Apex Exam Guidebook

Design
Year 12 QCE
Queensland Curriculum

2026 Edition

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Apex Exam Guidebook
Design
Year 12 QCE

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2024 Question

2024 Paper 1 Section 1 Question 1 **Design Challenge**	• Refer to the stimulus book. • Represent your design work on the four A3 response pages provided in the folio. If you need more space for a response, use an additional response page. – Number your response pages in the order in which they should be read. – Cancel any incorrect response by ruling a single diagonal line through your work. – Write the page number of your alternative/additional response, i.e. See page … – If you do not do this, your original response will be marked. – All used response pages must be returned in your folio at the conclusion of the assessment.

QUESTION 1 (34 marks)

Use the stimulus to redesign an item of living room furniture to discourage obsolescence.

Your response should show application of the develop phase of the design process. Devise ideas, and refine these based on your evaluation using the design criteria, to propose a design concept.

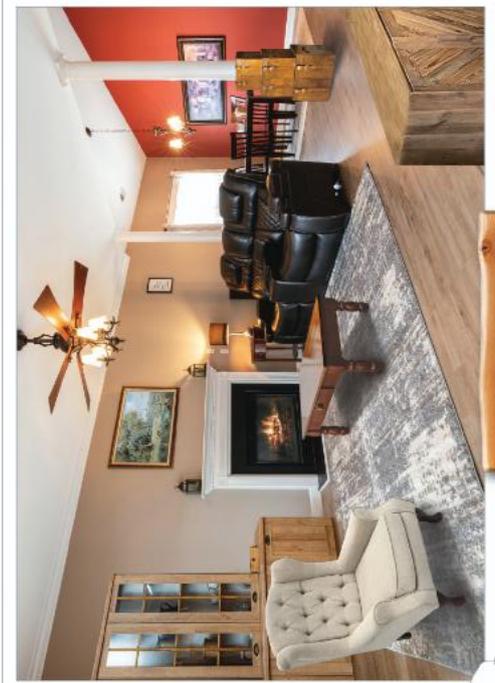Use sketches with notes to represent your ideas and design concept.

Coastal Collection
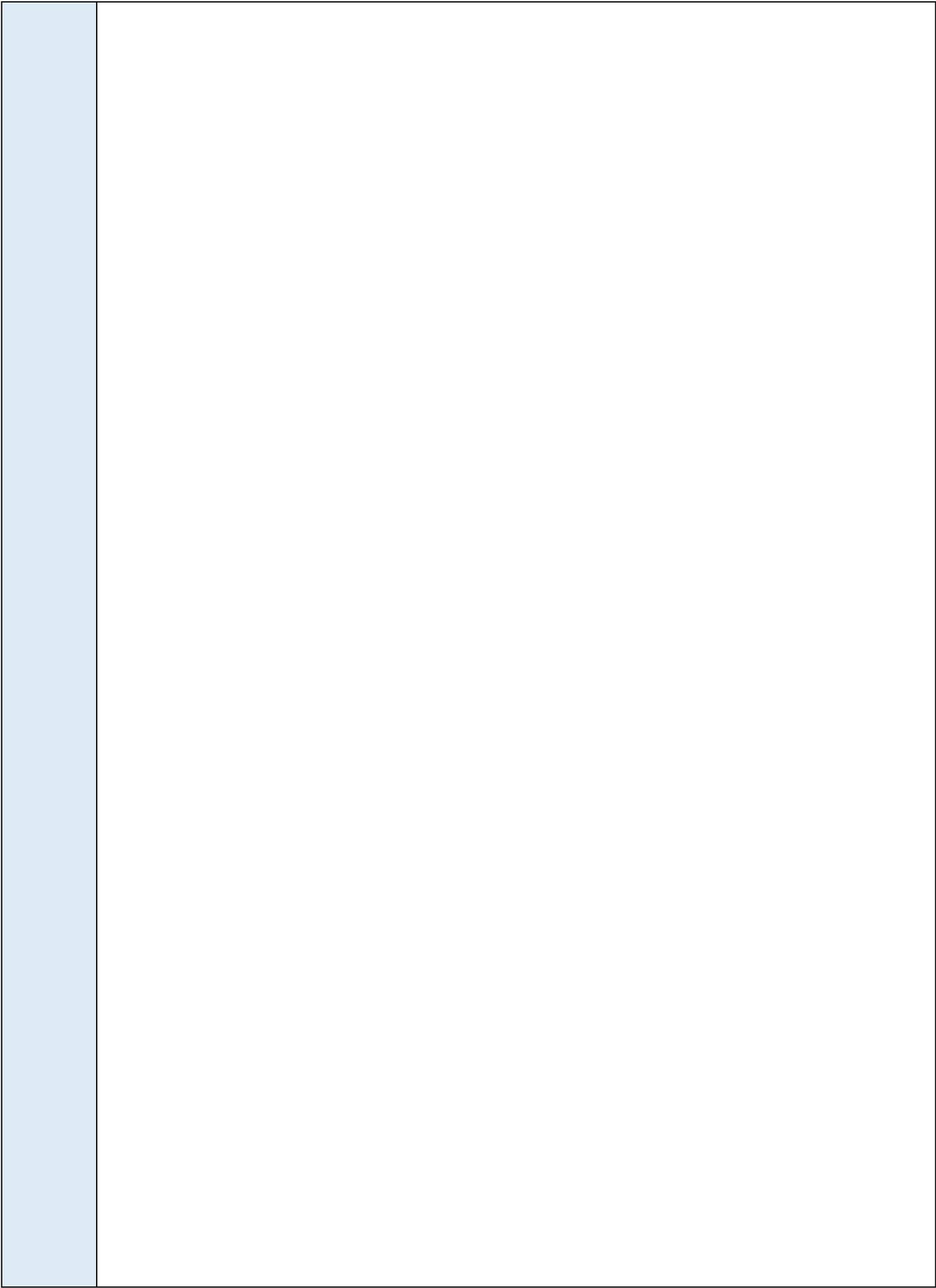
City Collection

Country Collection

1 of 1

Design problem

A company sells three different collections of living room furniture. They have identified an opportunity to improve the sustainability of their furniture.

You are required to redesign an item of living room furniture to discourage obsolescence.
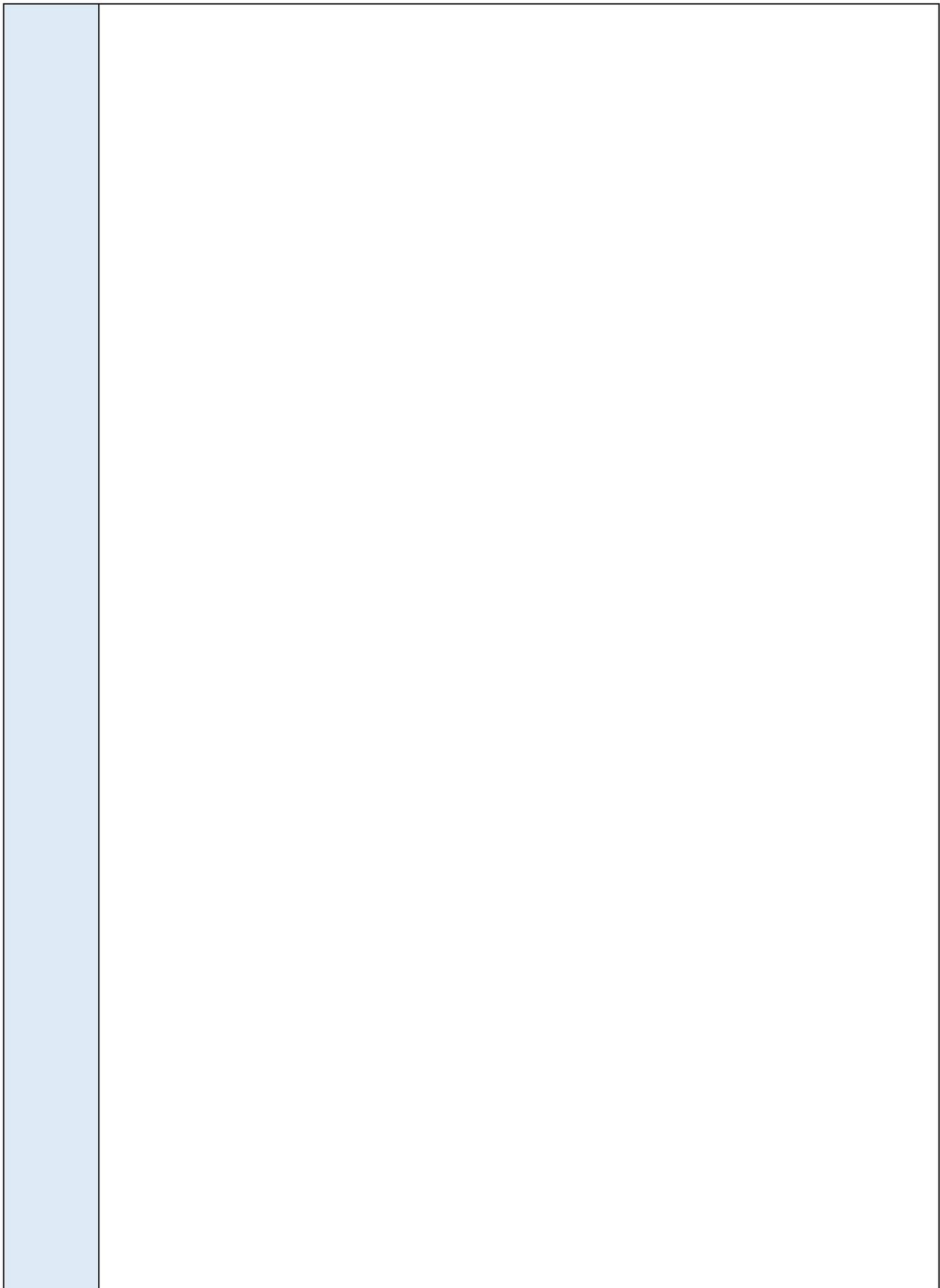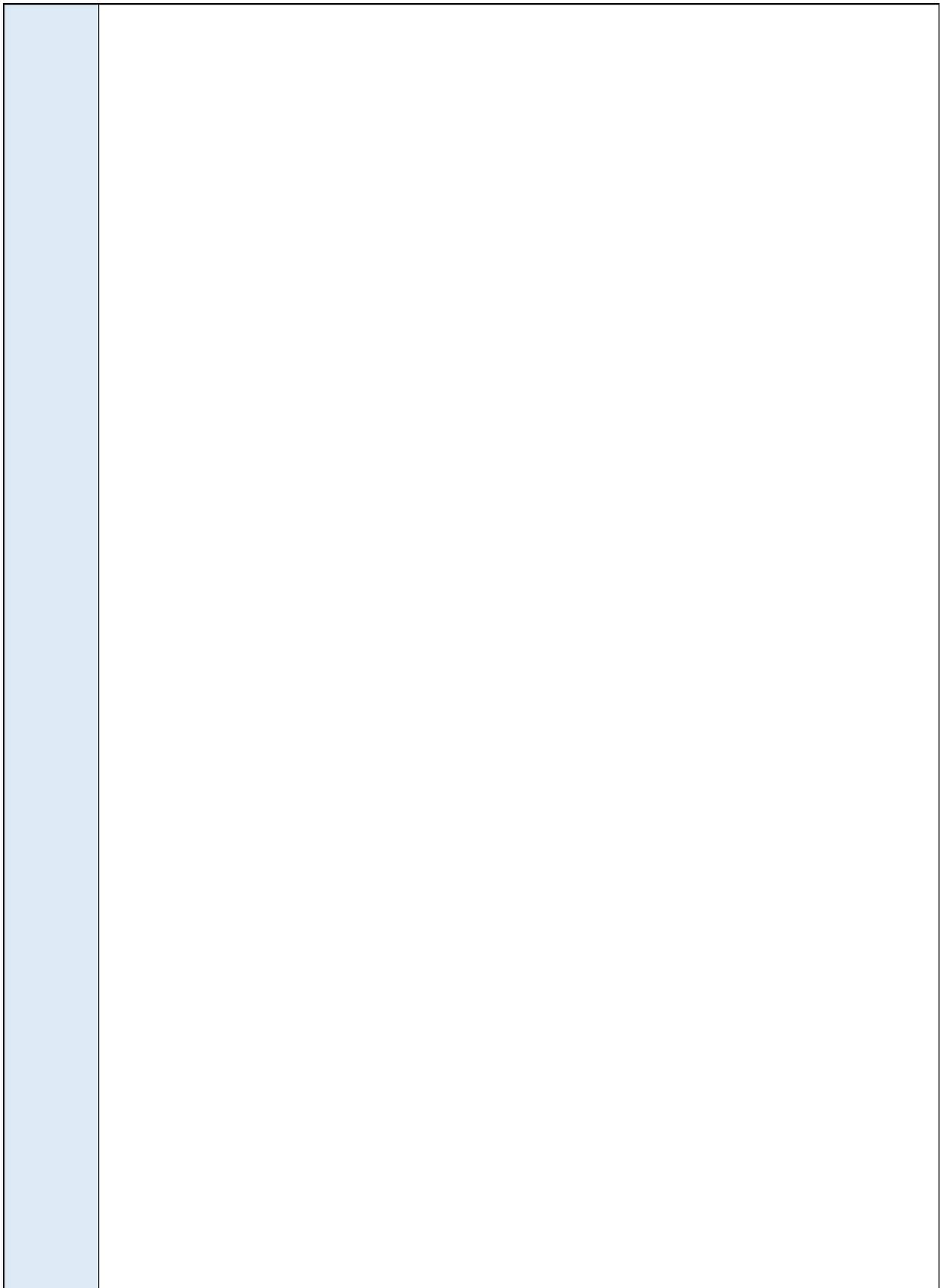
Design criteria

- Redesign the furniture item to have two functions.
- Match the style of one of the company's furniture collections.
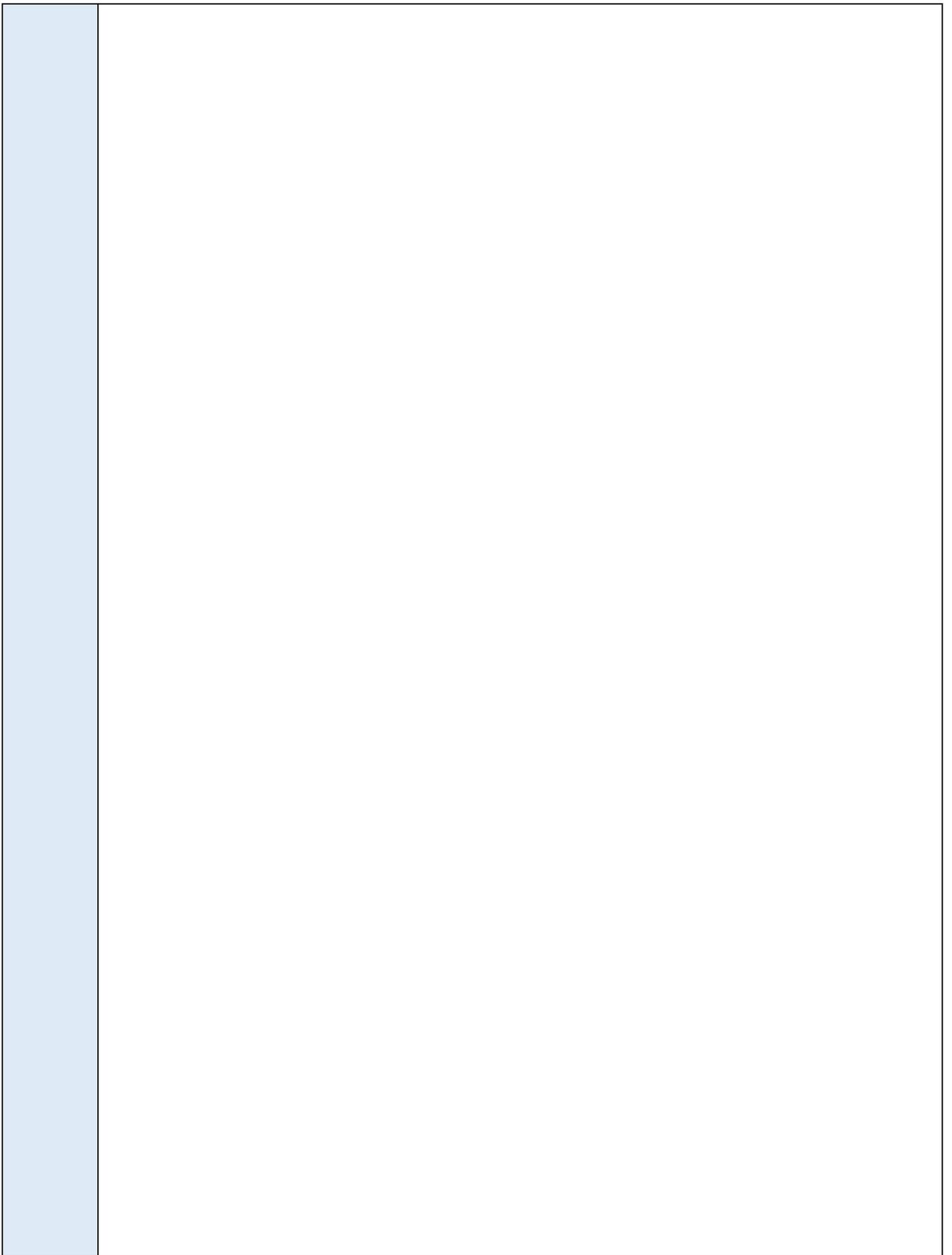- Enable changes to the furniture item's form.

2024 Marking Guide

2023 Paper 1 Section 1 Question 1 Design Challenge	**Criterion: Devising ideas**

Criterion: Devising ideas

Divergence of ideas	Attributes of ideas
The response	**The response**
[5 marks] • shows a wide range of ideas from divergent points of view, in response to the problem	[5 marks] • shows unique, credible and detailed ideas in response to all design criteria that demonstrate - perceptive understanding of discouraging obsolescence and circular design - discerning use of the stimulus
[4 marks] • shows a range of ideas, based on at least two different ways of responding to the problem	[4 marks] • shows credible and detailed ideas in response to all design criteria that demonstrate - knowledge of discouraging obsolescence and circular design - purposeful use of the stimulus
[3 marks] • shows a range of ideas that are similar to each other in their response to the problem	[3 marks] • shows credible ideas - related to the stimulus and sustainable design - in response to at least two design criteria
[2 marks] • shows ideas that respond to the problem	[2 marks] • shows superficial ideas related to the stimulus in response to at least one design criterion
[1 mark] • shows one idea OR • states suggestions	[1 mark] • states information about ideas related to the stimulus
[0 marks] • does not satisfy any of the descriptors above.	[0 marks] • does not satisfy any of the descriptors above.

Criterion: Evaluating and refining

Evaluation of ideas	Refinement of ideas
The response	**The response**
[5 marks] • provides a critical evaluation - of the strengths, limitations and implications of particular characteristics and properties of ideas - against all design criteria	[5 marks] • shows discerning changes - to ideas by modifying their attributes (selected for value and relevance) to improve how the range of ideas match the criteria - based on judgements related to all criteria
[4 marks] • provides a reasoned evaluation - of the strengths and limitations of ideas - against all design criteria	[4 marks] • shows effective changes - to ideas that improve how they match the criteria - based on judgements related to at least two design criteria
[3 marks] • provides statements - about the strengths and limitations of ideas that are believable and able to be actioned - related to at least two design criteria	[3 marks] • shows adequate changes - to at least two ideas - based on judgements related to at least one design criterion
[2 marks] • provides statements concerned with the obvious strengths or limitations of ideas against at least one design criterion	[2 marks] • shows superficial changes - to at least one idea - related to at least one design criterion
[1 mark] • provides statements about ideas	[1 mark] • shows trivial embellishment OR • shows changes to a flawed idea
[0 marks] • does not satisfy any of the descriptors above.	[0 marks] • does not satisfy any of the descriptors above.

Criterion: Design concept

The response
[5 marks] • proposes an innovative circular design concept that - includes a coherent and logical combination of the attributes drawn from multiple ideas and stimulus information - satisfies all design criteria
[4 marks] • proposes a credible circular design concept that - includes a logical combination of ideas and stimulus information - satisfies at least two design criteria
[3 marks] • proposes a simple circular design concept that - combines ideas and stimulus information - satisfies at least one design criterion
[2 marks] • proposes a rudimentary design concept that - reproduces a single idea - satisfies at least one design criterion
[1 mark] • shows a partial design concept in response to the problem
[0 marks] • does not satisfy any of the descriptors above.

Criterion: Representing

Representing ideas	Representing the design concept
The response	**The response**
[5 marks] • shows ideation and schematic sketching of ideas using - refined freehand methods - sophisticated application of line, tone, colour, shape, contrast, proximity, hierarchy and scaled details to show critical attributes - arrows, boxes, circles and connecting lines to show the relationships between attributes of ideas - combinations and sequences of related sketches to easily show progression of ideas as they are devised and across pages as the ideas are refined	[4 marks] • shows a sketch of the design concept using - refined freehand methods - sophisticated application of line, tone, colour, shape, contrast, proximity, hierarchy and scaled details to show how critical attributes satisfy the design criteria - arrows, boxes, circles and connecting lines to show the relationships between attributes
[4 marks] • shows ideation and schematic sketching of ideas using - careful and deliberate freehand methods that may include the use of a ruler - considered application of line, colour, tone, shape and scaled details to show attributes - arrows and connecting lines to show the relationships between ideas - sequences of related sketches to show changes in the detail and form of ideas across pages	[3 marks] • shows a sketch of the design concept using - careful and deliberate freehand methods that may include the use of a ruler - considered application of line, colour, tone, shape and scaled details to show attributes that satisfy the design criteria - arrows and connecting lines to show the relationships between attributes
[3 marks] • shows ideation and schematic sketching of ideas using - basic methods fit for purpose – three-dimensional objects are represented pictorially, processes are represented schematically - appropriate application of line, colour/tone and shape to show form - sketches to show changes to ideas across the pages	[2 marks] • shows a sketch of the design concept using - basic methods fit for purpose – three-dimensional objects are represented pictorially - appropriate application of line, colour/tone and shape to show form
[2 marks] • shows sketching of ideas with little attention to detail or small thumbnail images	[1 mark] • shows a sketch of the design concept with little attention to detail
[1 mark] • relies on written text descriptions	[0 marks] • does not satisfy and of the descriptors above.
[0 marks] • does not satisfy any of the descriptors above.	

2023 Question

2023 Paper 1 Section 1 Question 1 **Design Challenge**	• Refer to the stimulus book. • Represent your design work on the four A3 response pages provided in the folio. If you need more space for a response, use an additional response page. – Number your response pages in the order in which they should be read. – Cancel any incorrect response by ruling a single diagonal line through your work. – Write the page number of your alternative/additional response, i.e. See page … – If you do not do this, your original response will be marked. – All used response pages must be returned in your folio at the conclusion of the assessment. --- QUESTION 1 (34 marks) Use the stimulus and circular design methods to redesign packaging. Your response should show application of the develop phase of the design process. Devise ideas, and refine these based on your evaluation using the design criteria, to propose a design concept. Use sketches with notes to represent your ideas and design concept. [34 marks] Note: The below space has been left so the stimulus can be larger on the next page.

TC839
11 minutes ago
As a consumer, I want tamper-proof packaging to ensure items are not changed, removed or damaged.

↳ Reply

sustainable.

NW216
April 19 at 11:29 am
As a consumer, I want to understand the additional uses of new products.

↳ Reply

MS623
April 22 at 1:30 pm
As a consumer, I appreciate items that have a visual theme.

↳ Reply

RH582
April 14 at 9:45 am
As a retailer, I need to understand the benefit of new packaging.

↳ Reply

AL954
April 16 at 3:16 pm
As a retailer, I would choose packaging that I know will not end up in landfill.

↳ Reply

Ship from:

Order: 653 259 456 258   P   RTK Packaging

Design problem

The packaging used for online purchases of small individual items is often damaged when it is opened, making it unusable and creating waste. There is an opportunity to redesign the packaging to be more sustainable.

Design criteria

- Ensure the redesigned packaging has an extended life cycle with additional uses.
- Ensure the redesigned packaging continues to meet the requirements of current users.
- Consider the successful launch and acceptance of the new uses by stakeholders.

SECURE · SECURE · SECURE · SECURE · SECURE · SECU

Unsuitable items may need to be returned in the original packaging.

Opening the packaging often damages it beyond use.

Tamper-proof tapes, seals and adhesive closures are destroyed on opening.

Retailers need products to arrive at their destination clean and dry.

Lightweight packaging reduces transport costs.

Online shopping is an increasing trend; packages are sent overseas and locally.

Packaging is made from paper, cardboard, plastic (flexible and rigid), foil, wire or string.

RTK Packaging

1 of 1

2023 Marking Guide

2023 Paper 1 Section 1 Question 1 Design Challenge	

Criterion: Devising ideas

Divergence of ideas	Attributes of ideas
The response	**The response**
[5 marks] • shows a wide range of ideas from divergent points of view, in response to the problem	[5 marks] • shows unique, credible and detailed ideas - that demonstrate insight and understanding of the problem through discerning use of the stimulus - In response to all the design criteria
[4 marks] • shows a range of ideas, based on at least two different ways of responding to the problem	[4 marks] • shows credible and detailed ideas - that demonstrate purposeful use of the stimulus - in response to all the design criteria
[3 marks] • shows a range of ideas that are similar to each other in their response to the problem	[3 marks] • shows credible ideas - related to the stimulus - in response to at least two design criteria
[2 marks] • shows ideas that respond to the problem	[2 marks] • shows superficial ideas related to the stimulus in response to at least one design criterion
[1 mark] • shows one idea OR • states suggestions	[1 mark] • states information about ideas related to the stimulus
[0 marks] • does not satisfy any of the descriptors above.	[0 marks] • does not satisfy any of the descriptors above.

Criterion: Evaluating and refining

Evaluation of ideas	Refinement of ideas
The response	**The response**
[5 marks] • provides a critical evaluation - of the strengths, limitations and implications of particular characteristics and properties of ideas - against all design criteria	[5 marks] • shows discerning changes - to ideas by modifying their attributes (selected for value and relevance) to improve how the range of ideas match the criteria - based on judgements related to all criteria
[4 marks] • provides a reasoned evaluation - of the strengths and limitations of ideas - against all design criteria	[4 marks] • shows effective changes - to ideas that improve how they match the criteria - based on judgements related to at least two criteria
[3 marks] • provides statements - about the strengths and limitations of ideas that are believable and able to be actioned - related to at least two design criteria	[3 marks] • shows adequate changes - to at least two ideas - based on judgements related to at least one criterion
[2 marks] • provides statements concerned with the obvious strengths or limitations of ideas against at least one design criterion	[2 marks] • shows superficial changes - to at least one idea - related to at least one criterion
[1 mark] • provides statements about ideas	[1 mark] • shows trivial embellishment OR • shows changes to a flawed idea
[0 marks] • does not satisfy any of the descriptors above.	[0 marks] • does not satisfy any of the descriptors above.

Criterion: Design concept

The response
[5 marks] • proposes an innovative circular design concept that - includes a coherent and logical combination of the attributes drawn from multiple ideas and stimulus information - satisfies all design criteria
[4 marks] • proposes a credible circular design concept that - includes a logical combination of ideas and stimulus information - satisfies at least two design criteria
[3 marks] • proposes a simple circular design concept that - combines ideas and stimulus information - satisfies at least one design criterion
[2 marks] • proposes a rudimentary design concept that - reproduces a single idea - satisfies at least one design criterion
[1 mark] • shows a partial design concept in response to the problem
[0 marks] • does not satisfy any of the descriptors above.

Criterion: Representing

Representing ideas	Representing the design concept
The response	**The response**
[5 marks] • shows ideation and schematic sketching of ideas using - refined freehand methods - sophisticated application of line, tone, colour, shape, contrast, proximity, hierarchy and scaled details to show critical attributes - arrows, boxes, circles and connecting lines to show the relationships between attributes of ideas - combinations and sequences of related sketches to easily show progression of ideas as they are devised and across pages as the ideas are refined	[4 marks] • shows a sketch of the design concept using - refined freehand methods - sophisticated application of line, tone, colour, shape, contrast, proximity, hierarchy and scaled details to show how critical attributes satisfy the design criteria - arrows, boxes, circles and connecting lines to show the relationships between attributes
[4 marks] • shows ideation and schematic sketching of ideas using - careful and deliberate freehand methods that may include the use of a ruler - considered application of line, colour, tone, shape and scaled details to show attributes - arrows and connecting lines to show the relationships between ideas - sequences of related sketches to show changes in the detail and form of ideas across pages	[3 marks] • shows a sketch of the design concept using - careful and deliberate freehand methods that may include the use of a ruler - considered application of line, colour, tone, shape and scaled details to show attributes that satisfy the design criteria - arrows and connecting lines to show the relationships between attributes
[3 marks] • shows ideation and schematic sketching of ideas using - basic methods fit for purpose – three-dimensional objects are represented pictorially, processes are represented schematically - appropriate application of line, colour/tone and shape to show form - sketches to show changes to ideas across the pages	[2 marks] • shows a sketch of the design concept using - basic methods fit for purpose – three-dimensional objects are represented pictorially - appropriate application of line, colour/tone and shape to show form
[2 marks] • shows sketching of ideas with little attention to detail or small thumbnail images	[1 mark] • shows a sketch of the design concept with little attention to detail
[1 mark] • relies on written text descriptions	[0 marks] • does not satisfy and of the descriptors above.
[0 marks] • does not satisfy any of the descriptors above.	

2022 Question

2022 **Paper 1** **Section 1** **Question 1** **Design Challenge**	Instructions • Refer to the stimulus book. • Represent your design work on the four A3 response pages provided in the folio. If you need more space for a response, use an additional response page. – Number your response pages in the order in which they should be read. – Cancel any incorrect response by ruling a single diagonal line through your work. – Write the page number of your alternative/additional response, i.e. See page … – If you do not do this, your original response will be marked. – All used response pages must be returned in your folio at the conclusion of the assessment. Use the stimulus and circular design methods to reduce the waste of equipment and improve the sustainability of a sporting club. Your response should show application of the develop phase of the design process. Devise ideas, and refine these based on your evaluation using the design criteria, to propose a design concept. Use sketches and annotations to represent your ideas and design concept. [34 marks] Note: The below space has been left so the stimulus can be larger on the next page.

Design problem

A sporting club wishes to be identified as a sustainable organisation within the community. Club management has determined the regular cycle of replacing equipment results in unsustainable practices. Of most concern is the regular disposal of used functional equipment such as balls, bats, chairs and uniforms. There is a design opportunity to use circular design methods to reduce this waste and improve the sustainability of the club.

Design criteria

- Limit the waste of functional equipment.
- Consider economic, ecological and social benefits to the club.
- Ensure the design promotes the sustainable approach of club within the community.

2022 Paper 1 Section 1 Question 1 Design Challenge	**Criterion: Devising ideas**

Criterion: Devising ideas

Divergence of ideas	Attributes of ideas
The response	**The response**
[5 marks] • shows a wide range of ideas from divergent points of view, in response to the problem	[5 marks] • shows ideas with unique, credible, and detailed attributes that demonstrate a perceptive response to the stimulus and design criteria
[4 marks] • shows a range of ideas from divergent points of view, in response to the problem	[4 marks] • shows ideas with credible and detailed attributes that demonstrate a purposeful response to the stimulus and design criteria
[3 marks] • shows a range of ideas, in response to the problem	[3 marks] • shows ideas with credible attributes in an appropriate response to the stimulus and design criteria
[2 marks] • shows ideas superficially devised in response to the problem	[2 marks] • shows ideas with superficial attributes in response to the stimulus
[1 mark] • states suggestions in response to the problem	[1 mark] • states stimulus information that relates to the ideas
[0 marks] • does not satisfy any of the descriptors above.	[0 marks] • does not satisfy any of the descriptors above.

Criterion: Evaluating and refining

Evaluation of ideas	Refinement of ideas
The response	**The response**
[5 marks] • provides a critical evaluation of ideas against all design criteria	[5 marks] • shows discerning refinement of ideas based on judgments related to all criteria
[4 marks] • provides a reasoned evaluation of ideas against all design criteria	[4 marks] • shows effective refinement of ideas based on judgments related to at least two criteria
[3 marks] • provides a feasible evaluation of ideas against at least two design criteria	[3 marks] • shows adequate refinement of ideas based on judgments related to at least one criterion
[2 marks] • provides a superficial evaluation of ideas against at least one design criterion	[2 marks] • shows superficial refinement of ideas based on judgments related to at least one criterion
[1 mark] • provides statements about ideas	[1 mark] • shows changes to the ideas
[0 marks] • does not satisfy any of the descriptors above.	[0 marks] • does not satisfy any of the descriptors above.

Criterion: Synthesising a design concept

The response
[5 marks] • proposes an innovative circular design concept that - includes a coherent and logical combination of attributes drawn from multiple ideas and stimulus information - satisfies all design criteria
[4 marks] • proposes a credible circular design concept that - includes a logical combination of ideas and stimulus information - satisfies at least two design criteria
[3 marks] • proposes a simple circular design concept that - combines ideas and stimulus information - satisfies at least one design criterion
[2 marks] • proposes a rudimentary design concept that - reproduces a single idea - satisfies at least one design criterion
[1 mark] • shows a partial design concept in response to the problem
[0 marks] • does not satisfy any of the descriptors above.

Criterion: Representing

Representing ideas	Representing the design concept
The response	The response
[5 marks] • shows sophisticated representation of ideas by using: - elements and principles of visual communication to differentiate between critical and non-critical attributes in ideation and schematic sketching of ideas - fluent combinations and sequences of related sketches to easily and readily show detail in the progression of understanding of ideas	[4 marks] • shows sophisticated sketching of a design concept by using elements and principles of visual communication to differentiate between its critical and non-critical attributes
[4 marks] • shows considered representation of ideas by using - elements and principles of visual communication to represent the attributes of ideas in ideation and schematic sketching - proficient sequences of related sketches to show the progression of understanding of ideas.	[3 marks] • shows considered sketching of a design concept by using elements and principles of visual communication to represent its attributes
[3 marks] • shows appropriate use of - elements and principles of visual communication in ideation and schematic sketching of ideas - sketches that show the progression of understanding of ideas across the pages.	[2 marks] • shows appropriate sketching of a design concept by using line, shape, form, proportion and scale
[2 marks] • shows cursory use of sketching to show understanding of ideas	[1 mark] • shows cursory sketching of a design concept
[1 mark] • shows illogical use of sketching to represent ideas or relies on written text descriptions	[0 marks] • does not satisfy any of the descriptors above.
[0 marks] • does not satisfy any of the descriptors above.	

2021 Question

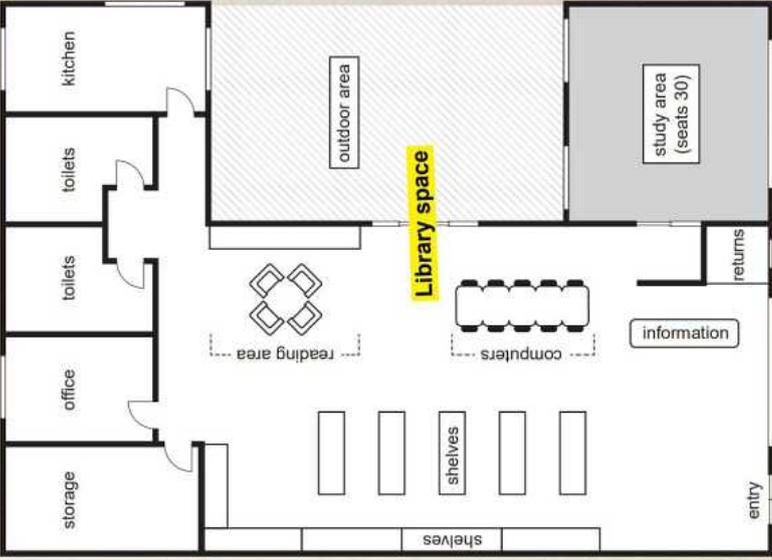|	
2021 **Paper 1** **Section 1** **Question 1** **Design** **Challenge**	Instructions • Refer to the stimulus book. • Represent your design work on four A3 pages in this question and response book. If you need more space for a response, use an additional response page. – Number your response pages in the order in which they should be read. – Cancel any incorrect response by ruling a single diagonal line through your work. – Write the page number of your alternative/additional response, i.e. See page … – If you do not do this, your original response will be marked. Use the stimulus to redesign the library space. Your response should show application of the develop phase of the design process. Devise ideas, and refine these based on your evaluation using the design criteria, to propose a design concept. Use sketches and annotations to represent your ideas and design concept. [36 marks] Note: The below space has been left so the stimulus can be larger on the next page.

Design problem

The use of a community library has reduced as people increasingly access books and media online. At some point this traditional library will become obsolete and the building risks being demolished. To ensure the existing building structure is maintained, adult community members who don't use the library have been consulted. Circular design methods must be used to redesign the library space to suit their needs and wants.

Design criteria

- Enable a broader range of uses of the building to suit the adult community members.
- Improve the aesthetic of the space for the adult community members.
- Ensure the design discourages obsolescence to maintain the sustainability of the building.

LIBRARY

Local Council
safe, inclusive, connected communities

Front of building

Interior

Library space

kitchen
toilets
toilets
office
storage
outdoor area
study area (seats 30)
returns
reading area
computers
information
shelves
shelves
entry

Adult community members stated:

👍 'I would use the library if it allowed me to ...'

😞 'I don't go to the library because ...'

❤ 'A space I would feel comfortable in would have ...'

👍 stay fit
😞 it primarily caters for older people and children
❤ adaptability for different purposes

👍 conduct a meeting
😞 I don't have privacy and it's dark and musty
❤ areas influenced by modernism, with forms that follow functions

👍 host events
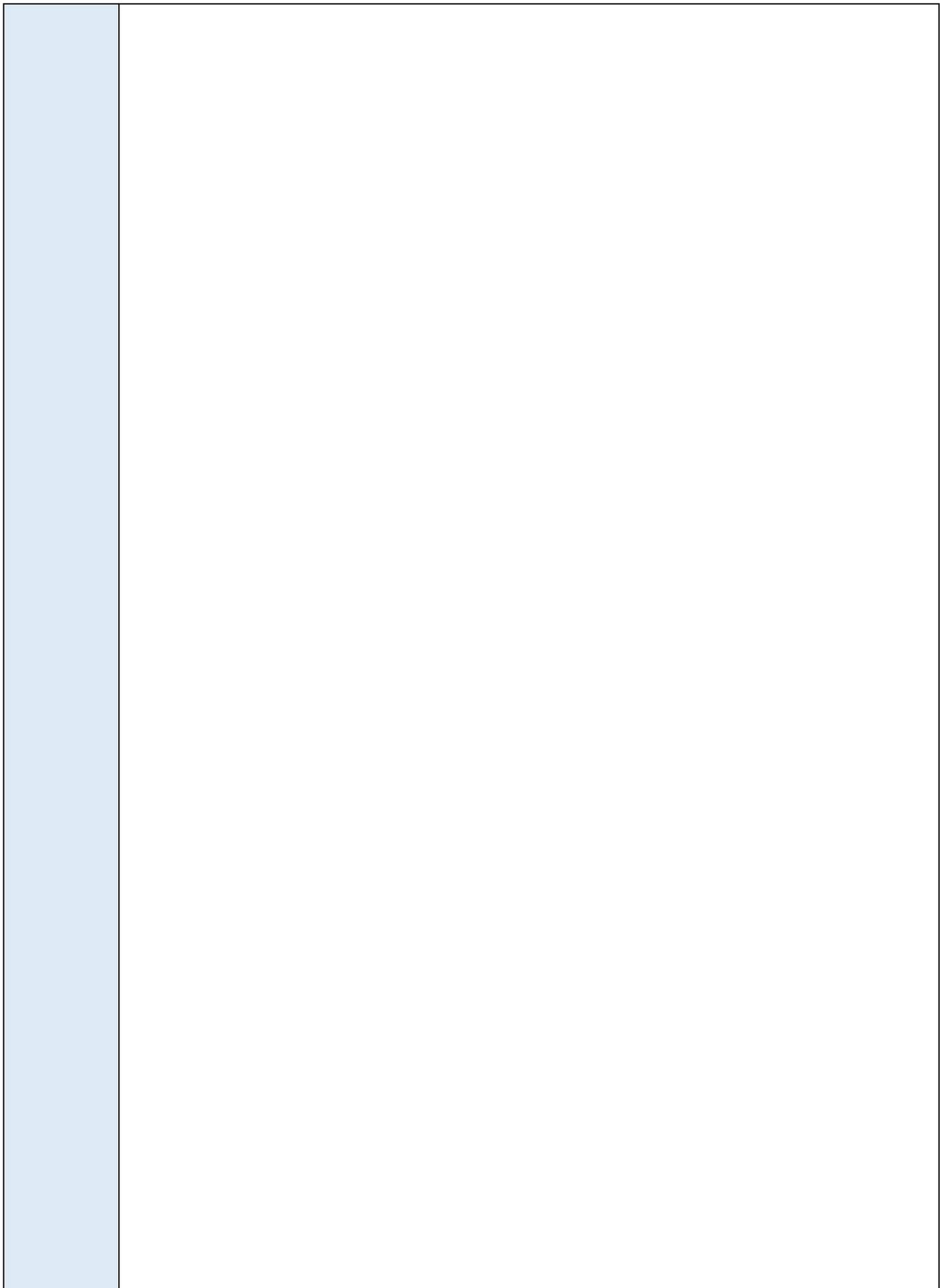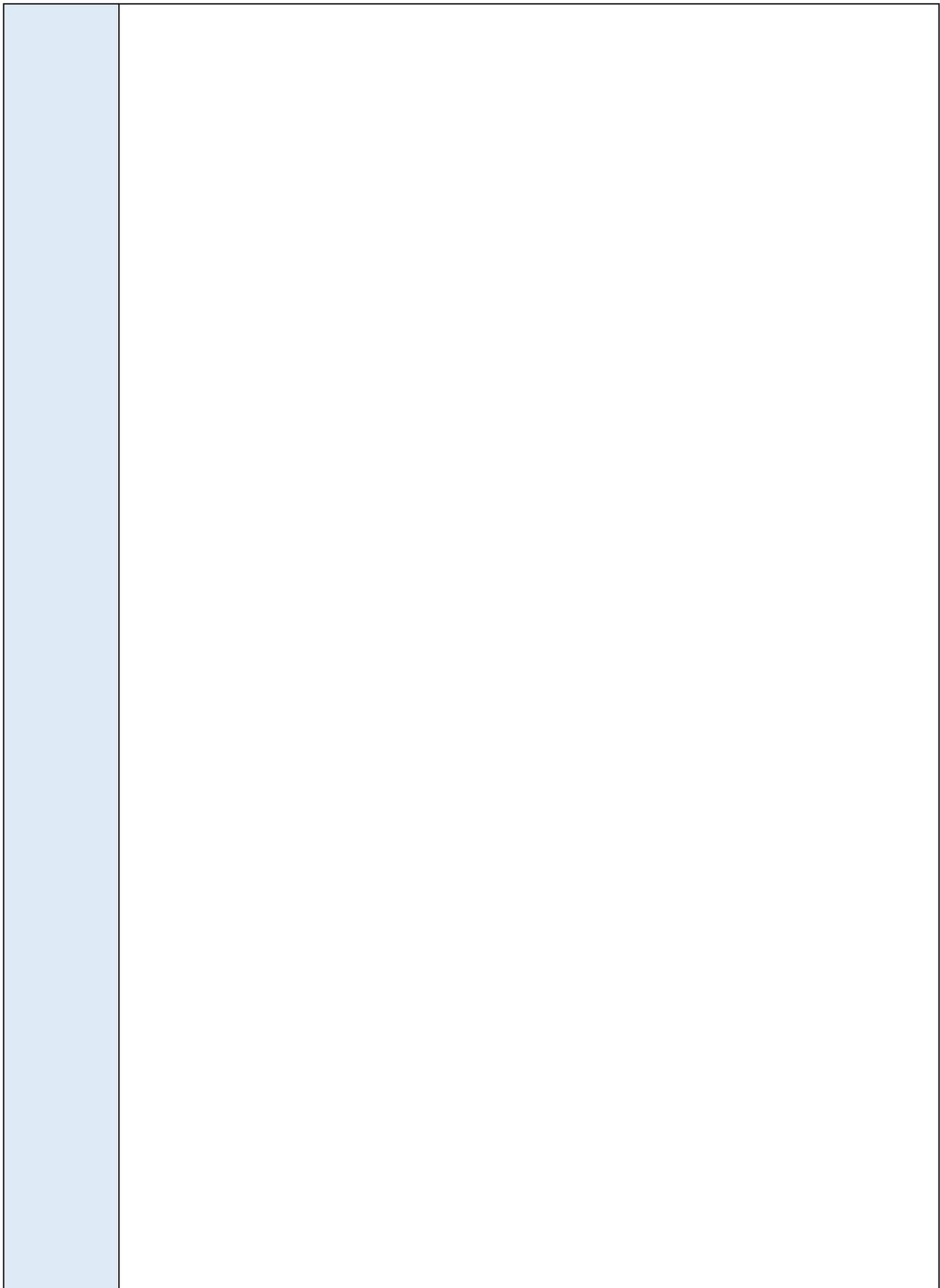😞 I can't make noise or eat and drink
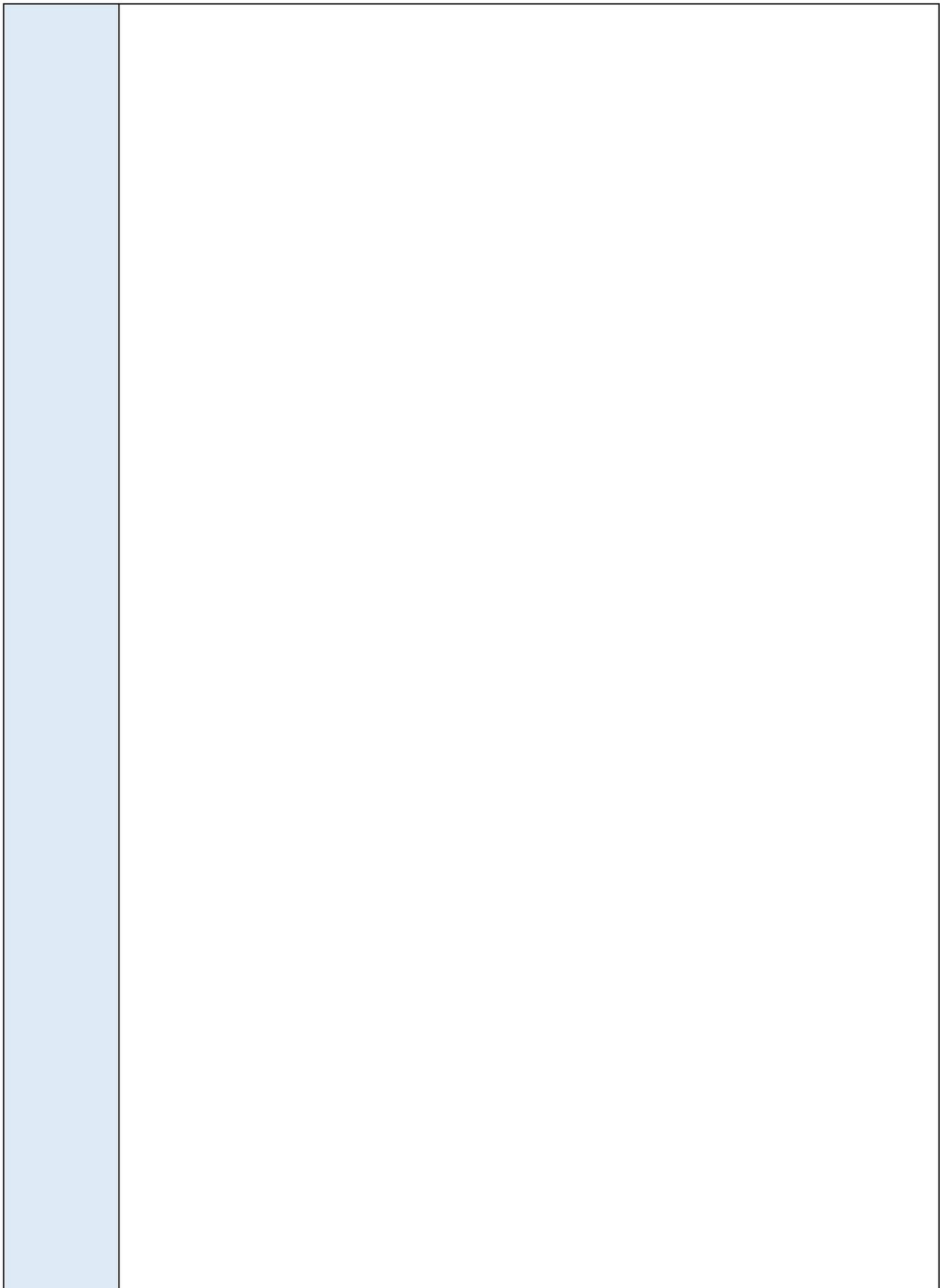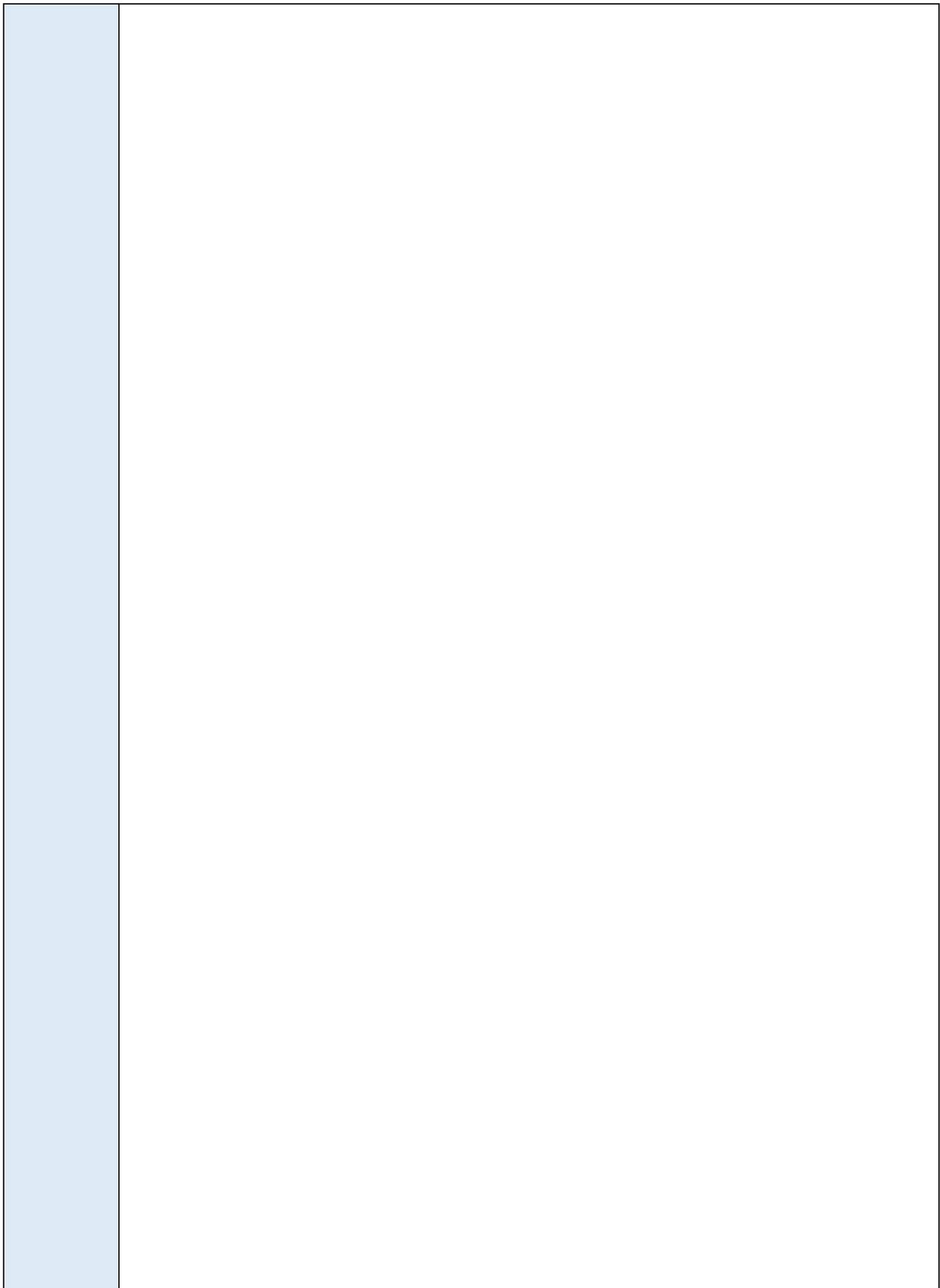❤ colourful, bright and airy spaces

👍 create art
😞 it's dated — brown and cream
❤ a connection to nature

👍 play online games
😞 I don't feel welcome; looks like a bunker
❤ areas to hang out with my friends
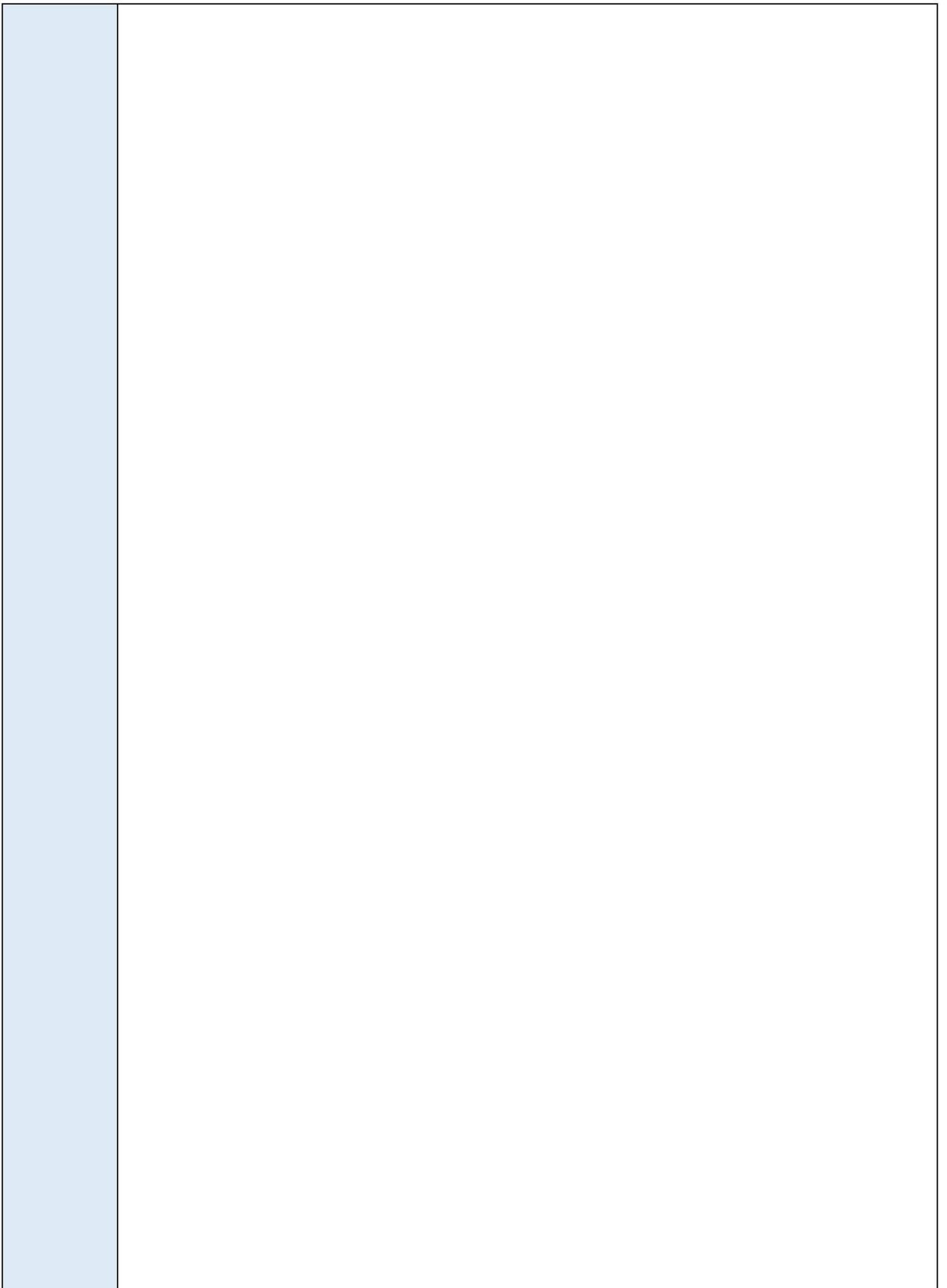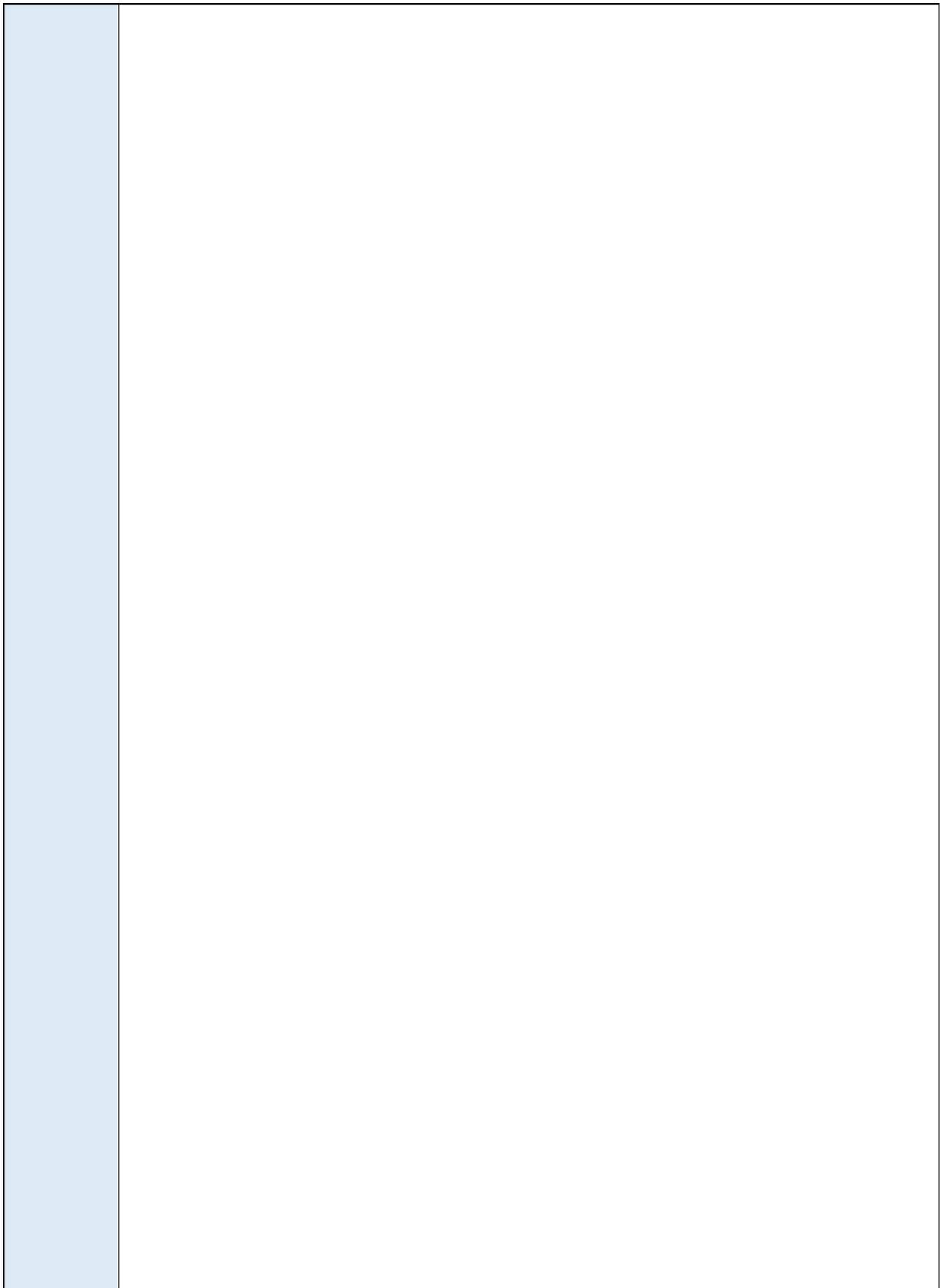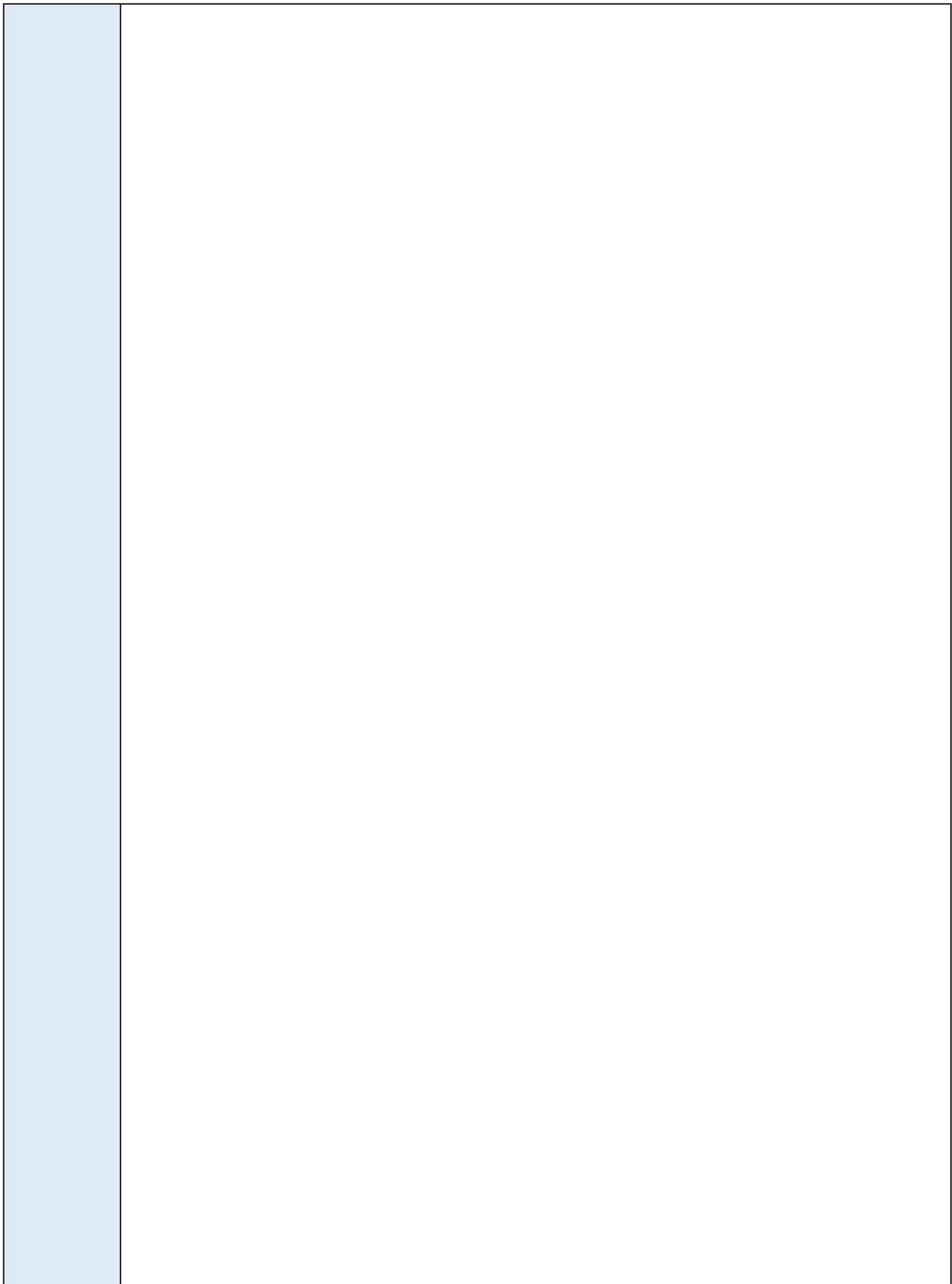
2021 Marking Guide

2021 Paper 1 Section 1 Question 1 Design Challenge	**Criterion: Devising ideas**

Criterion: Devising ideas

The response	The response
[5 marks] • shows a wide range of ideas from divergent points of view, perceptively devised	[5 marks] • shows unique, credible and detailed attributes in response to the problem
[4 marks] • shows a range of ideas from divergent points of view, purposefully devised	[4 marks] • shows credible and detailed attributes in response to the problem
[3 marks] • shows a range of ideas from divergent points of view, appropriately devised	[3 marks] • shows credible attributes in response to the problem
[2 marks] • shows a range of ideas from divergent points of view, superficially devised OR • shows ideas appropriately devised	[2 marks] • shows credible attributes in response to aspects of the problem
[1 mark] • shows ideas superficially devised	[1 mark] • shows a response to aspects of the problem
[0 marks] • does not satisfy any of the descriptors above.	[0 marks] • does not satisfy any of the descriptors above

Criterion: Evaluating and refining

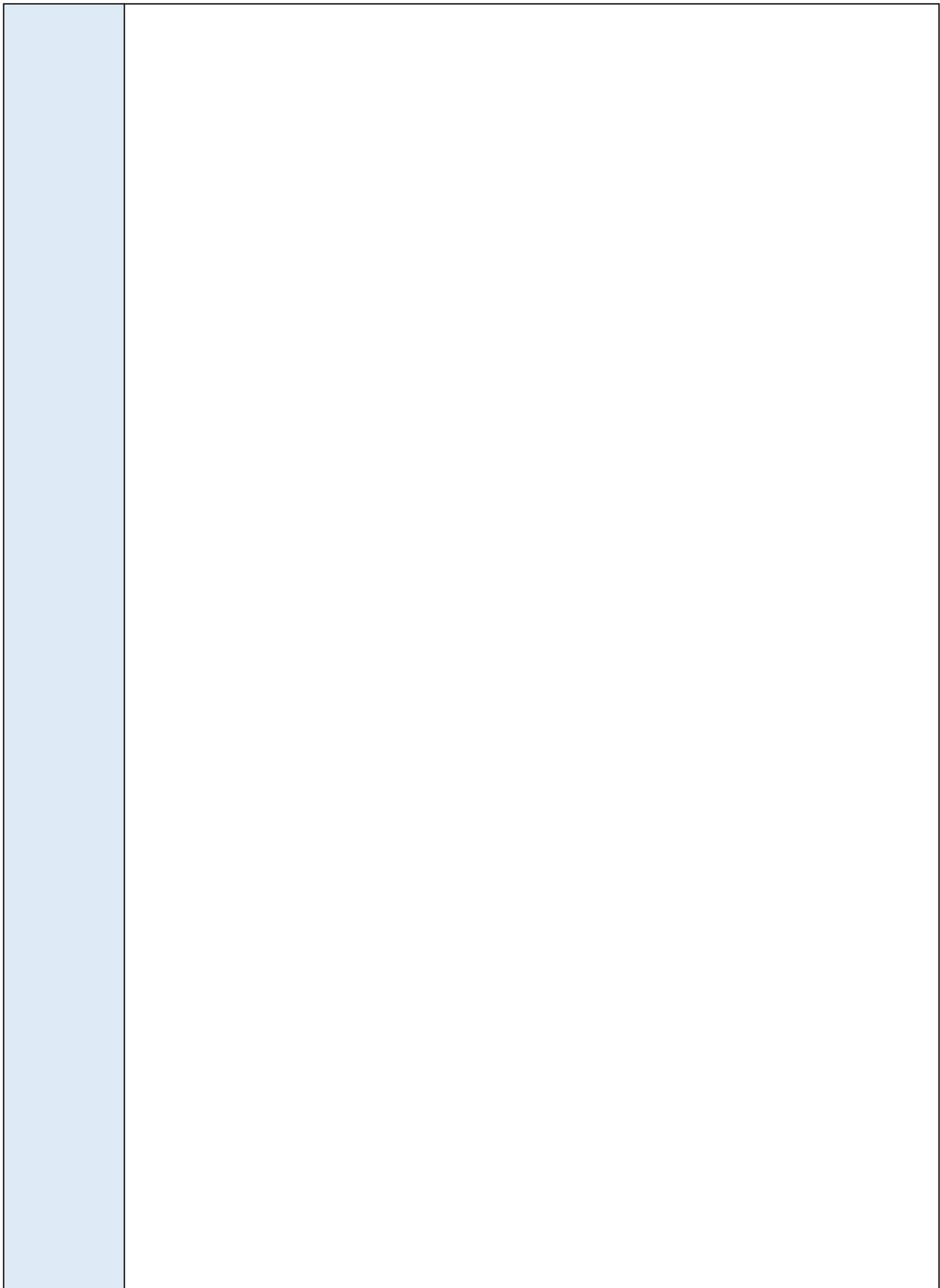| The response	The response
[5 marks] • provides a critical evaluation of the strengths, limitations and implications of ideas against all design criteria	[5 marks] • shows discerning refinement of ideas based on judgments
[4 marks] • provides a reasoned evaluation of the strengths and limitations of ideas against at least two design criteria	[4 marks] • shows effective refinement of ideas based on judgments
[3 marks] • provides a feasible evaluation of the strengths and limitations of ideas against at least one design criterion	[3 marks] • shows adequate refinements of ideas based on judgments
[2 marks] • provides a superficial evaluation of the strengths or limitations of ideas against at least one design criterion	[2 marks] • shows superficial refinement of ideas based on judgments
[1 mark] • provides statements about ideas	[1 mark] • shows changes to ideas related to some design criteria
[0 marks] • does not satisfy any of the descriptors above.	[0 marks] • does not satisfy any of the descriptors above.

Criterion: Synthesising a design concept

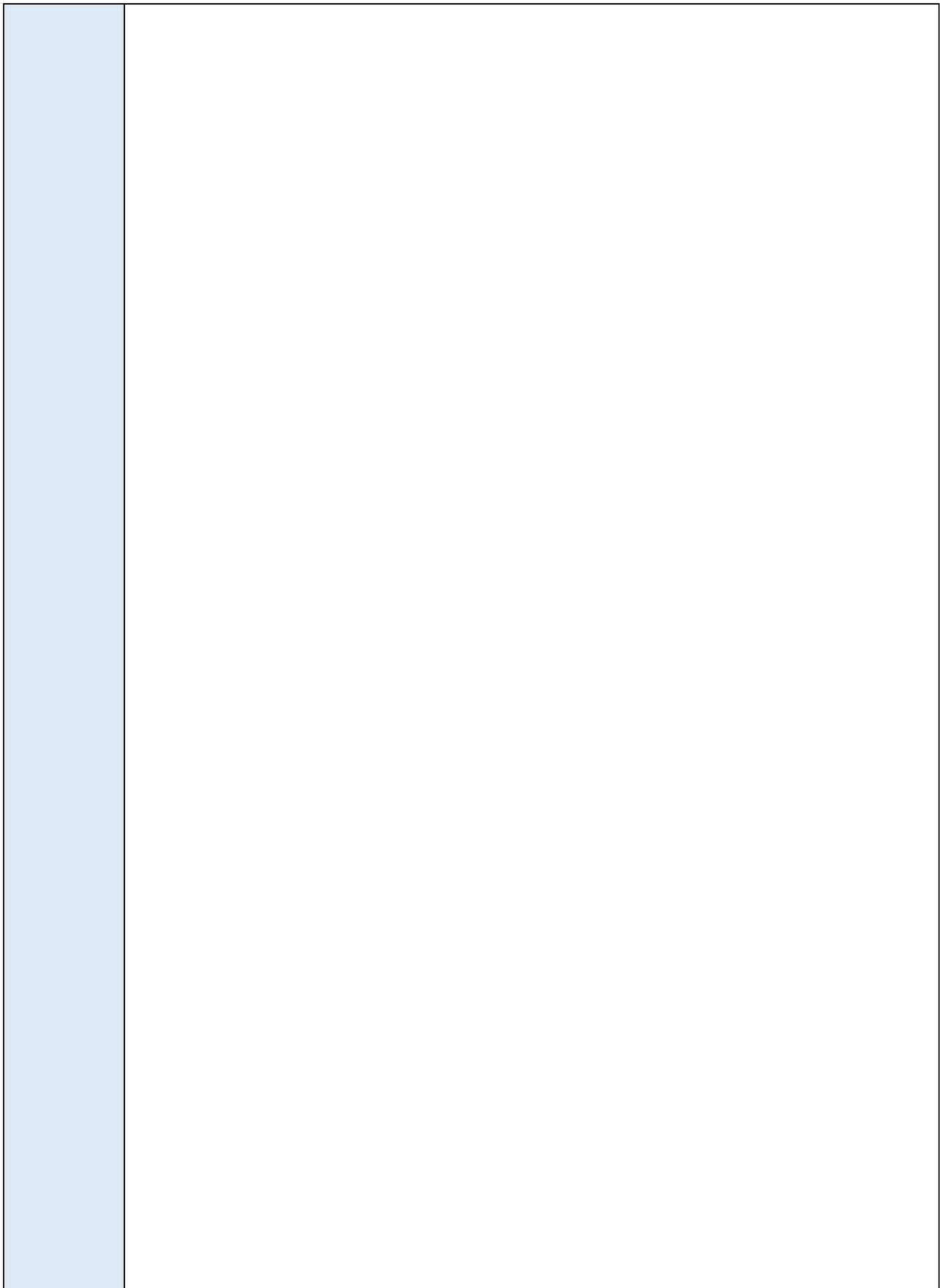| The response |
| --- |
| [7 marks]
• proposes an innovative design concept that
- includes a coherent and logical combination of attributes of multiple ideas and stimulus information
- satisfies all design criteria |
| [6 marks]
• proposes an innovative design concept that
- includes a logical combination of attributes of ideas and stimulus information
- satisfies all design criteria |
| [5 marks]
• proposes a credible design concept that
- includes a logical combination of attributes of ideas and stimulus information
- satisfies most design criteria |
| [4 marks]
• proposes a credible design concept that
- includes a combination of ideas and stimulus information
- satisfies most design criteria
OR
• proposes an innovative design concept that
- includes a combination of ideas and stimulus information
- satisfies some design criteria |
| [3 marks]
• proposes a simple design concept that
- includes a combination of an idea and stimulus information
- satisfies some design criteria |
| [2 marks]
• proposes a rudimentary design concept that
- reproduces a single idea
- satisfies some design criteria |
| [1 mark]
• shows a partial design concept |
| [0 marks]
• does not satisfy any of the descriptors above. |

Criterion: Representing

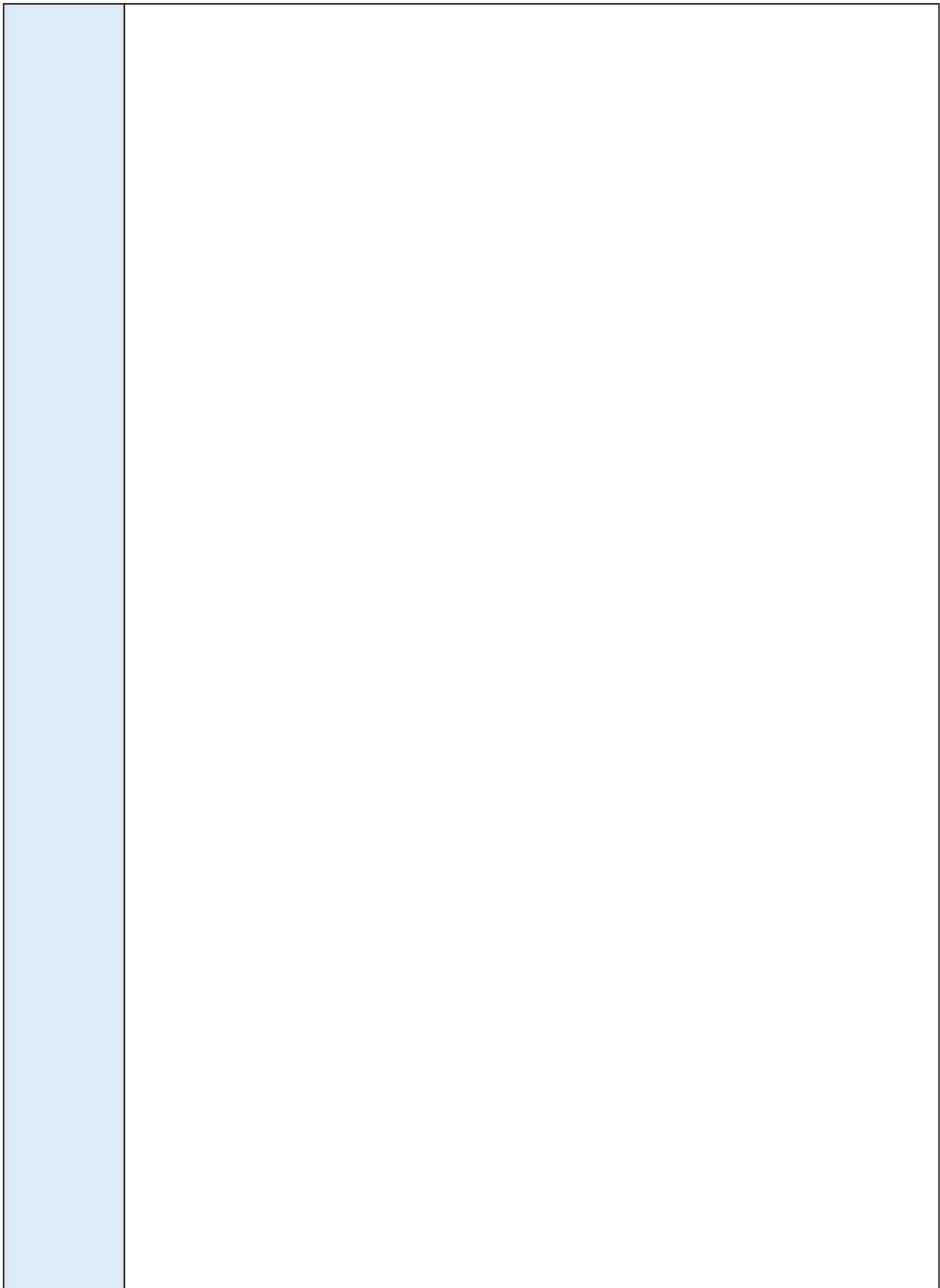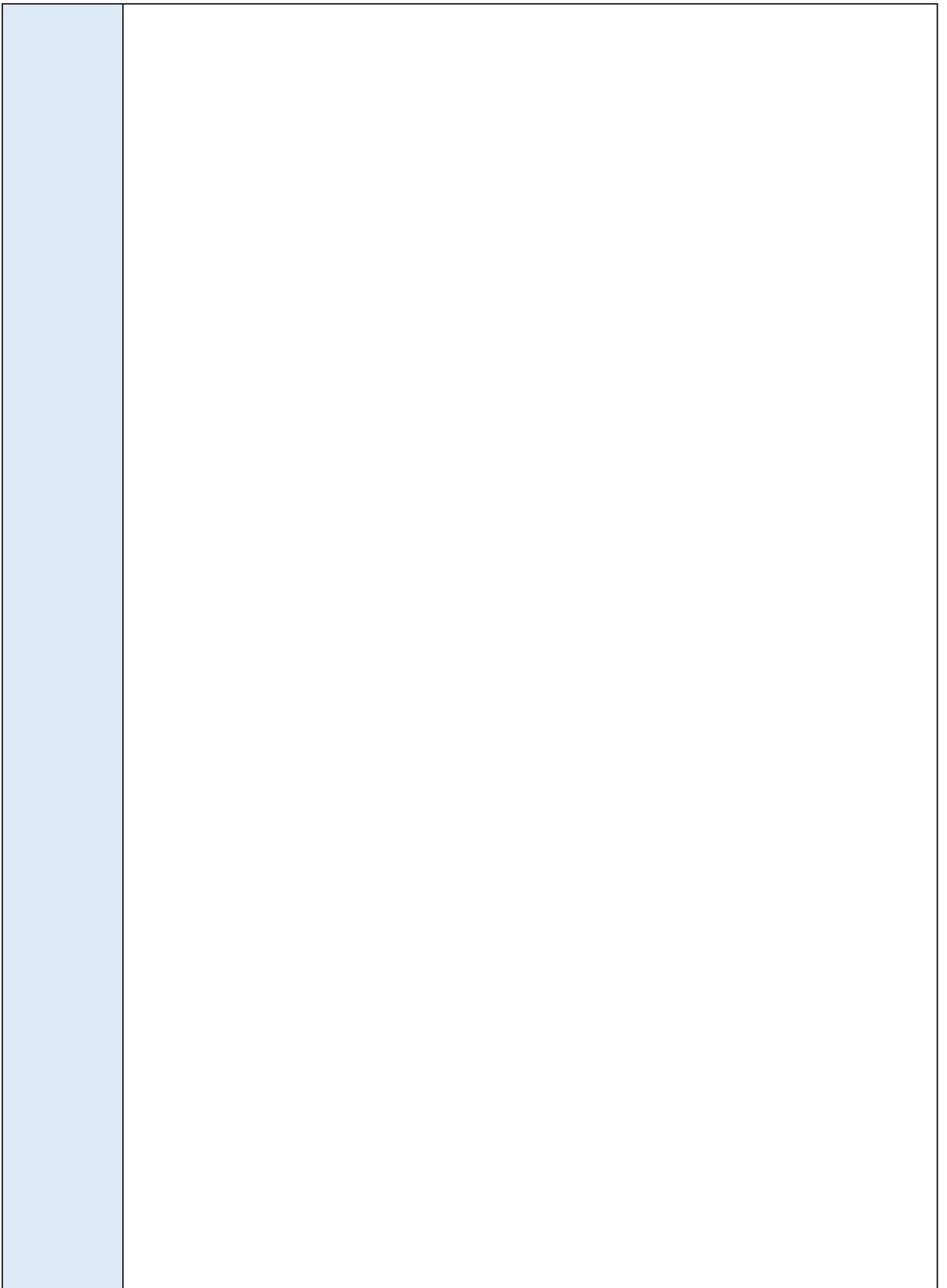| The response	The response
[5 marks] • shows sophisticated use of - elements and principles of visual communication to differentiate between critical and non-critical attributes in ideation and schematic sketching of ideas - fluent sequences of related sketches to easily and readily show the progression of understanding of ideas	[4 marks] • shows sophisticated sketching of a design concept using elements and principles of visual communication to differentiate between critical and noncritical attributes
[4 marks] • shows considered use of - elements and principles of visual communication to differentiate between attributes in ideation and schematic sketching of ideas - proficient sequences of related sketches to show the progression of understanding of ideas.	[3 marks] • shows considered sketching of a design concept using elements and principles of visual communication to differentiate between attributes
[3 marks] • shows appropriate use of - elements and principles of visual communication in ideation and schematic sketching of ideas - sketches that show the progression of understanding of ideas.	[2 marks] • shows appropriate sketching of a design concept using elements and principles of visual communication
[2 marks] • shows cursory use of sketching to show understanding of ideas OR • shows text descriptions of ideas supported by simple sketches	[1 mark] • shows cursory sketching of a design concept
[1 mark] • shows illogical use of sketching to represent ideas OR • shows text descriptions of ideas with unclear sketches	[0 marks] • does not satisfy any of the descriptors above.
[0 marks] • does not satisfy any of the descriptors above.	

2020 Question

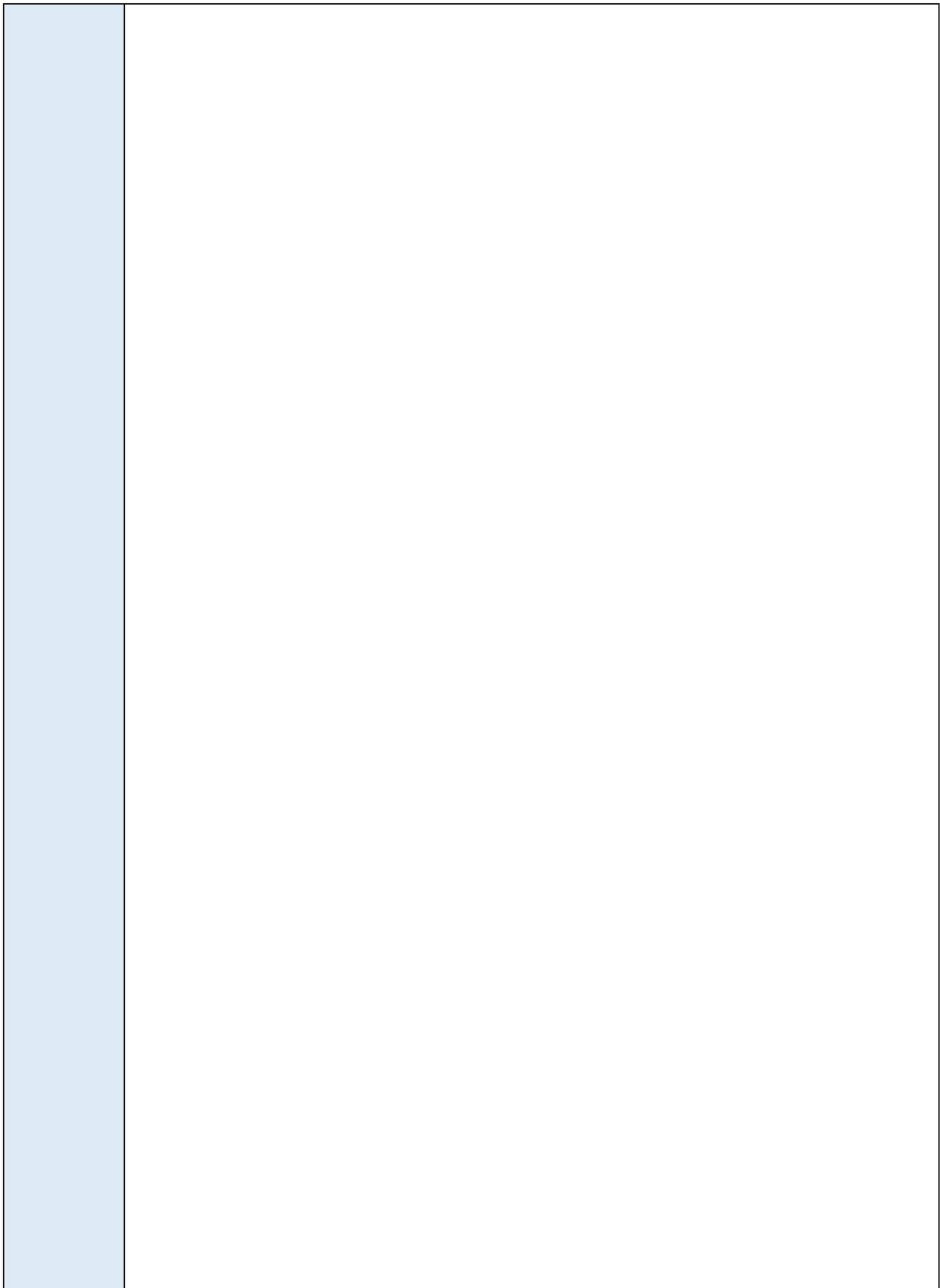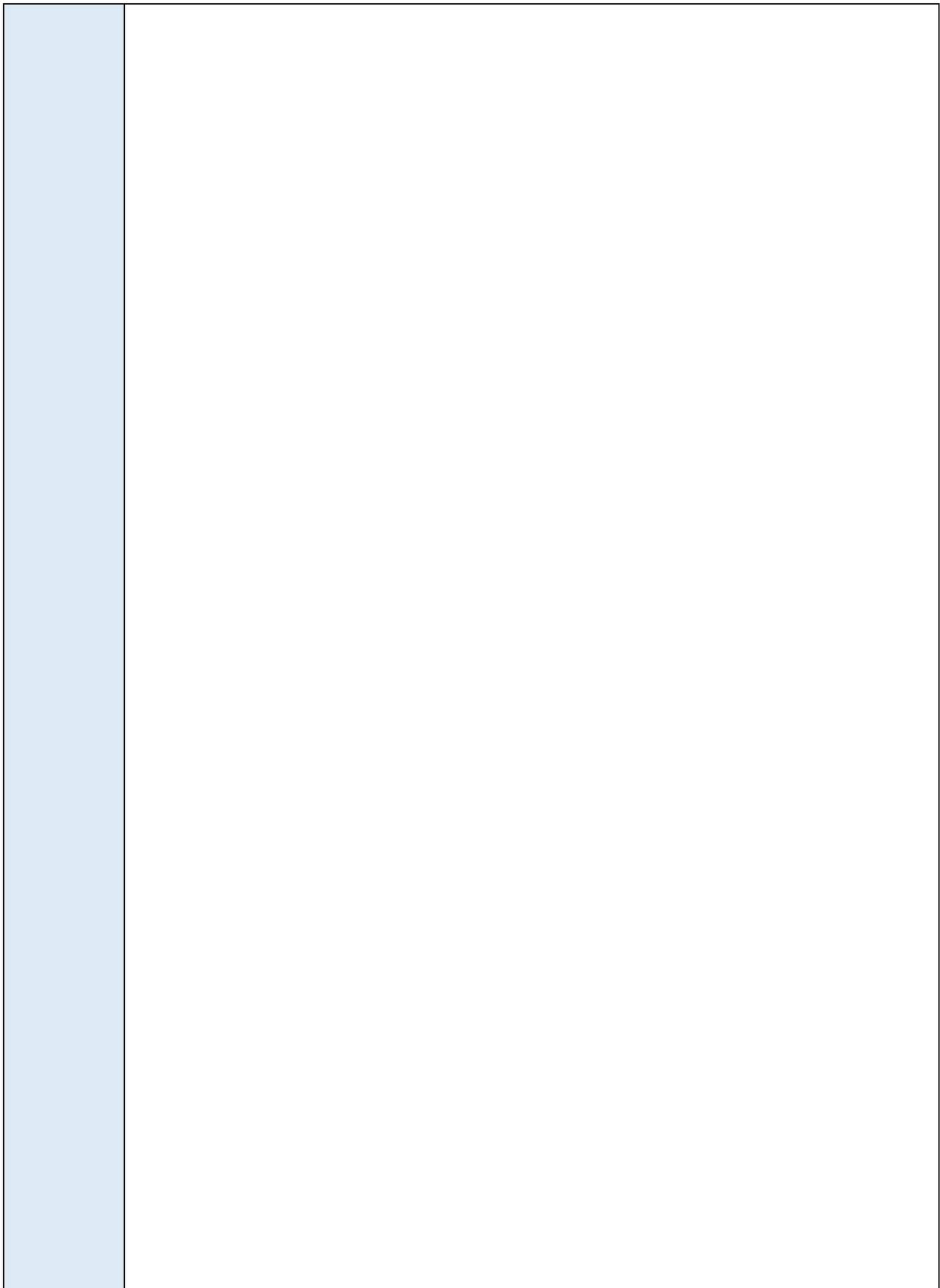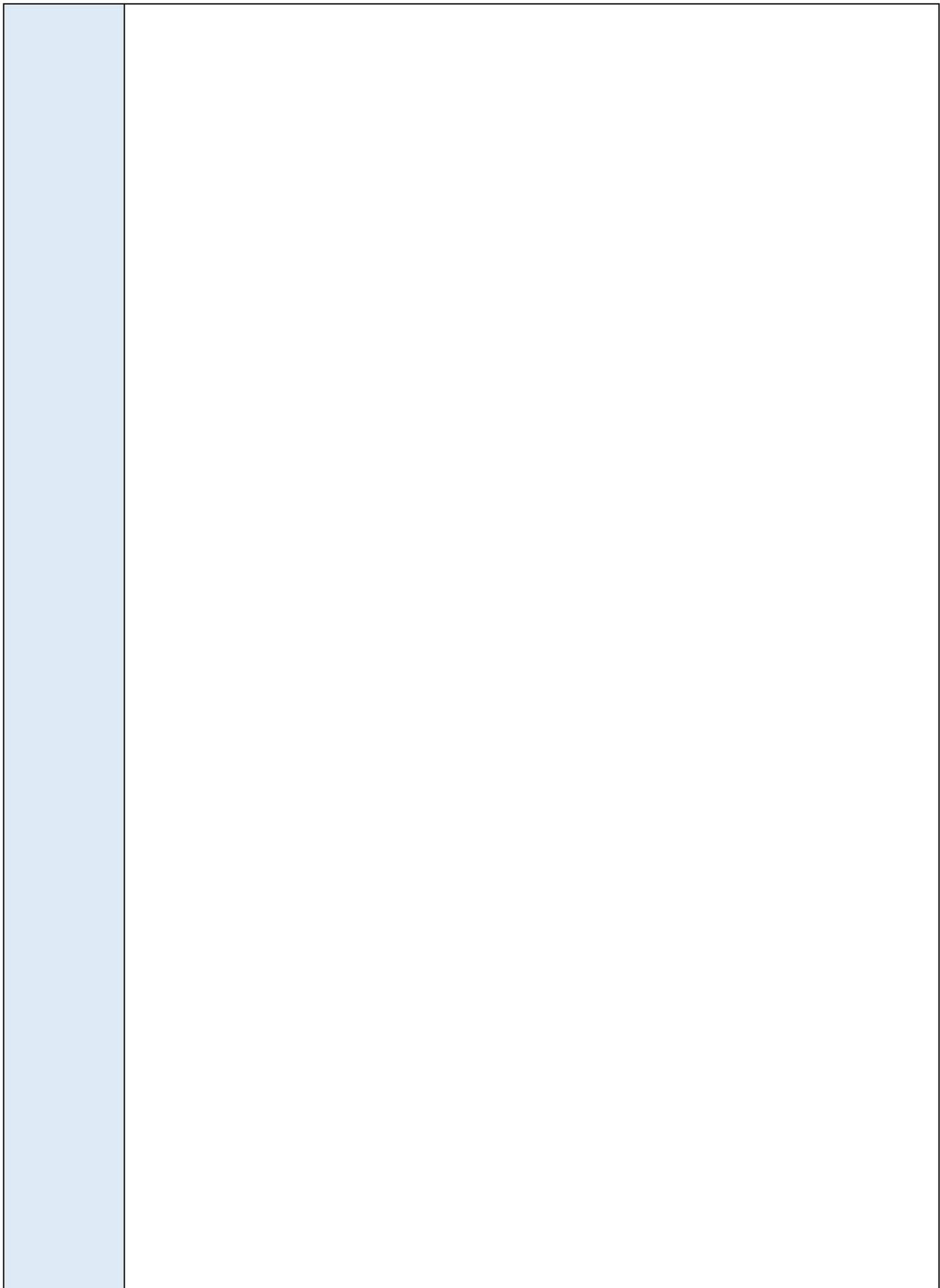|	
2020 **Paper 1** **Section 1** **Question 1** **Design** **Challenge**	Instructions • Refer to the stimulus book. • Represent your design work on four A3 pages in this question and response book. If you need more space for a response, use an additional response page. − Number your response pages in the order in which they should be read. − Cancel any incorrect response by ruling a single diagonal line through your work. − Write the page number of your alternative/additional response, i.e. See page … − If you do not do this, your original response will be marked. Use the stimulus provided to redesign the useful life cycle of a baby product. Your response should show application of the develop phase of the design process. Devise ideas and refine these based on your evaluation, using the design criteria to propose a design concept. Use sketches and annotations to represent your ideas and design concept. [28 marks] Note: The below space has been left so the stimulus can be larger on the next page.

Stakeholders' comments

High-quality clothes should last at least five years, and can be washed approximately 50 times.

High-quality toys can be passed from generation to generation.

Baby products become dangerous to children over time as materials break down and degrade.

Baby clothing is one of the worst offenders for creating waste, especially in an age of cheap, fast, disposable fashion.

Children often get tired of their own toys and desire the toys of others.

Bright primary colours stimulate brain development in babies.

It's important to provide safe, clean products to children.

A baby car seat has an expiration date stamped into the plastic.

Changes in technology make newer products more desirable.

Baby products are often handed down. Parents select the best and bin the rest.

Think globally but act locally.

Obsolete baby products

Baby products are made from various materials, including

wood
cardboard
textiles
metal
rigid plastic
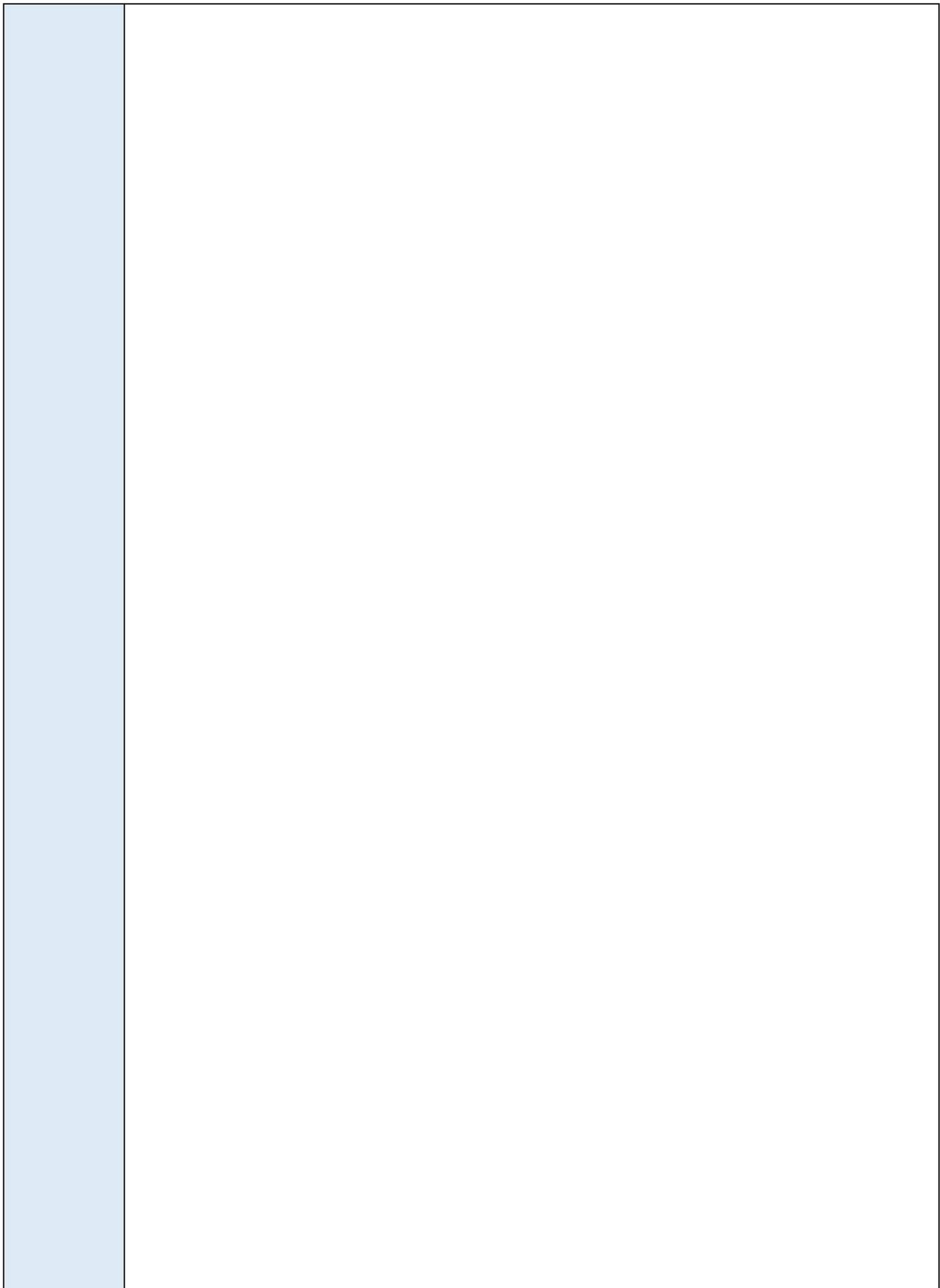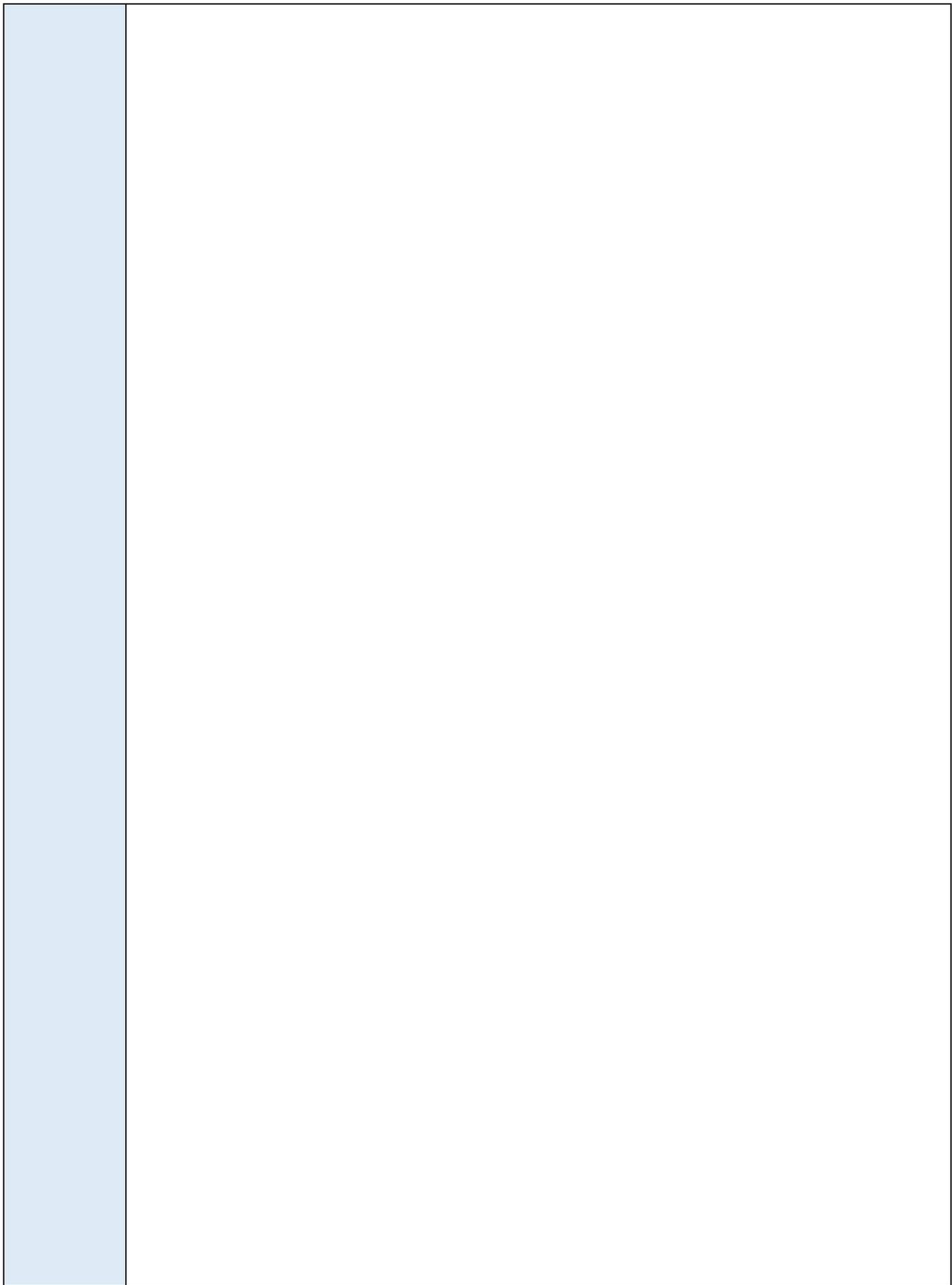flexible plastic

2020 Marking Guide

2020 Paper 1 Section 1 Question 1 **Design Challenge**	**Criterion: Devising ideas using divergent thinking in response to a redesign problem**
	The response
	[9 marks] • shows a wide range of ideas, from more than one point of view, perceptively devised with unique, credible and detailed attributes in response to the problem
	[8 marks] • shows a range of ideas, from more than one point of view, perceptively devised with unique, credible and detailed attributes in response to the problem
	[7 marks] • shows a wide range of ideas, from more than one point of view, purposefully devised with unique, credible and detailed attributes in response to the problem
	[6 marks] • shows a range of ideas, from more than one point of view, purposefully devised with credible and detailed attributes in response to the problem
	[5 marks] • shows a range of ideas purposefully devised with credible and detailed attributes in response to the problem
	[4 marks] • shows a range of ideas appropriately devised with credible attributes in response to the problem
	[3 marks] • shows ideas appropriately devised with credible attributes in response to aspects of the problem OR • shows an idea with credible and detailed attributes in response to the problem
	[2 marks] • shows ideas superficially devised in response to the problem OR • shows an idea with credible attributes in response to aspects of the problem
	[1 mark] • shows one or more ideas in response to aspects of the problem
	[0 marks] • does not satisfy any of the descriptors above.
	Criterion: Evaluating ideas and making refinements
	The response
	[6 marks] • shows discerning refinement of ideas based on judgments about the critical strengths, limitations and implications of attributes of ideas against all design criteria
	[5 marks] • shows effective refinement of ideas based on judgments about the logical strengths and limitations of ideas against all design criteria
	[4 marks] • shows adequate refinement of ideas based on judgments about the feasible strengths and limitations of ideas against most design criteria
	[3 marks] • shows adequate refinement of ideas based on judgments about the feasible strengths and limitations of ideas against some design criteria
	[2 marks] • shows superficial refinement of ideas based on identified strengths or limitations of ideas against some design criteria
	[1 mark] • shows changes to ideas related to the design criteria
	[0 marks] • does not satisfy any of the descriptors above.

Criterion: Synthesising to propose a design concept

The response

[7 marks]
• shows an innovative design concept that
- includes a coherent and logical combination of attributes of multiple ideas and stimulus information
- satisfies all design criteria

[6 marks]
• shows an innovative design concept that
- includes a logical combination of attributes of multiple ideas and stimulus information
- satisfies all design criteria

[5 marks]
• shows a credible design concept that
- includes a logical combination of ideas and stimulus information
- satisfies most design criteria

[4 marks]
• shows a credible design concept that
- includes a simple combination of ideas and stimulus information
- satisfies most design criteria
OR
• shows an innovative design concept that
- includes a simple combination of ideas and stimulus information
- satisfies some design criteria

[3 marks]
• shows a design concept that
- includes a simple combination of ideas and stimulus information
- satisfies some design criteria

[2 marks]
• shows a design concept that
- includes a simple idea and stimulus information
- satisfies some design criteria

[1 mark]
• shows a partial design concept that satisfies some design criteria

[0 marks]
• does not satisfy any of the descriptors above

Criterion: Representing ideas and a design concept
The response
[6 marks] • indicates sophisticated use of - elements and principles of visual communication to differentiate between critical and non-critical attributes in ideation and schematic sketching of ideas and a design concept - sequences of related sketches to easily and readily show the progression of understanding of ideas
[5 marks] • indicates considered use of - elements and principles of visual communication to differentiate between attributes in ideation and schematic sketching of ideas and a design concept - sequences of related sketches to show the progression of understanding of ideas

[4 marks]
• indicates appropriate use of
- ideation and schematic sketching of ideas and a design concept with labels and either 1 of the following
  • elements and principles of visual communication to differentiate between attributes
  • sketches that show the progression of understanding of ideas

[3 marks] • indicates appropriate use of - ideation sketching and schematic sketching - labels
[2 marks] • indicates cursory use of - ideation or schematic sketching - labels
[1 mark] • indicates illogical use of unclear ideation or schematic sketching
[0 marks] • does not satisfy any of the descriptors above.