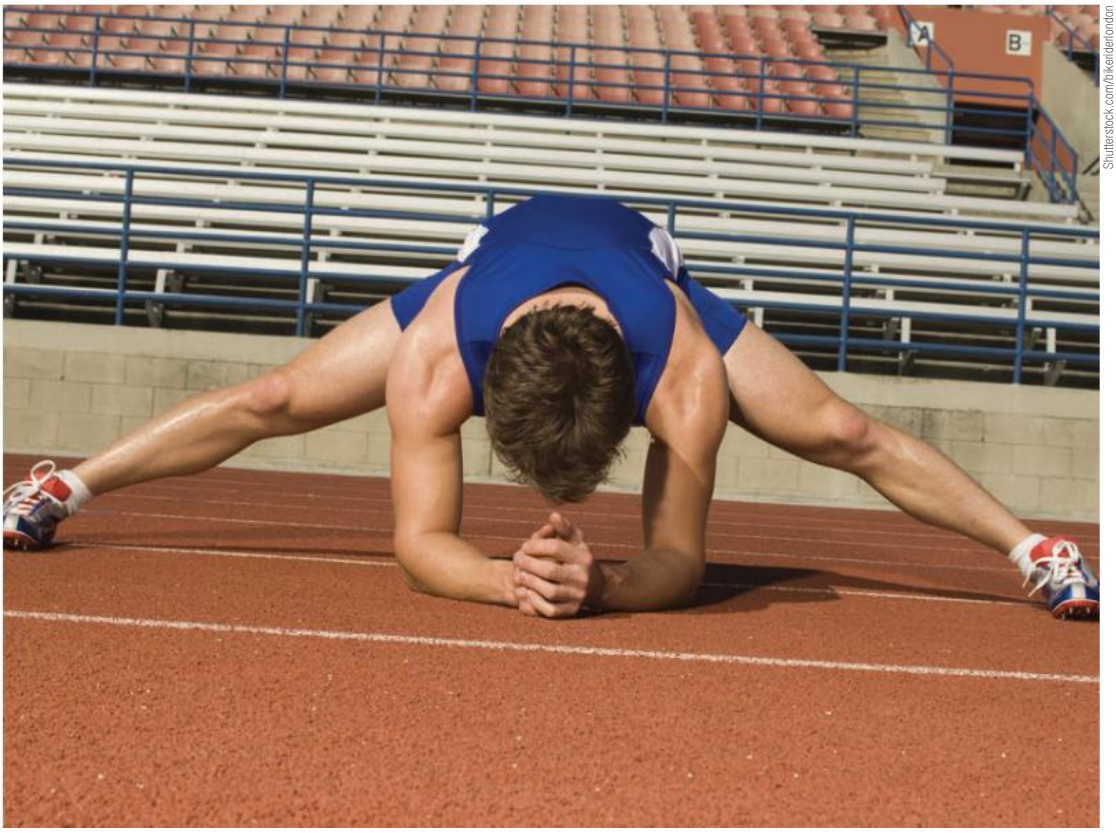
1. Push against each other (carefully) until one person takes two to three steps backwards.
2. Take each other's hands and cycle your hands in a circular motion carefully as if you are winching up a sail on a yacht. Do this for two minutes.
3. Discuss which activity you think required muscular strength and which needed muscular endurance.

WORKBOOK>>
Worksheet 9.6

Flexibility

A flexible joint can move through its full range of motion. Being flexible is really important in your daily life because it allows you to do things such as throwing a ball for your dog at the park or bending over to tie your shoelaces. Joint flexibility is different for each joint. Just because someone has excellent flexibility in one joint doesn't mean they will have good flexibility in all joints. For example, you might have good shoulder flexibility but be unable to touch your toes. Being flexible allows you to move certain joints quickly and easily and to avoid injury and chronic pain. The best way to improve your flexibility is to stretch regularly.

WORKBOOK>>
Worksheet 9.7



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Only an elite athlete would attempt this particular stretch, but stretching is important for all people

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Flexibility is important to perform both sporting and everyday lifelong physical activities

Body composition

Body composition is divided into two categories:

- fat-free mass, which is muscle, bone, water, connective tissue, organs and teeth
- fat mass, which is essential and non-essential fat stores.

FAST FACT

Health-related and skill-related fitness components are very specific and quite distinct from one another. Just because you are really flexible doesn't guarantee you would have good balance or coordination.

Essential fat

Essential fat is something that everybody needs. It is needed for normal body functions including the following:

- regulating your body temperature
- absorbing shocks
- regulating nutrients.

Essential fat is found in the heart, lungs, liver, spleen, kidneys, intestines, muscles, central nervous system and bone marrow.

Non-essential fat

Non-essential fat is found in the **adipose tissue**, and it is known as body fat.

Table 9.2 shows healthy body fat percentages for males and females. You will notice females generally have a much higher body fat than males.

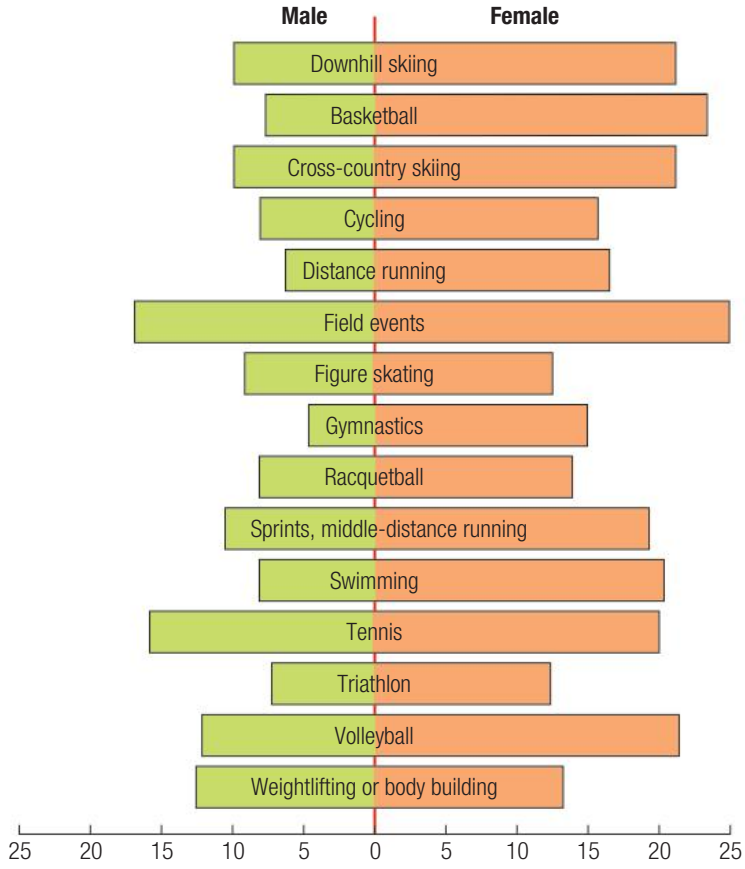
adipose tissue stored fat that is used as a source of energy; it also cushions and protects internal organs

TABLE 9.2 Healthy body fat percentages for teenagers 13–17 years

	Dangerously low	Low	Mid-range	Upper range	Dangerously high
Girls	Below 12%	12–15%	16–30%	31–36%	More than 36%
Boys	Below 5%	5–10%	11–25%	26–31%	More than 31%

Source: Vivian Heyward, *Advanced Fitness Assessment and Exercise Prescription,* 6th edition, Human Kinetics, 2010

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Average percentage of body fat of male and female athletes (17–35 years) in selected sports

critical + creative thinking

INTERPRETING DATA

1. Examine the graph of male and female athlete average body fat percentages. Which sports are associated with a higher percentage body fat?
2. Describe why you think triathletes would need a low percentage body fat.

The safest way to improve your body composition is to do regular physical activity and eat a healthy balanced diet, including foods from all food groups (see Chapter 2).

Skill-related fitness components

The skill-related fitness components include the following:

- balance
- muscular power
- agility
- reaction time
- speed
- coordination.

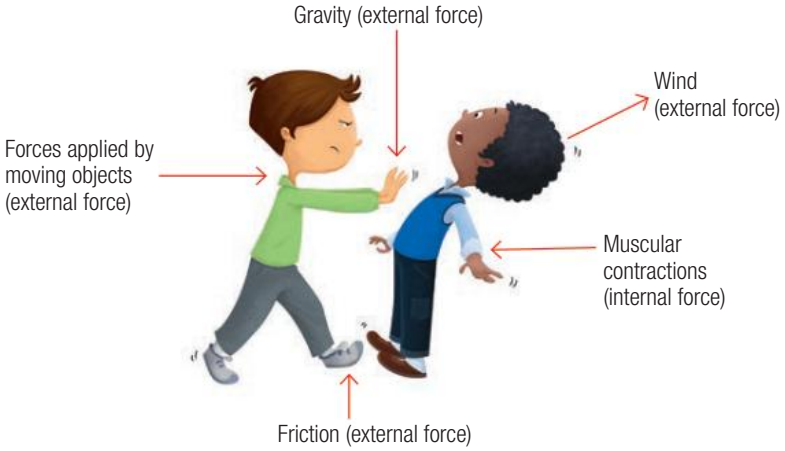
Each skill-related fitness component is unrelated to the others. Just because someone is fast on the basketball court does not mean that they are also well coordinated. Improvements to any (preferably all) skill-related fitness components are likely to increase performance in sport and other physical activities. When you

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watch elite athletes playing team sports, you see they are often above average in most skill-related components of fitness.

Balance

Balance is one of the most important components of fitness for every activity you do, from your daily movements around the house such as dressing, showering or going to the toilet right through to specific sporting movements such as throwing, jumping and landing.



To maintain balance, internal forces must equal external forces

This illustration shows that to maintain your balance (equilibrium) the external forces acting on your body such as gravity, wind (to a very small extent), moving objects or people, and friction must be constantly matched by internal forces such as muscular contractions, otherwise you would fall over. Balance varies depending on whether you are stationary (still) or moving. Your muscles and joints make constant adjustments to maintain your balance every time you change the position of your body or the environment you are in. For example it is much easier to maintain your balance standing still in waist-deep water than in air, but if you were standing in waves where there was a strong undertow removing all the sand from under your feet and water pushing against you, it would be very hard to stay on your feet.



Equestrian events require excellent balance. Although horse riding is considered a lifelong physical activity, the unpredictable movements of a horse can lead to a loss of balance and falling.

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Improving your balance is very specific to the activity being performed. Generally, balance can be improved by lowering the height of the centre of gravity and/or increasing the area of the base of support. For example if you were canoeing or kayaking and you started to lose your balance, you could lower your hands and paddle to retain your balance.



BALANCE

To do this activity, you will need to find a partner of similar build.

In a safe manner, person 1 tries to push person 2 off balance.

Now person 2 should attempt to become more stable. Person 1 again tries to push person 2 off balance. Now swap the roles and do the activity again.

Discuss the changes person 2 made to increase their stability and stay balanced. Did it work? Why or why not?



WHICH COMPONENTS?

1. As a class, discuss which health-related and skill-related fitness components are important in recreational cycling.
2. Now individually, or with the person next to you, think of a sport or physical activity you do regularly, and make a list of health-related and skill-related fitness components that would be important for that activity or sport.



BALANCED PHOTOS

Go online to locate images that depict the concept of balance. They may be images of athletes playing sport or people in everyday lifelong physical activities.

Add them to your online album or to the class collection.

Reaction time

external stimulus
a factor that comes from outside your body

Reaction time is the time it takes your body to respond to an **external stimulus**. You use your reaction time every day. Every time you cross the road, you wait and check for traffic and use your reactions to decide when it is safe to cross. When driving a car, every time the traffic lights change colour or there is a change in the speed of the traffic, drivers use reaction time to remain safe. In sport, athletes need to assess external information quickly before responding. Think about a sprinter or swimmer reacting to the sound of the starting pistol to power quickly off their blocks.

Decision making

Reaction time is directly linked with your decision-making speed. The more options you have to choose from, the more information your brain and central nervous

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system has to process before you can react. For example a netballer playing 'centre' looks around before making the next pass. They may have four different options. They will weigh up the position of their teammates and the opposition before making a split-second decision.

Distractions

Distractions can increase reaction time. The more information the brain is presented with, the slower it will respond. For example, many car accidents are caused when drivers or pedestrians are distracted by talking on the phone or looking at a text message. In the illustration, the cyclist must process information collected by her senses to avoid a dog that runs out in front of her. The cyclist will need to use her balance and coordination to react safely and quickly to avoid the collision.

The best way to improve your reaction time is to practise in various challenging but safe situations.



A combination of information from the senses, coordination and balance will be used during reaction time

DROP IT

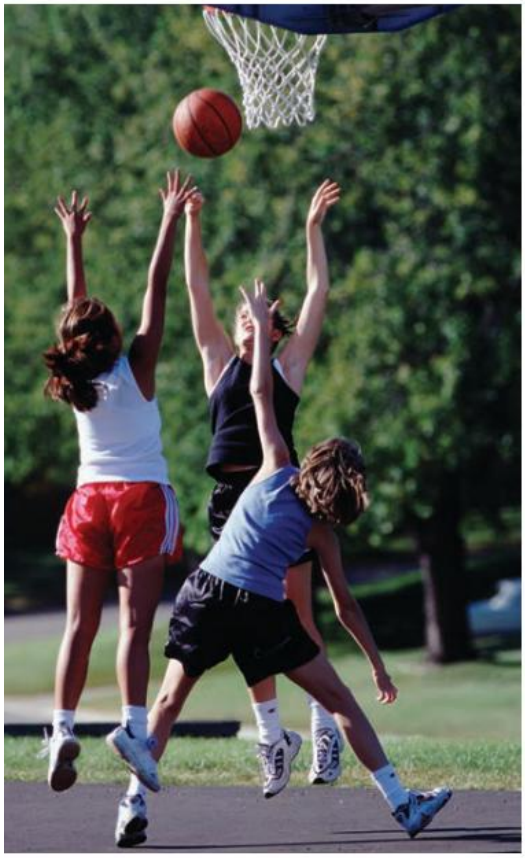
UP + MOVING

Work in pairs or groups of three. Have one person hold out a ruler and drop it without warning. Another person facing the ruler must try to catch the ruler as soon as they can before it hits the ground. The distance between the release point and the catch point is an indication of your reaction time. A person who catches the ruler after it falls a very short distance would have a faster reaction time than someone who catches the ruler after it drops a longer distance, or who doesn't catch it at all. If you don't have a ruler you could use a tennis ball, a relay baton or even a smooth stick.

Muscular power

Muscular power is the ability to exert a force rapidly and for a short time. Muscular power depends on both muscular strength and speed. Just because someone is really strong doesn't guarantee they will also be powerful, although it is more likely than someone who is weaker. Muscular power is not necessarily used a lot every day.

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Corbis/Ed Bock

Basketball players perform many skills at a high intensity and short duration that require them to have muscular power

An example of muscular power is a person picking up a toddler and lifting them above their head and then giving them a kiss. It is a fast movement, requiring powerful contractions from the muscles. If this same exercise was performed in slow motion it would rely more on the person's strength. Other everyday activities using muscular power (strength plus speed) include running up a flight of stairs, lifting boxes, rising from a chair, walking or playing with children.

In sport, muscular power is very important. It is the foundation of sprinting, jumping, lifting, swinging a golf club or bat, riding a bike uphill, and throwing. Many of the physical activities you participate in during your practical Physical Education lessons will require muscular power.

The maximum power a muscle can generate occurs at a lower speed. During really high-speed movement there may not be enough time to develop maximum force and therefore power can actually decrease.

The best way for non-athletes to improve muscular power is to train using circuit training or resistance training. When you want to improve your muscular power it is important to use weights that are not too heavy and to complete each repetition fairly quickly. For example you might do three to six repetitions of a bicep curl and complete this three times (three sets) using a medium weight, and allow two to three minutes' rest in between each set.



Bicep curls will help improve the power of the bicep muscles

Speed

Speed relates to how fast you can move your body or part of your body from one point to another.

$$\text{Speed} = \frac{\text{Distance moved}}{\text{Time}}$$

If asked to imagine a really fast athlete, you might think of someone like Usain Bolt, the Jamaican sprinter who holds the world records for both the 100-metre and 200-metre sprints. Speed is important for sprint swimming, cycling or running, and for all team sports.

The most effective way to improve speed is resistance training, improving your muscular power, and interval training or circuit training. With interval training you can work hard for longer, because your body has time to recover between efforts.

ISBN 9780170376181

Sprinting

When sprinting, you reach top speed in 20 to 30 metres, so to get to top speed quickly, you need to coordinate the following within a few seconds:

- drive your lead arm
- drive out (if you were in a crouched position e.g. starting blocks) at a 45-degree angle
- take a large first step and then extend
- drive the arms and hands down and back
- push the ground back and away
- ensure your feet hit the ground below or behind the hips
- keep your heels pretty close to the ground during the first six to eight steps
- let your upper body straighten naturally.



Alamy/PCN Photography

Usain Bolt set a world record of 9.58 seconds for the 100-metre sprint and 19.19 seconds for the 200-metre sprint in 2009

HOW FAST IS BEST?

UP + MOVING

Jump as high as you can in the air. Or, if you are outdoors, throw or hit a ball as hard as you can. Experiment with the speed at which you perform the activity. Try to do it fast, medium and slow.

1. If you can, measure the distance of your throw or hit or the height of your jump.
2. Describe what happened as you changed the speed of the performance.
3. Was there an optimal speed of performance?
4. Discuss what happened when you performed the task too fast or too slow?
5. You could even graph your results using the three different conditions: fast, medium (normal speed), slow.

Agility

Agility is the ability of a person to quickly change the speed or direction of their body while remaining in control. Many team sports and racquet sports require players to accelerate (speed up), decelerate (slow down), quickly change direction to get away from an opponent or sprint to catch a ball or another player.



Courtesy of Action Photographics Aust PTY LTD

To score in rugby, players must exhibit exceptional agility to evade their opponents

ISBN 9780170376181

review & reflect

AGILITY

In small groups discuss two sports you enjoy playing or watching, and talk about which parts of these games require players to be agile.

review & reflect

TEST YOUR KNOWLEDGE

1. Everyone needs essential fat as part of their body composition. Identify five locations in the body where essential fat can be found.
2. Describe why agility is important for the following athletes:
   - baseball catcher
   - hockey player
   - football (soccer) goalkeeper
   - circus performer
   - ballet dancer
   - tennis player
   - 100-metre hurdler
3. Explain two everyday activities that would require you to be agile.

Coordination

Every sport and physical activity requires some coordination. Coordination is the ability to use the body's senses to perform **motor skills** smoothly and accurately. Coordination is sometimes referred to as either hand–eye, head–eye or foot–eye coordination, depending on which body parts are involved. High-performing athletes have good coordination, which allows them to perform skills accurately, proficiently and successfully.

motor skills a sequence of movements of the nerves and muscles that combine to perform a particular task

Coordination may involve the following:

- control of the body parts to perform a sequence of movements (e.g. a gymnastics routine)
- manipulation of equipment (e.g. a bat or club) and parts of your body (e.g. hitting a ball with a hockey stick).

review & reflect

WHICH TYPE OF COORDINATION?

Classify these sporting activities in terms of the type of coordination used by placing a tick in the corresponding column (i.e. hand–eye, head–eye or foot–eye). Use your workbook or fill in the scaffold online.

<<SCAFFOLD
Coordination types

Physical activity
Football (soccer) player heading the ball towards the goal
Table tennis player returning a serve
Baseball shortstop flicking a ball from their glove, using their throwing hand, to the second base player to turn a double play
AFL player kicking for goal

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Practice makes perfect

When you watch an elite performer, their movements often appear effortless, smooth and as if they have all the time in the world. This of course is the result of years of experience, hard work and hours of practice during training, competitions and recovery. You can constantly improve your coordination as you learn and practise skills over and over under varying conditions.

No matter how fit or strong someone is, if they are not coordinated they will never perform at a high level. Coordination is very specific. For example, if you juggle a soccer ball it doesn't mean you would be able to consistently make a set shot in basketball from the free throw line.

Coordination is even specific to certain skills within the same sport or physical activity. For example, you might be terrific at driving a golf ball off the tee, but really poor at putting onto the green. Coordination can even vary enormously across variations of a skill. For example, in tennis a player may be excellent at performing a slice serve but unable to perform the kick serve. Coordination is influenced by the equipment used, fatigue, amount of warm-up, level of practice that week, mood, weather conditions and other factors.

EXTRA ACTIVITY>>
Racquet sports

CASE STUDY Australian national men's doubles

ONE day the Australian national men's doubles and mixed doubles table tennis champion was having a casual hit with friends on a table at university. His friends couldn't believe they won several points off the champion, who was having difficulty getting the ball on the table when returning a serve. When the national champion was asked about this, he explained he was not hitting the ball as cleanly as usual because he was not using his own bat, and also because he had not trained for a few weeks. Table tennis, like other racquet sports, requires such fine tuning that elite players play every day, and sometimes several times a day.



Alamy/Afto Foto Agency

? Have you ever been described as having a very good level of coordination?

Coordination improves dramatically with practice and experience. If you can ride a bike, think about when you were learning to ride. You were probably very wobbly when you started out and had to concentrate just to stay upright. Now that you are more experienced, you can coordinate the skill of riding a bike without thinking, leaving your mind free to concentrate on the external factors such as traffic, other cyclists, pedestrians and other possible dangers.

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MEASURING YOUR BODY'S RESPONSE

Most of the health-related fitness benefits of being physically active occur when you are working with at least moderate intensity. Moderate-intensity physical activity usually consists of sustained rhythmic movements. If you are working at a moderate intensity:

- you should be able to comfortably have a conversation
- you are working at 50–70 per cent of your maximum heart rate
- you are expending three to six times the energy that you would while at rest.

Moderate-intensity physical activities include brisk walking, cycling, raking leaves, mopping the floor, sweeping, lifting weights, doing aerobics, golfing and paddling in a pool.

But how do you know if you are working at a moderate intensity? You could measure your heart rate, breathing rate or even your ability to talk while exercising.

Measuring your heart rate

You first need to know how to monitor your heart rate, also known as your 'pulse'. Every time your heart beats, it pumps blood into the arteries. If you hold a finger against an artery, the surge of blood you can feel is caused by the pulse. Table 9.3 describes the two easiest positions to locate your pulse.

Taking your carotid pulse is probably the easiest because the carotid artery is relatively close to the surface and the pulse is strong. Don't use your thumb to count your pulse because your thumb also has a pulse in it. You need to stop exercising for a moment to take your pulse, or take it after you've finished exercising. To work out your pulse rate, count how many beats you feel in one minute. You can also estimate the beats per minute by counting for 30 seconds and doubling the count, or for 15 seconds and multiplying by four.

TABLE 9.3 Measuring your pulse

Radial pulse	Place your index and middle fingers on the inside of your wrist, just below the base of the thumb.
Carotid pulse	Place two fingers (index and middle fingers) on either side of the front of the neck, just below the jaw. Use a light pressure, but do not press too hard. If you measure your carotid pulse on the right side, use your right hand.

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Alamy/BSIP SA

Radial pulse is taken on your wrist


Alamy/BSIP SA

Carotid pulse is taken on your neck

Measuring your breathing rate

WORKBOOK>>
Worksheet 9.8

Another useful way to work out whether you are working at a moderate intensity is to measure your breathing rate. Sometimes your breathing rate is known as your 'respiratory rate' and is measured in breaths per minute. You can measure your breathing rate by simply placing a hand on or under the lower rib cage area.

A normal healthy adult at rest will breathe between 12 and 20 breaths per minute. At rest, one of the best ways to measure your breathing rate is to ask a friend to count your breaths without you realising, as your breathing rate can change if you try to count your own breaths. If you are exercising intensely, you can breathe up to 40 to 50 breaths per minute to supply your body and working muscles with all the oxygen required. Even when you stop exercising, your breathing rate can remain higher than when at rest for 20 to 40 minutes to give the body a chance to recover. Table 9.4 shows the normal average resting respiratory rates for different age groups.

TABLE 9.4 Average resting respiratory rates by age

Age	Breaths per minute
Birth to 6 weeks	30–60
6 months	25–40
3 years	20–30
6 years	18–25
10 years	15–20
Adult	12–20

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Use the talk test to determine how hard you are exercising

Measuring your ability to talk (talk test)

You can also work out whether you are exercising at a moderate intensity by using the talk test. If you can talk comfortably while being active, you are most probably exercising at a light to moderate intensity. If you are unable to talk comfortably, you are more likely to be working at a more vigorous intensity.

WORKBOOK>>
Worksheet 9.9

FAST BREATHING

Your breathing rate during maximal exercise such as running up flights of stairs or a steep hill can reach 40–60 breaths per minute.

CREATING PERSONAL FITNESS PLANS

When creating a personal fitness plan within your overall physical activity program, you need to be realistic. Start with a simple, personalised plan based on the activities you enjoy and that could be easily built into your everyday life. In Years 9 and 10 you will learn more about training principles, training methods and exercise plans. Table 9.5 is an example of a personalised physical activity plan for a 14 year old. The goal of this plan is to meet the national physical activity guidelines for 13–17 year olds and improve aerobic capacity.

SCAFFOLD>>
My weekly activity plan

TABLE 9.5 Example of a weekly personalised physical activity plan for a 14 year old

	6 – 9 a.m. (before school)	9 – 3 p.m. (school hours)	3 – 10 p.m. (after school)
Monday	walk to school (10 min)		zumba class (60 min)
Tuesday		physical education class (100 min)	
Wednesday	walk to school (10 min)		after-school/interschool sport (volleyball; 90 min)
Thursday		boxing stations (20 min)	walk the dog (45 min)
Friday		physical education class (50 min)	home-based fitness circuit (45 min)
Saturday		30 push ups sit ups (3 sets × 25 reps)	bike ride (90 min)
Sunday			walk the dog (70 min)

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DESIGNING YOUR OWN PHYSICAL ACTIVITY PLAN



In this activity, you will design your own personalised physical activity plan using a similar template to Table 9.5. Design your plan using these steps:

1. How much physical activity do the national guidelines recommend for your age group? (See Table 3.2, page 97.) As a class, go online in class or for homework to confirm these recommendations. (They are updated from time to time.)
2. Are you meeting the guidelines each day? If not, plan to add some additional physical activity to your typical week.

PHYSICAL ACTIVITY GUIDELINES



Go to the website of the Australian Government Department of Health (link at http://ff178vic.nelsonnet.com.au) to look up physical activity guidelines for all age groups.

1. Make sure you have included activities from all levels of the physical activity pyramid (see Chapter 3, page 100), as this will allow you to develop all of the health- and skill-related components of fitness.
2. Plan to use several of the cognitive and behavioural strategies that are discussed in the following section. Once you have read that section, explain which strategies you will use and how they will help you to keep to your personalised physical activity plan.

There is no such thing as 'one size fits all' when creating personal fitness plans. Your strategies must be tailored to your own needs, interests and experiences. Use a range of cognitive strategies including things that relate to what you think or understand and things that increase your knowledge or awareness. In addition, use a range of realistic behavioural strategies to increase or maintain your activity level. Behavioural strategies are the 'doing' things, like organising a friend to go for a walk with you. This is not something you just think about, you also do it.

Cognitive strategies in a personal fitness plan

Cognitive strategies include the following:

- learning more about the importance of being active
- understanding the risks of being inactive and not doing some activity every day
- caring about consequences (how your inactivity can affect your family and friends)
- understanding the benefits of being active and fit
- being more aware about opportunities to be active.

Although cognitive strategies are an essential first step, they are not enough to change your behaviour on their own. Behavioural strategies, the things you actually do, are most important. A person must be regularly active to become fit.

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Behavioural strategies in a personal fitness plan

Behavioural strategies are the 'doing' things; realistic behavioural strategies are essential to a personal physical activity and fitness plan. They include the following:

- substituting alternatives
- enlisting social support
- motivating and rewarding yourself
- committing yourself by setting realistic goals
- reminding yourself.

Substituting alternatives

sedentary behaviour activities that involve sitting or lying down, with little energy expenditure. Examples include watching TV, reading, or sitting in a car or on public transport

A great place to start is to think about your current physical activity level. By completing a daily activity log, you will become more aware of your **sedentary behaviours**. In today's society, technology continually saves us from the need to move and expend energy. Many people sit in a vehicle to go to and from school or work. They arrive and then sit for most of the day, and then sit for many hours at home again, watching television or using a computer, smartphone or tablet.

WORKBOOK>> Worksheet 9.10

Have a look at the activities you do on a typical day, and identify up to 10 more active alternatives to some of your light intensity or sedentary activities. There are some examples on the worksheet called CLASS children's questionnaire. The whole idea of substituting alternatives is to replace a usual behaviour with a more active option, building this into your everyday life until it becomes a lifelong physical activity. Table 9.6 has some suggestions for substitute activities.

isometric exercises that do not involve movement; only your muscles contract or change length. An example is to clasp your hands together and push them towards each other.

TABLE 9.6 Substituting more active alternatives in everyday life

Typical sedentary activities	More active alternatives
Park as close to the shops as possible	Park further away from the shops
Watch television while sitting or lying down	Exercise while watching TV or exercise for a few minutes during the ads (sit ups, push ups, squats, lunges, stretching, bicep curls)
Complete household chores slowly such as picking up laundry or tidying your room	Dance or move vigorously to music while completing household chores
Go to watch the footy each week or watch sport on television	Play a recreational sport each week
Drive to the local shops	Walk, cycle, scooter or skate to the local shops
Be driven to school	Walk or ride or take public transport to and from school at least once per week
Be driven to a friend's house	Walk or ride to a friend's house
Play a computer game with friends while sitting down	Play something active with your friends or an active computer game such as Wii
Lay in bed before getting up or going to sleep	Stretch in bed before getting up or going to sleep
Sit while waiting for your toast to cook or the kettle to boil or while talking on the phone	Complete squats or lunges or other exercise while waiting for your toast or the kettle or while on the phone
Sit at a desk while studying	Stand at a desk (place a box under your keyboard or buy a desk that changes height
Sit still in a car as a passenger	Perform some **isometric** exercises while riding in a car
Sit and talk during school recess and lunch break	Walk around while talking during recess and lunch break periods
Use a trolley to carry shopping bags to the car	Carry shopping bags to the car and do some bicep curls using the bags as your weights

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Enlisting social support

You are much more likely to exercise regularly if you have someone to do it with. It doesn't matter who that person is: it could be a family member, a friend or even taking the dog for a walk. You can enlist social support to be active in many ways:

- texting or sending a message to a friend to meet you somewhere and do something active
- going to someone's house to be active or to go for a walk
- meeting at lunchtime or after school to be active
- meeting at a community centre or park to go and do something active.

Social support for being active can include the following:

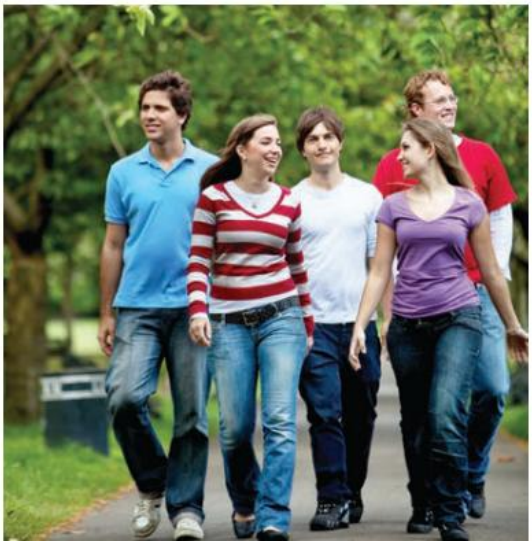
- having someone to be active with
- having someone to encourage or remind you to be active
- having an active role model such as a parent or coach
- having someone to provide transport to training or to the local park
- having someone pay fees so you can join in a Pilates, yoga or aerobics class or netball game
- having someone supervise so you can go to the local park, skate ramp or swimming pool.

PHYSICAL ACTIVITY AUSTRALIA

In 2013 Physical Activity Australia (an organisation for people who work in the fitness industry) developed an online program called 'Activity Buddies'. The program allows you to enter information about your age, sex, where you live and the types of physical activities you like to do. It matches people with similar interests, so they can find someone to be active with. If you want to explore this, please check first with your parents. You can link to the website at http://ff178vic.nelsonnet.com.au.



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Social support can take many forms: being active with someone else, providing encouragement, role modelling, providing transportation to an activity or providing supervision

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COMMUNICATE YOUR HEALTH CONCERNS

If you want to talk to someone about any health concerns, there are a variety of people you could ask: your family, your friends, a coach, teacher, your doctor or a medical person such as your school nurse or physiotherapist, school counsellor, social worker, chemist or local council staff. The important thing is to communicate with people any time you have concerns about your health.

Motivating and rewarding yourself

It is really important when creating a personal fitness plan to recognise both internal and external factors that motivate (reinforce) you to be active. Understanding what things motivate you greatly increases your chances of success and of keeping to a routine over time.

Internal motivation factors might include:	External motivation factors might include:
• 'I will feel healthier and have more energy'	• 'I will buy myself a treat after I complete a few sessions'
• 'I will feel happy when I reach my goal'	• 'My mum will let me buy a new song online if I walk home from school for the next couple of weeks'



WORK OUT WHAT MOTIVATES YOU

Identify five tasks or goals relating to your personal health, fitness and wellbeing that you would like to achieve. Outline the internal and external reinforcers you could use to help achieve your goals. Fill in a table like this online or in your workbook.

Task or goal	Internal reinforcer	External reinforcer
Example: I will walk to school three days this week	I will have more energy at school and won't feel as tired	My parents will let me buy a new song on iTunes if I reach my goal

SCAFFOLD>>
Achieving my goals

Pedometers

One of the best devices you can use to assist you to both set goals and monitor whether you are achieving them is by wearing a pedometer. Pedometers provide immediate feedback. They track your daily steps and are very motivating. They also increase your awareness of how active (or sedentary) you are. It is recommended that adults walk at least 10 000 steps per day and that young people walk at least 15 000 steps a day.



STEP IT UP

To start, measure your daily steps for two days and then take an average of these. (Add the two daily totals and divide by two for your daily average.) If you are under the target recommended, try increasing your daily step count by 10 per cent. For example if your daily steps are 6000, then a 10 per cent increase brings that to 6600 steps a day. After a few weeks increase your daily steps again, and continue increasing about every three weeks.



APPS

Go online to search for free pedometer apps you could download. If you are able to use a pedometer or an app or other device, record your daily steps for a week. Keep a diary of how many steps you did each day.

Discuss how your steps compare to the recommended number of steps per day.

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Make a commitment

The key to success in creating your personal fitness plan or physical activity program is to make a commitment or set a goal. Being able to set goals is an essential life skill that can be used to create personal fitness plans. Goal setting is a motivational technique allowing you to set clear targets, priorities and expectations. Table 9.7 describes the guidelines for setting effective goals using the SMARTER approach.



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Wearing an activity tracker or a pedometer is a great way to become more aware of your activity level and to motivate you to reach your daily step goal

TABLE 9.7 Developing effective goals using the SMARTER approach

SMARTER	Description	Example goal: cycling to and from school
Specific	Goals need to be specific and as clear as possible	To cycle to and from school at least three days per week for a month
Measurable	You should evaluate progress against previous performance	To cycle 7.5 km to and from school at least three days per week
Accepted	Goals should be accepted by everyone involved	It is OK with your parent/guardian to cycle and OK with your school to leave your bike there during the day
Realistic	Goals should extend you but be achievable	The path includes a hill; it is OK to get off the bike and walk up it
Time-based	Goals should include a specific end date	Until the end of Term 1
Exciting	You need to be challenged and inspired	Yes!
Recorded	Goals should be written down	Write what you did in your school diary each day

Remind yourself

WORKBOOK>>
Worksheet 9.11

Another essential component of creating a personal fitness plan is setting up an effective reminder system. Here are some simple tips you can use to remind yourself to be active and to complete your exercise plan:

- keep physical activity clothing and shoes in your parents' car
- set automated reminders in your phone or computer or write them in your calendar or diary
- place prompt signs around your house: on your fridge or on your desk in your room or in your parents' car, saying things like 'Have you done your exercise today?'
- email a reminder to yourself
- keep a spare pair of runners at the front door as a reminder to be active.

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EXPLORING YOUR LOCAL ENVIRONMENT FOR PHYSICAL ACTIVITY OPPORTUNITIES

In Chapter 3 you learnt how your environment can influence your physical activity. People who live in more supportive environments (e.g. near parks, swimming pools or bike paths) are more likely to meet the national physical activity guidelines for their age. Here are some strategies for exploring your local environment. This includes your school and your local community.



GET UP AND MOVING

1. Find a map of your local area and calculate the distance you would need to travel to school. Is it a walkable distance for you or could you ride your bike? What are the factors you would need to consider if you were to use active commuting (walk or ride) to and from school? On your map identify all the physical activity facilities and places you could be active within a short distance from school and home. Look for things such as local parks, bike paths, walking trails, swimming pools, sporting facilities such as a recreation centre, tennis courts and so on.
2. Go for a bike ride around your local community or on a local bike trail and take digital photos of buildings and the natural environment that either enable or are barriers to physical activity. Describe ways to increase physical activity opportunities. Place these into an electronic portfolio and describe whether you have used any of these facilities or areas to be active.
3. Design your own 'ultimate playground' concept for your school. Send it to your school principal or school council, or to your local council for a community park or to improve an existing park.



SCHOOL AUDIT

As a class your teacher may take you outside to audit your school grounds and facilities. Examine which features of your school (grounds and buildings) encourage you to be active. Identify things that make it difficult for you to be active (e.g. areas where ball games are not allowed).

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Finding information and services that support youth

There is a lot of health information and many services available to young people to help you stay healthy and active as you grow older. You can obtain information about your health, wellbeing and ways to be active from your school, your GP, the local community centre, recreation centres and your local council.

CASE STUDY **Melton Waves**

MELTON Waves is a large community recreation centre located in the western suburbs of Melbourne, Victoria. It includes a gym, group fitness studio, cycle studio, indoor wave pool, indoor 25-metre pool, hydrotherapy and spa pools, steam room, indoor and outdoor toddler play areas, crèche, café and a merchandise store that sells physical activity clothing and equipment such as yoga mats, bathers, kickboards and goggles.

MY COMMUNITY CENTRE

critical + creative thinking

Visit your local community centre and your local recreation centre. Investigate the facilities that are accessible and what programs are offered to different age groups. Use the scaffold table (page 334) to enter the information you find.

For programs aimed at 12 to 14 year olds, collect information relating to their cost, timetables and how to get there (walking distance, or need to take the bus or ride a bike).



iStockphoto/Christopher Futcher

There are many opportunities in your local community to participate in physical activity

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Table 9.8 shows a range of water- and land-based fitness programs typically offered in local recreation centres, for everyone from babies to the elderly. Your local community centre will also offer a range of programs to improve your individual, social and physical health and wellbeing. For example, programs may include the following:

- yoga
- Pilates
- walking groups
- men's shed
- nature walks
- school holiday programs
- kinder gym
- gentle exercises to music
- exercise programs for people with special needs.



MY RECREATION CENTRE

Go to your local recreation centre either as a class excursion or for homework. Draw or obtain a map of the facilities on offer, participate in a fitness class or activity, and collect information about all the programs they offer for students your age. Use the table on your student website as a starting point.

SCAFFOLD>>
My recreation centre

EXTRA ACTIVITY>>
Melbourne sports precinct

TABLE 9.8 Programs and facilities in recreation centres

Program	Facility	Outcomes		Age group the program is designed primarily for				
		Fitness	Social	Young children	Children	Adolescents	Adults	Older adults
Group fitness classes (e.g. cycle/spin, body balance, body attack, pump, Pilates, yoga)	Fitness studios	✓	✓			✓	✓	
School holiday programs	Pool and multipurpose room	✓	✓		✓	✓		
Personal training	All areas	✓	✓				✓	✓
Learn to swim	25-m pool & wave pool	✓		✓	✓	✓	✓	
Crèche	Crèche			✓				
Aqua play	Toddler pool	✓	✓	✓				
Birthday parties	Pool and multipurpose room		✓	✓	✓	✓		
Swim squad	25-m pool	✓			✓	✓	✓	
Resistance training for older people	Gym	✓	✓					✓
Aqua aerobics	25-m pool	✓	✓			✓	✓	
Gentle exercises to music	Rehab pool	✓	✓					✓


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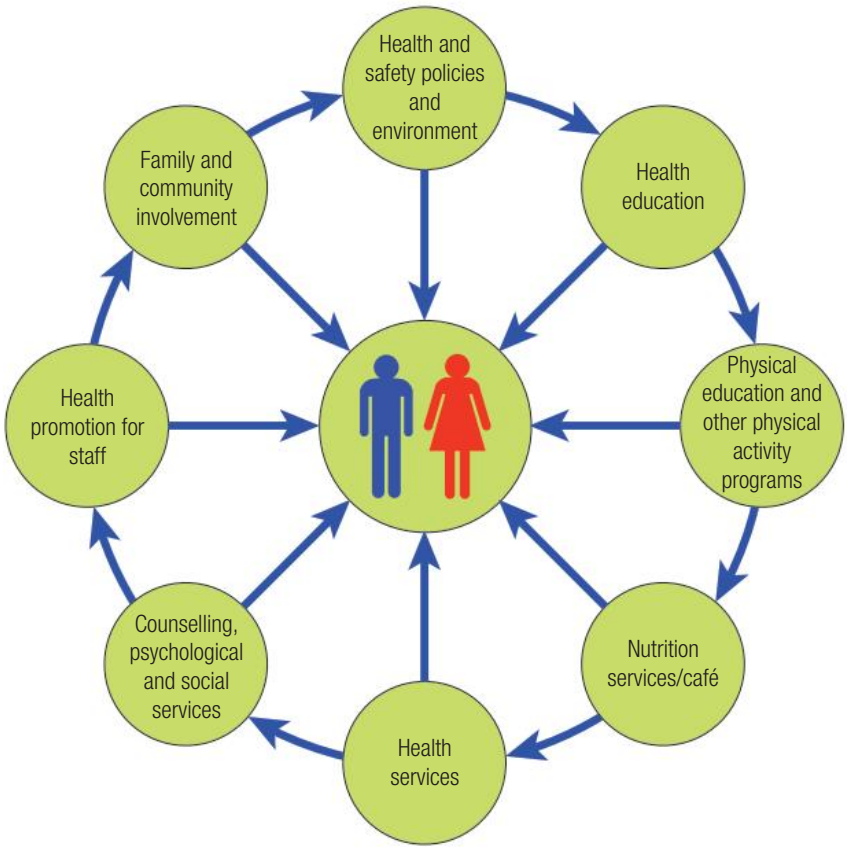
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Promoting health and wellbeing in school communities

Your school has an important role in promoting health and wellbeing among its students. In order to provide the best programs, schools need to continually assess their programs to make sure they are achieving the right results. To assist schools in this assessment, in 2012, the Centers for Disease Control and Prevention (CDC) in the USA published a 'School Health Index' (SHI). The SHI is designed as a way for schools to assess their own 'health', based on the eight interactive parts shown in the following diagram. The SHI helps schools to meet the following goals:

- identify the strengths and weaknesses of their programs and policies on health and safety promotion
- develop an action plan to improve student health and safety
- involve the school community in regularly improving school policies, programs and services.

WORKBOOK>>
Worksheet 9.12



Interactive parts of the School Health Index (SHI)

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SCHOOL HEALTH INDEX

Search for 'School Health Index' (SHI) on the internet or link direct at http://ffl78vic.nelsonnet.com.au. Have a look at the School Health Index for Middle and High Schools developed by the CDC.

The School Health Index recommends schools bring together a team of people to design, implement and evaluate policies and programs to promote health and safety. The team could be made up of people within your school:

- Principal or Assistant Principal
- Health and Physical Education teachers
- students and parents or other family members
- Health and Physical Education coordinator and Sport coordinator, coaches
- canteen manager, cleaner and maintenance manager
- school counsellor, psychologist, student welfare coordinator and school nurse
- representatives from health organisations and local council.

Once the SHI team is assembled, they meet and complete the self-assessment checklist. Then they fill in the overall score card to identify strengths and weaknesses and areas for improvement. At the next few meetings, the team creates a school improvement plan to prioritise areas needing improvement while retaining the strengths.

WORKBOOK>>
Worksheet 9.13
Worksheet 9.14

WORKBOOK>>
Worksheet 9.15
Worksheet 9.16
Worksheet 9.17
Workbook 9.18



REVIEW ACTIVITY

Make a table that lists each of the 11 health-related and skill-related fitness components and their corresponding definitions. Print out a hard copy, cut the terms and definitions up and mix them up. With a partner or in a small group, match up the health-related and skill-related components of fitness with the correct definition.

Alternatively, you could do the same exercise as a review for the cognitive and behavioural strategies used to create a personalised physical activity plan.

ISBN 9780170376181

CHAPTER REVIEW

WORKBOOK>>
Worksheet 9.19

1. Outline 10 characteristics of lifelong physical activities.
2. Identify each health-related and skill-related fitness component.
3. Explain the difference between muscular strength and muscular endurance.
4. Describe why you need essential fat in your body.
5. State what a dangerously high body fat level for girls and boys would be.
6. Discuss an example of when you use reaction time in the sports or activities you do.
7. Outline two examples of when an athlete uses their hand–eye coordination.
8. Describe how you would measure your carotid pulse.
9. Identify the average resting respiratory rate for a 10-year-old child.
10. Explain what is meant by the term ‘cognitive’ and provide five examples of cognitive strategies that could be used in a personal fitness plan.
11. Describe three behavioural strategies you could use to create and sustain a personal fitness plan.
12. Outline five sedentary behaviours and five more active alternatives.
13. Apply the SMARTER approach to draft a goal for yourself in relation to being active.
14. Discuss which two reminder systems would suit you best for your personal fitness plan.
15. Explain what the School Health Index can be used for.

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JUST DANCE!

10

ISBN 9780170376181



In this chapter **you will learn about the important role of dance in various cultures and how to work in a group to create your own dance.**

By the end of this chapter, you should be able to:

- understand your own motivation to dance
- understand the impact that other people have on your dance choices
- identify reasons why people dance
- understand the role of dance in the culture of Aboriginal and Torres Strait Islander people
- explore the use of the elements of dance
- compose and perform a sport dance routine
- develop a safe and effective dance routine, applying selected criteria
- take on a role within a group to assist with the choreographic process
- provide and use feedback based on selected criteria to improve your dance and performance level
- develop leadership and collaborative skills.

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Performing your sport dance	**359**

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WHY DO PEOPLE DANCE?

An important feature of human beings is the ability to communicate, not only by speech and writing but by physical expression. While there are many ways for people to communicate, one of the most popular methods through the ages has been dance.



Newspix/Bruce Magilton

The ability to speak allows people to communicate effectively, but can all of your ideas, emotions and feelings be expressed through speech alone? The physical and visual portrayal of ideas, stories and emotions through movement can convey so much more than just words. For many people, dancing is about self-expression – how you feel usually influences how you move.

Since ancient times, dance has been used to convey how people think and feel. It can help to tell a story, to celebrate or to express cultural, spiritual or emotional issues. Dancing can also provide many social opportunities.



Newspix/Jono Searle

ISBN 9780170376181

Importantly for many people, dance is now becoming a very popular form of exercise. Dancing just to move your body can also benefit your health.

DO YOU DANCE?

Do you dance? If you do, why? If not, why not? The answer to these questions might not be as straightforward as you think.

review & reflect

Reasons to dance

There are a lot of reasons why people dance. They range from the desire to continue cultural traditions, to participating in dances that are part of traditional ceremonies and events, to opportunities to socialise and exercise.

- Dance is often part of the activities of ethnic or migrant groups because it is a way for people of the same ethnic background to stay together and keep their traditions alive. People from outside particular ethnic groups can learn a lot about another culture by participating in or studying their dance activities. Many community ethnic groups have regular dance nights or educational programs that are designed to teach people about the traditions of their culture.

Newspix/Renee Nowytarger



Cultural dance performance

- Dancing is also considered exercise and can be a great way to improve fitness and coordination. Some styles of dancing are especially good for this purpose because they require a lot of energy! Salsa and Bollywood dancing classes have become very popular and there is a strong 1950s rock 'n roll dance culture in many areas. Dancing can also exercise your brain: it can take a lot of concentration and practice to perform some of the more difficult dances and this can be especially beneficial for older dancers.

Corbis/Kike Calvo/National Geographic Society



Partner dancing

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➜ Dancing is also an important form of social interaction in many societies. In the past, these dances were often one of the only ways that single young adults could mingle and meet, even though their interactions were heavily supervised. In rural Australia, church dances or barn/bush dances were important events.



Getty Images

Bush dancing

ritual
a ceremony that consists of certain actions carried out in a certain order

➜ Dances are often important parts of **rituals**, ceremonies and celebrations. Many cultures have specific dances associated with important milestones in peoples' lives, such as coming-of-age ceremonies in Aboriginal and Torres Strait Islander culture, or debutante balls in some Western cultures. Have you been to a wedding and seen the bride and groom take part in their first dance? This is another type of ritual that is part of a celebration. Some cultures incorporate dancing into funeral processions as a way to celebrate a person's life.



Alamy/Ninette Maumus

'Jazz funerals' in New Orleans, USA, are known for their long processions, jazz music and dancing

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Many people dance because they find it the best way to express themselves. In the same way that painters or writers express themselves through artworks and writing, dancers convey emotions such as joy, sorrow and fear through movement. Often, the expression of these emotions by movement alone has a greater impact on an audience than more traditional forms of expression such as speech.



Shutterstock.com/Robert Przybysz

Self-expression is an important reason why many people dance

WHY DO PEOPLE DANCE?

critical + creative thinking

1. Write down your thoughts about why you dance.
2. Then, with a partner, give three responses to each of the following questions:
   - a. Why do people dance?
   - b. Who influences your dance choices?
3. As a class, tally your results to create a class graph of the most frequent responses.
4. With your partner, research places in the local community offering dance classes that you might be interested in. List three places, including where they are situated and what genre of dance they offer.
5. As a class, create a local Dance Directory of places that offer dance classes that can be distributed to your class or to others in your school or community.

WORKBOOK>>
Worksheet 10.1

indigenous people who originated in a particular place or country

DANCE AND CULTURE

Australian **Indigenous** culture is many thousands of years old. A large part of this culture is based on recognising and acknowledging the relationship of the people with the land. Through their history and spiritual connection to their environment, Aboriginal and Torres Strait Islander people have become unique and impressive storytellers.



Corbis/Penny Tweedie

Aboriginal people participating in a ceremonial dance at Groote Eylandt, Northern Territory

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One of the ways that Aboriginal and Torres Strait Islander people tell stories is through dance. Over thousands of years, they have used dance as a way to creatively express their lives, communities, beliefs and history. Dance is a traditional and essential part of life within Indigenous communities and an important way of passing on culture and identity from one generation to the next.

Exploring Australia's leading Indigenous dance company

The history and traditions of Australian Indigenous dance are now being widely recognised, both nationally and internationally, through the Bangarra Dance Theatre.

choreography the process of designing a dance

Bangarra Dance Theatre is recognised around the world for the high standard of its **choreography** and performance. It celebrates Indigenous culture and presents it through contemporary dance works.

EXTRA ACTIVITY>>
Two dancers



Newspix/John Foladis

The Bangarra Dance Theatre productions are world-class representations of Indigenous culture



BANGARRA DANCE THEATRE

Take a few minutes to explore the Bangarra Dance Theatre website to develop an understanding of what it is and what it does. Link direct via http://ff178vic.nelsonnet.com.au.

WORKBOOK>>
Worksheet 10.2

ISBN 9780170376181

CREATING YOUR OWN SPORT DANCE

Some of the best dances, both to watch and perform, are those that tell a story. By telling stories, dancers can create meaningful experiences for themselves and for the audience.

Telling a story through a sport dance can be as simple as performing known movement patterns relating to a particular sport or sharing movements that express feelings about your own sporting experiences.

When creating a dance, a choreographer will choose moves that represent and signify an action, idea, thought or feeling. Most importantly, the movements have to reflect what the choreographer is trying to show.



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A movement conversation within a game of volleyball

Most sports involve a series of movements that are performed continuously in order to achieve a certain goal. For example, a serve in tennis allows the game to begin. If the serve is not performed, the game cannot begin. It is then up to the receiver to play the next shot to continue the game, and on it goes. It is a bit like having a conversation with the other player but with movements instead of speech. The next time you watch your favourite sport, follow the movement conversations that the players have and how this can almost flow into a dance within itself. After all, dancing is just about expressing yourself through movements and movement patterns and sport is very similar, except that in a game situation, you usually choose your next move as a result of what your opponent has just done.

WORKBOOK>>
Worksheet 10.3

Choose a sport or several

Throughout the rest of this chapter you will work in groups of three or four to create a sport dance based on your favourite sport or activity. Your dance can be about one sport, or it could combine movements from a range of different sporting activities. For example your group might decide to focus the dance just on tennis; another group might want to include a move from each group member's favourite sport, such as football, basketball, volleyball and cricket. It is entirely up to your group to decide when creating your group's movements.

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Start by thinking about the sports and activities you participate in and then about which moves and movement patterns can be developed into a super sport dance move! Remember, everyone has different interests and talents. You might be great at surfing and have some awesome surfing moves that could be used in your group's dance.

mime to express actions or emotions without using words

The important thing to remember is that your dance will be a **mime** of sport movements or movement patterns and therefore no equipment will be used, so there is no need to bring in your favourite surfboard or cricket bat for this activity!

It is also important to remember that if your dance reflects a contact sport, for the safety of others, the dance won't include any body contact such as tackling or taking marks that use another student as a launching point for the leap! If you want to include these movements in your dance, they must be performed safely as an individual mime movement only.

Music

consistent tempo a regular speed or rhythm

You will need to choose some music to use as part of your sport dance. The music will need to be of a **consistent tempo** so each group can practise at the same time, and of course, it must be suitable for listening to at school.

Below is a suggested list of songs that could be used as a playlist when creating and practising your dances. By using a playlist, each group can practise their dance at the same time to each song, and then choose one to use for the final sport dance performance.

Suggested music:

- 'Troublemaker' – Olly Murs
- 'Let it Roll' – Flo Rida
- 'Brokenhearted' – Karmin

When choosing music, it is important to ensure that the music is suitable for listening to at school. Your teacher will provide a playlist that is sequenced and at a continuous beat for the entire album.

Getting started

Now that you have started thinking about your own favourite sport or activity and some movements to include, take some time to check out examples of sport dances to give you some extra ideas.



Sport dance



BASKETBALL SPORT DANCE

Check out this video on the NelsonNet website (http://ffl78vic.nelsonnet.com.au) and have a go at the basketball sport dance as a class.

The basketball sport dance is an example of a dance that has been choreographed specifically to a complete song. You will not be required to create a dance as long as this, but after you complete this unit, your teacher may give you another opportunity to extend your dances further in a follow-up unit.

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Safe dance practices


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Participating in dance requires you to think and be **proactive** about safety in the same way as you would with any other sporting activity. It is always essential to consider safe dance practices before undertaking any dance-related activity.

Consider and apply the following when dancing and creating your sport dance:

- have a safe dance space, including your own personal space and a safe surface to dance on
- consider the personal space of others when working in a group
- wear appropriate footwear (runners) and clothing
- have your asthma puffer with you if necessary
- participate in a warm-up, cool down and stretch in each session
- choose appropriate and suitable movements: everyone should be able to perform all your moves. This includes no equipment, no body contact and no gymnastic-type movements.
- drink plenty of water.

proactive
to be in control of a situation rather than reacting to it

No break dancing or gymnastics moves

Break dancing and acrobatic/gymnastic styles of movement require specialised instruction and matting. Therefore, the following movements are **not** to be performed or included in your dance:

- rotation of the **torso** over the back, head and neck
- body support using the back, head or neck
- gymnastics rolls, cartwheels and handstands, etc.

torso
the mid-section of the body, not including the head and limbs

Planning your sport dance

Before you can start planning your sport dance you need to know a little bit more about what you are required to do.

Basic structure of the dance

With your group you will create a sport dance that:

- has at least four steps (moves)
- uses a 16-count phrasing for each step (move)
- has at least two formations
- begins and ends with a sporting pose.

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You may not be familiar with some of these terms yet but they will all be discussed as you progressively plan and develop your sport dance. But at least now you know what you are going to do and it should be lots of fun!



Alamy/epa european pressphoto agency b.v.

A choreographer at work

What is choreography?

Choreography is the process of designing and composing a dance. It involves making decisions about what goes into a dance. It focuses on elements of dance such as the story or idea, the movements that will be included, the timing and length of a dance and its patterns and formations.

The term choreography can also mean dance notation or dance writing, which includes recording the dance in a written format.

Choreographing or creating a dance involves bringing together a number of different choreographic areas. In designing your sport dance, you and your group will focus on the following areas:

- idea or storyline
- steps or moves to be included
- timing and phrasing of the dance
- formations within the dance
- presentation of the dance.

As you learn about each area, you and your group will make decisions about how to develop each of these choreographic areas to create a fun and effective sport dance.

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Working as a group

To create a dance, your group will need to work together cooperatively and develop some effective decision-making skills. It is important when creating a dance as a group that everyone feels that they have had some input to the creation. By having input and assisting in the development of the dance, each group member has some ownership of it. It is no fun when one person or a couple of people make all the decisions about a dance because it becomes their creation and does not represent all the group members.

When working in a group it is also important to remember that you are not going to end up with a dance that will have everything that you want in it. It will be a combination of ideas that have been chosen by the group, using a decision-making process.

Decision-making process

Throughout the dance creation process, your group will need to make many decisions. One way to help make the best decisions about your sport dance is to use the democratic decision-making guidelines (DMG).

The democratic decision-making process is based on the principle that every group member is entitled to provide input and ideas throughout the creation of the dance. It is then up to the group to discuss and try each idea and then vote to make a final decision.

DECISION-MAKING GUIDELINES (DMG)

To assist in making decisions, your group can use the following steps.

- Step 1: brainstorm all ideas – ensure each group member has had an opportunity to contribute.
- Step 2: discuss and try each idea in your dance.
- Step 3: vote.

If you have a situation where there is a tie in votes, the area coordinator will make the final decision. When voting, remember that you are trying to create a fabulous dance and not just to include your own personal ideas!

The following example illustrates the three steps of the democratic decision-making guidelines. Your group might be trying to decide on the sport pose to include at the beginning of the dance. As a group you would brainstorm each group member's ideas, ensuring that every person has the opportunity to contribute (Step 1).

You would then discuss and try each suggestion, looking at how each pose contributes to the overall presentation of the dance (Step 2).

As a group you would then vote on the most appropriate pose for inclusion into your dance (Step 3).

Now that you have some ideas about how to make decisions in your group, it is time to get started!

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Corbis/© RCWW, Inc.

The democratic decision-making guidelines help your group make decisions

Your teacher will assist you and your class to form groups of three or four students. It is important to only have three or four students in your group as you will all take on a specific role to assist the choreographic process. If you only have three students in your group then one student will have to take on two roles.

Once you have a group, you can begin the planning process for developing your sport dance. The process is made up of five parts:

1. Create a story
2. Steps and moves
3. Timing/phrasing
4. Formations
5. Presenting the sport dance.

1 Create a story

The first thing you need to decide on is your idea or story. As a group, brainstorm and discuss the sport or sports to be included in your sport dance. Some points to discuss include the following:

- is the dance going to be about just one sport or a combination of sports and activities that group members participate in?
- if it is a combination of sports, how many sports will be included?
- will the dance have a particular storyline or will it just be a presentation of sport movements?

Remember this is a story about your experiences, so there are no right or wrong answers, just decisions to be made. Use the democratic decision-making guidelines (DMG) to assist your group. Because you don't have a group coordinator for this first activity, if you can't agree within your group, you may need to ask your teacher to help with the final decision.

face 2 face

START PLANNING

Get together with your group to begin planning. By the end of this activity each group will have chosen a sport or a group of sports to focus its dance on.

Sometimes it helps to have music on in the background to provide some inspiration!

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Take on a coordinating role

As well as being a part of a group, each group member will need to take on a coordinating role for one of the following four choreographic areas:

- steps (moves) to be included
- timing or phrasing of the dance
- formations within the dance
- presentation of the dance.

These roles can be called:

- steps coordinator
- timings coordinator
- formations coordinator
- presentations coordinator.

If there are four people in your group, each person will become the coordinator for one choreographic area. If you have three people, one person will take on two roles.

The coordinators will be responsible for ensuring that the sport dance criteria have been accomplished.

- Steps coordinator leads the process that ensures the dance has at least four steps or moves that are repeated twice.
- Timings coordinator leads the process that ensures the dance has a **16-count phrasing** for each step or move.
- Formations coordinator leads the process that ensures the dance has at least two **formations**.
- Presentations coordinator leads the process that ensures the dance begins and ends with a sporting pose.

16-count phrasing
equivalent to 16 beats

formation
a shape created by a dancer or group of dancers

Being a coordinator means that when the time comes to make decisions about this part of your dance you will each have an opportunity to develop your leadership skills by ensuring that all group members are involved in the dance creation process. Coordinators are responsible for leading discussions and ensuring the democratic decision-making process is followed.

For example, the steps coordinator's responsibility is to:

- lead the brainstorming of ideas, ensuring each group member has the opportunity to contribute
- lead discussion and try each idea in the dance
- organise the vote. Importantly, if the group does not reach a decision from the vote, the coordinator will make the final decision.

A good leader will keep the group focused on the task, and provide motivation and encouragement for all group members and extra ideas for the specific choreographic area.

When your leadership opportunity arrives, make sure you give it your best shot!

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face 2 face

ASSIGN ROLES

Now it is time to get into your group and decide who will take on each coordinating role.

2 Steps and moves

Now it is time to begin adding the steps or moves to your dance. The term 'step' or 'move' can be used interchangeably to mean the same thing. The term 'step' in dance can sometimes seem related to really complicated dance movements, but dance isn't just about intricate steps and patterns. A dance step is just a movement or a set of movements that create a movement pattern. Sometimes dance steps are performed without you even knowing it – every time you perform a sport move, you are performing a movement or movement pattern that could easily become a dance step.

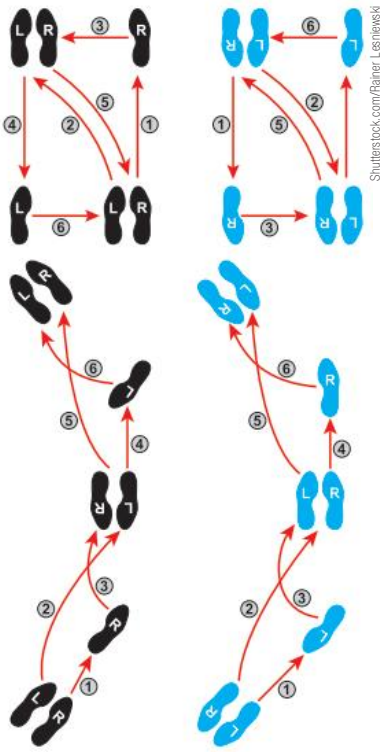
For example, the 'Grapevine' is a dance step, but how often do soccer players cross their feet over when moving sideways in game? The 'Carioca' is another exercise used as a **plyometrics** or agility warm-up for many sports! You can search the internet for videos on how to do the Carioca. The 'Running man', sometimes known as the 'Shuffle', is another example of a sport-based dance move that can be used as a dance step.

plyometrics
a type of exercise that involves fast movements

WEB

Another option for creating a sport dance move is to link a dance step with a sport move such as performing a step-touch with your feet and performing a handball movement with your arms. Or walking forward for three counts and pretending to kick a ball on the fourth count.

There are many options for you and your group to explore. When you are creating your dances you need to think creatively and outside of the box! Just make sure that your sport movements are safe.



Dance steps aren't always complicated

If you are having a bit of difficulty getting started the best way to get everyone involved in the dance and the group creation process is to have each group member contribute a movement for consideration. Once you get started, the ideas will begin to flow.

face 2 face

SELECT THE MOVES

As a group you need to select the steps or moves to include in your dance and the order that these will be performed in.

Remember, by the end of this activity your sport dance should have at least four steps or moves.

Steps coordinators it is now time to facilitate your leadership! Off you go!

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3 Timing/phrasing

Music is a great motivator for getting people up and dancing. Just think of the last time you chose to dance. Was it because you heard a favourite song with a catchy tune and a great beat?

It is generally the beat of the music that initially gets you tapping your feet and wanting to get up and dance. Good dance music is designed to get you moving through the constant beat and rhythms that underpin the musical melody. The beat and rhythm of the music provide the timing for your movements to flow with the music and allow movements to be performed together when a group is performing a dance.



Alamy/Peter D Noyce

Drums are often used to drive the beat of the music

Finding the beat

The beat of a piece of music is like its pulse or heart rate – it is the underlying and constant sound that continues from the start to the end of the song.

In your group, using the song 'Troublemaker' by Olly Murs, tap out the beat together. You can tap the beat with your hands or feet or take it in turns to lead the tap using different moves.

When counting the music, one musical beat is equal to one count. Having found the beat, you can then break the beat into useable sections or **phrases** so that you can create timing blocks to fit the steps into. A musical phrase can be any length of beats but you will use a 16-count music phrase for the group dance. The benefit of using a set phrase throughout the dance is that it allows you to know when to start and finish a step or move.

phrase
a series of musical notes

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For example, if you are going to include the Grapevine into your dance, you would have 16 counts in which to perform it.

In your group and using the song 'Troublemaker', tap out 16-count phrasings. You can tap the beat with your hands or feet while counting out 16 beats. Continue counting a 16-beat phrasing until you and your group are confident at counting in this way.

UP + MOVING

JOIN YOUR PHRASE TO YOUR STEPS

It is now time for your group to use a 16-count phrase for each of the four steps or moves you have chosen for your dance. You can do this by counting how many beats/counts there are in a step.

For example, one Grapevine is equal to four counts, so four repeats of the Grapevine can fit into a 16-count phrase.

Having a set phrasing helps all members of the group to know how many of each step or move to do, and when each step or move begins and ends.

As a group you have 16 counts for each of the steps. You need to count out how many repetitions of each step you can perform within the 16 counts.

Remember by the end of this activity your sport dance should have a 16-count phrasing for each step or move.

Timing coordinators it is now time to facilitate your leadership! Off you go!

4 Formations

Now that your group has the basis of a sport dance with steps and timing organised, the next step is to look at ways to make the dance more interesting. Space can be used as an element to create formations and patterns in your dances.

When creating a dance for a performance it is important to think about the audience and how the dance can be made more interesting from its point of view.



Alamy/ACE STOCK LIMITED

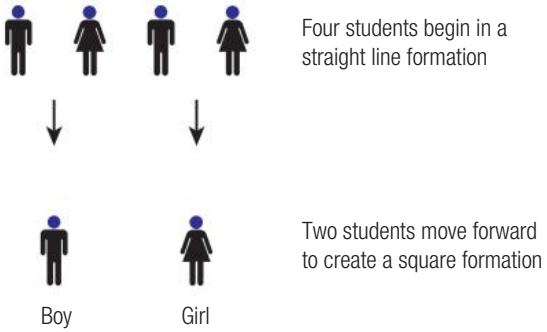
The placement of dancers on the stage creates the formations and patterns

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One way to do this is to incorporate patterns and formations using the dance space available. A dance that incorporates the use of space with different patterns and formations will be more interesting to an audience than one that is performed in one straight line for the whole performance. The use of space as an element of dance can create greater visual interest for the audience. In simple terms, a formation is generally a shape created by a dancer or group of dancers and a pattern is the movement across the floor or space.

For example a group of four dancers who begin in a straight line might use a ball bounce step with two dancers moving forward and two dancers moving backward to create a square formation. The movement to the formation creates the pattern.

There need to be at least two different formations in your group's dance.

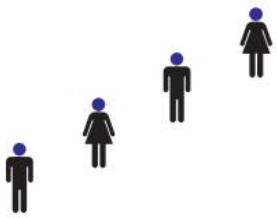


Formation ideas

Square formation



Diagonal line



V formation



Star formation



ISBN 9780170376181

face 2 face

DEVELOP YOUR FORMATIONS

It is now up to your group to use the list of formation ideas to help you develop two or more formations to include into your dance.

Remember, by the end of this activity your sport dance should have at least two formations within the dance.

Formations coordinators it is now time to facilitate your leadership! Off you go!

5 Presenting the sport dance

By now your sport dance will be looking really good. So it is time to put the finishing touches to your creation to make the end product as exciting and interesting as possible to a prospective audience.

The presentation of your dance is just like putting the icing on a cake. There are many ways to improve a dance through presentation:

- costumes
- make-up
- **props**
- scenery.

prop
short for 'property', props are items (not including scenery) used by actors during a performance



Hill Street Studios/Sarah Gelonka

These all help to tell the story or idea of the dance and paint a picture for the audience. Now that you have created a sport dance, one way to add to the presentation is to begin and end the dance in a creative sport pose that captures the audience's attention.

Using a sport pose at the beginning and end of the dance can help to highlight and build on the storyline of your dance.

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PRESENTATION POSES

It is now time for your group to select your presentation poses. Ensure that the poses are safe!

Remember by the end of this activity your sport dance should begin and end with a sporting pose.

Presentations coordinators it is now time to facilitate your leadership! Off you go!

Getting ready to perform

In the next activity, each group will have the opportunity to perform their dance. This can be done by performing to the class, to another group or just to your teacher. Importantly all members of your group need to feel comfortable about the performance, as dancing should be fun! Therefore if groups don't wish to perform their dances to a live audience, then a video recording of the dance could be taken for your teacher to assess your group's dance.

Filming

Filming your dance can also help your group to self-assess and make any necessary changes to the dance to meet the set criteria. As this is a school activity, only school-based equipment can be used for filming this task.



Alamy/Marmaduke St. John

Live performance

For those groups who do wish to perform their sport dances, keep in mind that it takes a lot of courage to get up in front of a group of people and perform, so it is important to support and encourage everyone's efforts.

SUPPORTING OTHERS AND PROVIDING FEEDBACK

Dancing is about self-expression. Although a group might be performing the same steps, the way that each individual student interprets and delivers these steps can be unique to each person.

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Feedback criteria

If your class chooses to provide feedback to other groups, it must be based only on the four set criteria for the dance.

Feedback can only be provided on whether the sport dance meets the following goals:

- has at least four steps (moves)
- uses a 16-count phrasing for each step (move)
- has at least two formations
- begins and ends with a sporting pose.



Alamy/H Mark Weidman Photography

How to provide feedback

It is always nice to receive encouragement, so try to use the following tips if you are asked to provide feedback:

- begin with a positive feedback statement about how the dance met the four set criteria
- provide a positive feedback statement about a highlight of the dance
- provide a constructive comment, only if necessary, on how the dance could be improved to meet the set criteria.

Providing feedback relating to the set criteria ensures that the dances are assessed fairly, without taking personal dance styles into consideration.

WORKBOOK>>
Worksheet 10.4

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PERFORMING YOUR SPORT DANCE

One of the many reasons people dance is to celebrate. The performance of your sport dance should be a celebratory session where you get to display your group's hard work and acknowledge your group's achievements.

Your performance can be to the whole class, to just another group or you can have your dance filmed for your teacher to view. Whichever way you choose to perform your sport dance, it should be a fun and enjoyable culmination of the group effort.



Getty Images/DreamPictures

Your dance will be a fun and celebratory event

Costumes

For your final performance you might also want to select the one song your group enjoyed practising to the most. You may also consider wearing costumes.

For example, your group could wear matching singlets or shorts if the dance is about basketball or you could all be dressed in individual sport outfits, depending on the theme of your dance. Importantly, any costume should add to the overall presentation of the dance and should not have an effect on your ability to move, so make sure your costumes are safe to dance in.



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Simple costumes can enhance the presentation of your dance

GO FOR IT!

Now it is time to perform your sport dance! Remember to have fun and enjoy all your hard work. Go for it!

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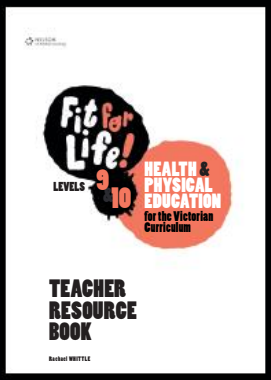
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