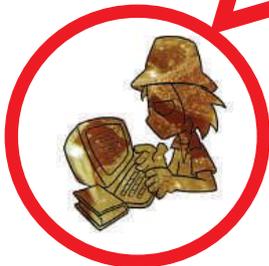# PRIME BITE E
Firing Ahead

Age range 9 - 11

Sunset Boulevard

Exploring the Forest

Firing Ahead

Golden Globes

The Sky's the Limit

Name:_____ Date:_____

Prime Bites

	This volume	ISBN	Approximate age range
E	Firing Ahead	978-1-921917-07-3	9-11yrs
	Others in the series:		
A	The Sky's the Limit	978-1-921917-03-5	5-7yrs
B	Sunset Boulevard	978-1-921917-04-2	6-8yrs
C	Exploring the Forest	978-1-921917-05-9	7-9yrs
D	Golden Globes	978-1-921917-06-6	8-10yrs

The age ranges given are suggestions only as they will vary between education districts.

A set of photocopy masters for PYP Maths published by IBID Press.

Name:_____ Date:_____

CONTENTS

Name:_____ Date:_____

OBJECTIVE 1: ADDITION

WORD NUMBER BITES

1.i   The car yard has two blue, three yellow and nine red cars for sale. How many cars are for sale?

Working Space:	
	Answer:

1.ii   We sold four tickets on Sunday, seven on Monday and eight on Tuesday. How many tickets have we sold?

Working Space:	
	Answer:

1.iii   We baked five sponges yesterday, three this morning, but need six more to fill our order. How many sponges are in the order?

Working Space:	
	Answer:
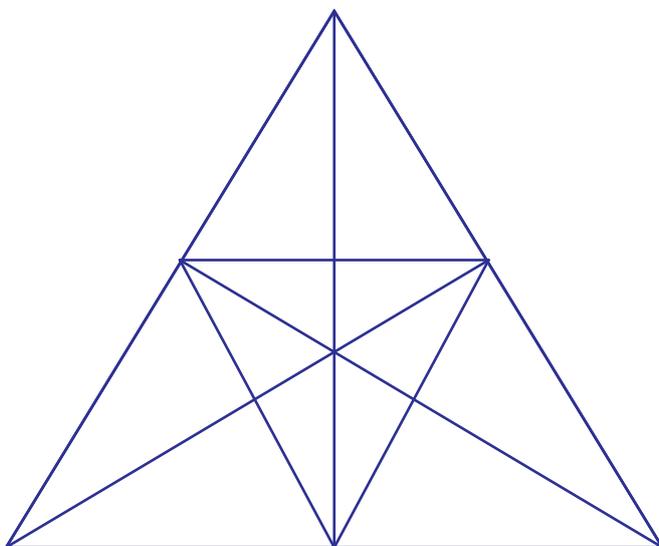
NIFTY NUMBER BITES

Look carefully at this figure.

How many triangles can you see.

A triangle can be counted even if it contains other, smaller triangles.

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

+	1	2	3	4	5	6	7	8	9	10	11	12
15												
13												

+	1	2	3	4	5	6	7	8	9	10	11	12
24												
42												

+	1	2	3	4	5	6	7	8	9	10	11	12
33												
51												

Name:_____ Date:_____

OBJECTIVE 2: SUBTRACTION

WORD NUMBER BITES

2.i   Bernie found eleven golf balls at the side of the golf course and sold nine. How many are left?

Working Space:	
	Answer:

2.ii   Jessica collected thirteen shells, but seven were broken. How many unbroken shells did Jessica collect?

Working Space:	
	Answer:

2.iii   0ur dog dug fifteen holes in the vegetable garden. I filled in twelve. How many holes are yet to be filled

Working Space:	
	Answer:

NIFTY NUMBER BITES

Use 4 buttons to create this answer on a calculator.

64

÷	7	8	9
×	4	5	6
+	1	2	3
–	0	=	√
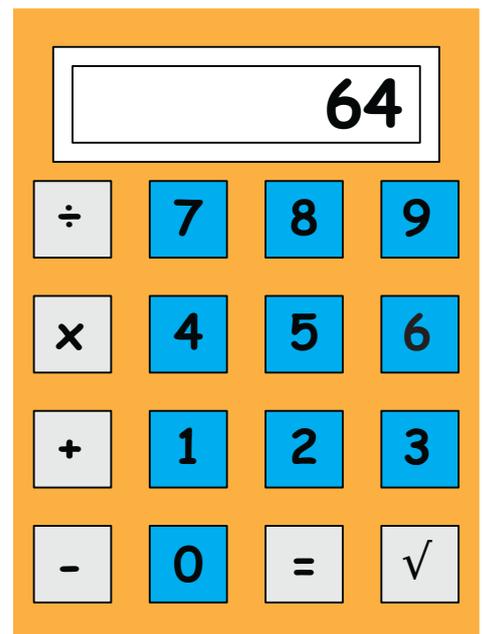
Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

–	17	18	19	20	21	22	23	24	25	26	27	28
1												
5												

–	17	18	19	20	21	22	23	24	25	26	27	28
12												
14												

–	27	58	79	90	61	42	33	34	75	86	97	68
23												
25												

What will I learn tomorrow?

Name:_____ Date:_____

OBJECTIVE 3: MIXED ADDITION AND SUBTRACTION

WORD NUMBER BITES

3.i   On our side of the street there are eleven new houses and there are five on the other side as well as six near the shops. How many are there altogether

Working Space:	
	Answer:

3.ii   Narelle bought a packet of fifteen biscuits and shared all but three with friends. How many were shared?

Working Space:	
	Answer:

3.iii   Stephanie ran five kilometres on each of three days, and six kilometres on the third. How many kilometres is this in total?

Working Space:	
	Answer:

NIFTY NUMBER BITES

42

45   36   72

35   28   56   49

119   116   110

44   78   32   23

65   57   75   13

74   48   61   17

34   38   43   71

105   112   45   63   70

53   89   30   23

34   50   46

91   84

57   48   34   93

47   61   82

98   65   54   77

Starting at the smallest number that can be divided by 7 without a remainder, draw a line to the next smallest number that can also be divided by 7 without a remainder.

Continue in this way until a shape emerges.

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

+	17	18	19	10	11	12	13	24	25	26	27	28
22												
31												

-	16	17	18	19	20	21	22	23	24	15	26	27
12												
14												

-	28	36	49	57	77	81	92	50	26	33	25	64
14												
25												

Prepare to land!

Name:_____ Date:_____

OBJECTIVE 4: MULTIPLICATION

WORD NUMBER BITES

4.i   Kathleen went fishing and caught five fish on four days. How many fish did Kathleen catch in total?

Working Space:	
	Answer:

4.ii   Our three lemon trees are growing well. Each tree has nine ripe lemons. How many lemons are there altogether?

Working Space:	
	Answer:

4.iii   The sports store sells tins of tennis balls, each tin containing four balls. If I buy eight tins, how many tennis balls will I have?

Working Space:	
	Answer:

NIFTY NUMBER BITES
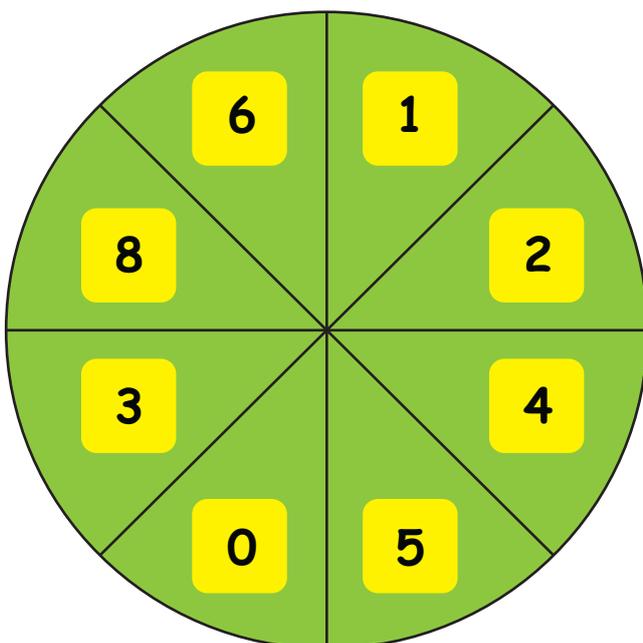
Each part of the circle has a number.

How many ways can you find to add four of these numbers together to total 14?

Numbers can be used more than once but you can't use the same numbers in a different order.

Record your equations.

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

×	6	9	3	5	10	8	0	7	1	4	2
4											
5											

×	8	0	4	9	2	10	1	7	5	6	3
6											
7											

×	7	4	2	6	9	0	8	10	3	1	5
8											
9											

Name:_____ Date:_____

OBJECTIVE 5: DIVISION

WORD NUMBER BITES

5.i   Twenty-seven cuttings were planted in rows of nine. How many rows were there?

Working Space:	Answer:

5.ii   Forty-eight cookies were placed evenly into six bags. How many cookies were in each bag?

Working Space:	Answer:

5.iii   Fifteen identical socks were put into pairs. How many pairs were there and were there any left over?

Working Space:	Answer:

NIFTY NUMBER BITES

15

3		
2	6	

15

4	4	
		6

Each row, column and diagonal in a magic square must add up to the assigned value.

18

1		
5	2	

18

11	2	
	10	

Can you complete these?

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames? Shaded boxes have remainders.

÷	10	20	80	110	40	70	50	60	100	90	30
10											
5											

÷	16	22	8	26	15	24	18	21	36	27	30
2					▓			▓		▓	
3	▓	▓	▓	▓							

÷	10	16	30	24	28	12	5	14	20	24	70
4	▓		▓				▓	▓			
7	▓	▓	▓	▓		▓	▓		▓	▓	

What has Monty learnt?

Name:_____ Date:_____

OBJECTIVE 6: MIXED MULTIPLICATION AND DIVISION

WORD NUMBER BITES

6.i　　Each of nine students needed four exercise books. How many books were needed?

Working Space:	Answer:

6.ii　　If twenty-five biscuits are shared equally between five students, how many will each receive?

Working Space:	Answer:

6.iii　　There were six oranges in each of five bags. How many oranges were there in total?

Working Space:	Answer:

NIFTY NUMBER BITES

As a pre-requisite to attempting this question, students will need an understanding of the structure of polygons, in particular the pre-determined values of the totals of the internal angles.

A polygon has a smallest internal angle of 120°
The next largest angle is 5° bigger (125°) and
the next is 5° bigger again (130°) and so on.
How many sides does the polygon have?
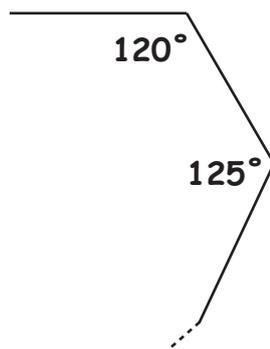
120°

125°

Name:_____ Date:_____

Skills Number Bites

Can you solve these number frames? Shaded boxes have remainders.

×	1	2	3	4	5	6	7	8	9	10	11	12
1												
3												

÷	16	22	14	26	15	24	18	21	36	27	30
6	▓	▓	▓	▓	▓			▓		▓	
5	▓	▓	▓	▓		▓	▓	▓	▓	▓	

On track?!!

Name:_____ Date:_____

OBJECTIVE 8: MONEY - ADDITION

WORD NUMBER BITES

7.i   Sally bought a muffin for €2.50 and a drink for €3. air. How much was spent?

Working Space:	
	Answer:

7.ii   Kelly spent £5.50, £6.95 and £12.40 at the shopping centre. How much did Kelly spend in total?

Working Space:	
	Answer:

7.iii   1 bought three Christmas presents. The first cost $17, the second $8 and the third $15. How much did I spend altogether

Working Space:	
	Answer:

NIFTY NUMBER BITES

16	24	7	9
17	13	20	28
18	5	19	26
8	32	48	12

Cross out all numbers exactly divisible by 4.

Cross out all the odd numbers.

Cross out the nunber which is exactly half of 52.

Which number is left?

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

+	$1	$2	$3	$4	$5	$6	$7	$8	$9	$10	$11	$12
$3												
$4												

+	£1	£2	£3	£4	£5	£6	£7	£8	£9	£10	£11	£12
£22												
£71												

+	€1	€2	€3	€4	€5	€6	€7	€8	€9	€0	€1	€12
€18												
€19												

Annual income twenty pounds, annual expenditure nineteen, nineteen and six, result happiness. Annual income twenty pounds, annual expenditure twenty pounds ought and six, result misery.   Mr Micawber in David Copperfield by Charles Dickens

Name:_____ Date:_____

OBJECTIVE 8: MONEY - SUBTRACTION

WORD NUMBER BITES

8.i   A jacket cost €65.50. How much change was there from €100?

Working Space:	Answer:

8.ii   A download of Debbie's favorite songs cost $17.95. How much change would there be from twenty dollars?

Working Space:	Answer:

8.iii   A family bought four theatre tickets costing thirteen dollars fifty cents each. How much change was there from a $100 note?

Working Space:	Answer:

NIFTY NUMBER BITES

1	2		4	5
				3
3				

Using only the numbers 1 to 5, can you fill in the empty squares?

No row, column or diagonal can have the same number more than once.

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

–	£24	£35	£46	£76	£81	£92	£17	£71	£32	£83	£94	£45
£11												
£14												

–	$45	$76	$47	$28	$19	$15	$21	$82	$73	$16	$95	$26
$12												
$15												

–	€90	€71	€52	€33	€24	€55	€36	€27	€68	€19	€20	€21
€13												
€16												

Name:_____ Date:_____

OBJECTIVE 9 REVISION

WORD NUMBER BITES

9.i   There were 33 cherries in a bag. If they were shared equally between three friends, how many did each receive?

Working Space:	
	Answer:

9.ii   In our school fun run, Janet ran 7km, Sally ran 6km, Michaela ran 8km and Joanne 4km. What was the total number of kilometres run?

Working Space:	
	Answer:

9.iii   The 40 litre tank neede a top-up. It already contained twenty-one litres so how much more was needed to fill the tank

Working Space:	
	Answer:

NIFTY NUMBER BITES

How many number words are in this puzzle.

Record each one you find

o	e	t	h	i	r	t	y
n	i	l	t	o	s	i	x
e	g	y	t	y	e	o	m
l	h	t	w	t	v	w	i
e	t	f	e	n	e	t	l
v	e	i	l	e	n	h	l
e	n	f	v	w	t	r	i
n	i	n	e	t	y	e	o
f	o	u	r	t	e	e	n

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

+	1	2	3	4	5	6	7	8	9	10	11	12
21												
13												

−	15	16	17	18	19	20	21	22	23	24	25	26
2												
4												

×	1	2	3	4	5	6	7	8	9	10	11	12
7												
9												

Stay Safe

Name:_____ Date:_____

OBJECTIVE 10: TIME PROBLEMS

WORD NUMBER BITES

10.i   The tennis match started at 9:30a.m. and finished at 2:00 pm. How long did the match last?

Working Space:	Answer:

10.ii   The small hand is just after the six and the large hand of the clock is on three. What is the time?

Working Space:	Answer:

10.iii   If I read 15 pages of a book every hour. How many pages could I read in four hours at the same speed?

Working Space:	Answer:

NIFTY NUMBER BITES

	1	2	3	4
A				
B				
C				
D				

Insert the answers into the designated squares.

A1 100–24	B3 100–78	D4 100 –34	C4 100–15
A2 100–63	B1 100–51	A4 100–88	D1 100–39
C1 100–48	A3 100–67	B4 100–93	D2 100 –6
C2 100–56	D3 100–19	C3 100 –60	B2 100–82

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

+	3hr	9hr	8hr	5hr	10hr	6hr	0hr	7hr	11hr	4hr	2hr
13hr											
14hr											

−	16days	22days	31days	9days	27days	40days	14days	17days	15days	28days	11days
9days											
5days											

×	6min	4min	11min	7min	9min	12min	8min	10min	3min	0min	5min
4min											
9min											

Do you know the answers?

Name:_____ Date:_____

OBJECTIVE 11: LENGTH PROBLEMS

WORD NUMBER BITES

11.i   A kilometre is 1000 metres. How many kilometres in 30000 metres?

Working Space:	
	Answer:

11.ii   Pamela threw the shot eight metres, Teresa 870cm and Debbie 8 metres 55cm. Who had the best throw

Working Space:	
	Answer:

11.iii   I drew a triangle with equal sides of twenty-five cm. How long would the sides be if we added them together?

Working Space:	
	Answer:
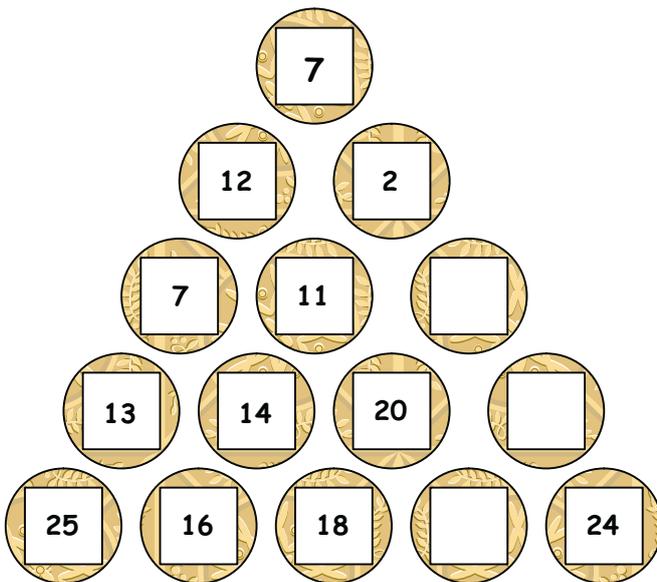
NIFTY NUMBER BITES

Insert the missing numbers.

Each row's total is double that of the row above.

7

12   2

7   11

13   14   20

25   16   18   24

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

+	14km	61km	21km	35km	41km	51km	67km	71km	81km	83km	85km	43km
12km												
14km												

×	4m	41m	24m	34m	44m	57m	64m	75m	84m	94m	23m	14m
3												
6												

−	20cm	36cm	26cm	41cm	19cm	52cm	63cm	29cm	18cm	23cm	21cm	22cm
14cm												
18cm												

Good question!

Name:_____ Date:_____

OBJECTIVE 12: MASS PROBLEMS

WORD NUMBER BITES

12.i　Kim needs 25kg of potatoes. If they are sold in 5kg bags, how many bags should Kim buy?

Working Space:	
	Answer:

12.ii　27kg of apples are shared equally amongst three friends. How many kilograms do they each get?

Working Space:	
	Answer:

12.iii　I needed 200g of flour for the recipe but could only find 125g. How much more do I need?

Working Space:	
	Answer:

NIFTY NUMBER BITES

Find a way through this maze.

Before you start, decide on a strategy.

Record it and comment on its success or failure.
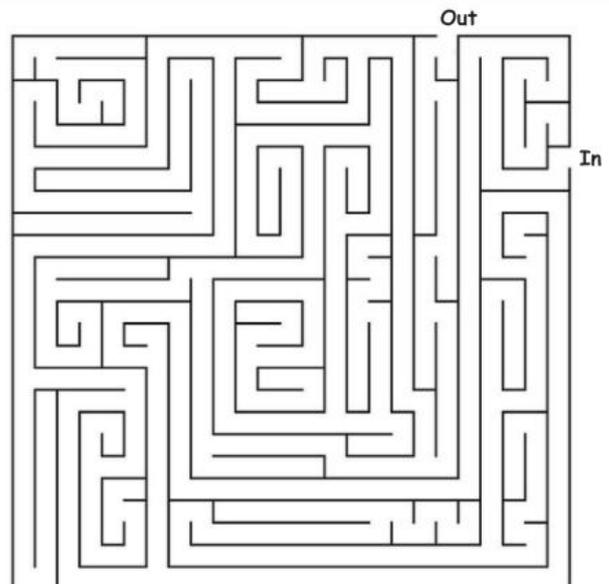
Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

+	1g	2g	3g	4g	5g	6g	7g	8g	9g	10g	11g	12g
10g												
13g												

−	21T	25T	43T	84T	75T	66T	72T	81T	19T	40T	4T	12T
2T												
4T												

×	1kg	2kg	3kg	4kg	5kg	6kg	7kg	8kg	9kg	10kg	11kg	12kg
6												
7												

Name:_____ Date:_____

OBJECTIVE 13: CAPACITY PROBLEMS

WORD NUMBER BITES

13.i   Joleen's truck uses diesel fuel. It has a 60 litre tank. If it currently holds only 16 litres, how much more is needed for it to be full?

Working Space:	Answer:

13.ii   My drink bottle, when full, holds 425ml. How much less than a half of a litre is this?

Working Space:	Answer:

13.iii   Our backyard pool needs 5500 litres to fill it. It is half full, so how many litres have we already used?

Working Space:	Answer:

NIFTY NUMBER BITES

**Fill in the gaps in these number patterns
Give a short description of each pattern.**

A. 1, 4, 9, ..., 25, ..., ...

The pattern is:

B. 1, 3, 7, ...,13, ..., ...

The pattern is:

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

+	1ml	12ml	22ml	32ml	42ml	52ml	62ml	72ml	82ml	92ml	102ml	112ml
5ml												
7ml												

−	5ml	15ml	25ml	35ml	45ml	55ml	65ml	75ml	85ml	95ml	105ml	115ml
2ml												
4ml												

✕	1L	2L	3L	4L	5L	6L	7L	8L	9L	10L	11L	12L
4												
8												

Learning can bring a sense of wonder.

Name:_____ Date:_____

OBJECTIVE 14: REVISING MEASUREMENT

WORD NUMBER BITES

14.i   Monty the bulldog weighs 26kg exactly twice as much as Kitty the cat. How much does Kitty weigh?

Working Space:	
	Answer:

14.ii   A stamp for a letter costs 65 cents and Sally needs four. What will be the cost of the stamps?

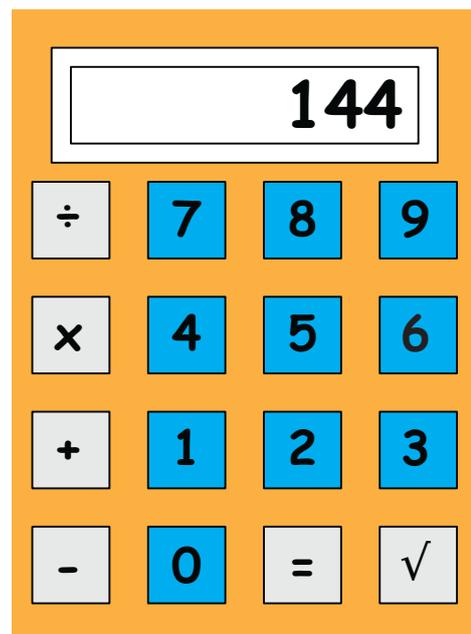| Working Space:	
	Answer:

14.iii   The container of oil held 60 litres but one third has been used to service the tractor. How much oil is left in the container?

Working Space:	
	Answer:

NIFTY NUMBER BITES

Change the 144 into 12 using the fewest number of buttons.

Record your tries.

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

+	52g	82g	22g	42g	92g	2g	62g	102g	12g	72g	112g	32g
12g	64g											
14g			36g									

-	55T	85T	5T	105T	35T	75T	95T	115T	15T	45T	65T	25T
13T		72T										
15T					20T							

×	3s	6s	11s	7s	5s	9s	8s	2s	10s	4s	12s	1s
4	12s											
6	18s											

North-west isn't it Willy?

Name:_____ Date:_____

OBJECTIVE 15: FRACTIONS

WORD NUMBER BITES

15.i   ¼kg of apples cost £1.90. How much per kilogram is this?

Working Space:	
	Answer:

15.ii   ½ of what I need for next week's rent is €230. How much is a week's rent?

Working Space:	
	Answer:

15.iii   After ⅓ of our journey we had travelled 23km. How long is the entire journey?

Working Space:	
	Answer:

NIFTY NUMBER BITES

54   44   72 80
17   25   34   58
63   56   75   38
66   74   55
48   54   64 88
45   34   37 70
50   42   96
27   38   43
66   90   102
29   110   116
128   120
49   68   86
98   90   102
89   83   81
90   87   105
109   100   106
136   140
40   32   112 104

Start at the lowest number that can be divided by 8 without a remainder.

Join it to the next highest number that can be divided by 8 without a remainder.

Continue joining increasing multiples of 8.

What shape do you see?

Name:_____ Date:_____

Skills Number Bites

Can you solve these number frames?

	1	20	3	40	5	60	7	8	80	10	11	12
½of												
¼of												

	18	24	32	40	5	16	72	80	9	48	88	56
¼of												
⅛of												

'Shops' come in many forms.

Name:_____ Date:_____

OBJECTIVE 16: MIXED EXAMPLES: MONEY

WORD NUMBER BITES

16.i　With a $100 note Daniela bought ten bags of potting mix costing $42.00 How much change was there?

Working Space:	Answer:

16.ii　Eight 50cent coins, seven 20cent coins and five $1 coins makes how much in dollars and cents?

Working Space:	Answer:

16.iii　Games of ten pin bowling cost $5.50 How much would it cost to play five games?

Working Space:	Answer:

NIFTY NUMBER BITES SKILLS
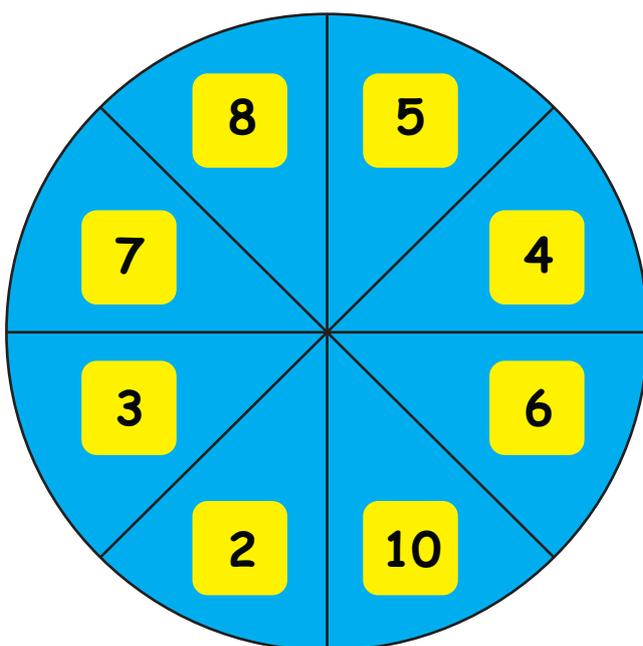
There is a number in each slice of the circle.

Use four of these to add to 16.

How many ways can you find to do this?

Numbers can be used more than once but you can't use the same numbers in a different sequence.

(Circle slices: 8, 5, 7, 4, 3, 6, 2, 10)

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

+	$57	$87	$27	$47	$97	$7	$67	$107	$17	$77	$117	$37
$12	$59											
$14			$41									

−	£56	£86	£6	£106	£36	£76	£96	£116	£16	£46	£66	£26
£13		$73										
£16					$40							

×	€39	€69	€119	€9	€59	€99	€79	€29	€109	€49	€89	€19
3	€117											
7												

Name:_____ Date:_____

OBJECTIVE 17: GENERAL REVISION

WORD NUMBER BITES

17.i   The clock reads 9:37. How many minutes will pass before the clock reads 10:00?

Working Space:	
	Answer:

17.ii   An ant walks around a rectangular brick with sides 18cm by 12cm. How far does the ant walk in centimetres?

Working Space:	
	Answer:

17.iii   Jacklyn's scores on a history tests have been 17, 18, 10, 19 and 18. What is the total score for the five tests

Working Space:	
	Answer:

NIFTY NUMBER BITES

21

	8	
11	6	

21

6	14	
13		

In magic squares, all rows, columns and diagonals must add up to the amount assigned.

24

	3	7
		2

24

	11	
	1	
13		

Can you fill in the empty squares?

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

+	8s	18s	27s	35s	48s	58s	62s	77s	81s	98s	87s	56s
2s	10s											
4s	12s											

−	8T	16T	26T	36T	46T	56T	66T	76T	86T	96T	6T	11T
6T	2T											
5T	3T											

×	1g	22g	32g	42g	52g	62g	72g	82g	92g	10g	11g	12g
4	4g											
6	6g											

Steady as you go!

Name:_____ Date:_____

OBJECTIVE 18: GENERAL REVISION

WORD NUMBER BITES

18.i   Judith took five hours to paint a room. How long would it take to paint eight rooms of similar size?

Working Space:	
	Answer:

18.ii   The team needs to buy four footballs at $7 per ball. What will the total cost be?

Working Space:	
	Answer:

18.iii   Outside the gym there were 72 shoes of different shapes and sizes. Assuming matches can be made, how many pairs of shoes would this make?

Working Space:	
	Answer:

NIFTY NUMBER BITES

$$2 \bigcirc + 5 \square + 4 \hexagon = 33$$
$$\bigcirc - 2 \square - \hexagon = -9$$
$$3 \bigcirc - 3 \square - 3 \hexagon = -18$$

Can you find the values represented by the symbols?

Record your reasoning.

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

–	18	28	83	78	92	73	65	77	88	93	107	111
12												
14												

+	6	16	26	36	46	56	66	76	86	96	106	116
33												
45												

×	1	2	3	4	5	6	7	8	9	10	11	12
4												
6												

Exploration is an important tool for learning.

Name:_____ Date:_____

OBJECTIVE 19: ADDITION

WORD NUMBER BITES

19.i   Joan's scores in cricket were 23, 35 and 22. How many runs were scored over the three matches?

Working Space:	
	Answer:

19.ii   Tanya drove a car to London and back again. It was 105 kilometres one way. How many kilometres was it for the total trip?

Working Space:	
	Answer:

19.iii Fifteen sparrows, seven parrots and five crows visited our bird bath yesterday. How many birds were there altogether

Working Space:	
	Answer:

NIFTY NUMBER BITES

Look at all the numbers in the diagram.

Cross out all the square numbers, then all the numbers divisible by 9 without remainders and finally cross out the number that is ¼ of 128

What number is left?

25	9	36	49
108	121	54	4
72	64	66	90
100	32	45	81

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

+	5	15	25	35	45	55	65	75	85	95	105	115
27	32											
15	15											

+	12	22	32	42	52	62	72	82	92	102	112	122
34	43											
52	64											

+	10	20	30	40	50	60	70	80	90	100	110	120
47	57											
68	78											

Mind how you go

Name:_____ Date:_____

OBJECTIVE 20: SUBTRACTION

WORD NUMBER BITES

20.i   Mason swam fify-five laps of the indoor pool, while Barry swam twenty-one. How many more laps did Mason swim?

Working Space:	
	Answer:

20.ii   Wendell ran 120 metres to the shop and back home again. How many metres would it be just going to the shop

Working Space:	
	Answer:

20.iii At the airport, eighty aircraft took off during the day, while fifty-five arrived. What is the difference between arrivals and departures?

Working Space:	
	Answer:

NIFTY NUMBER BITES

2	4		8	10
				6
	8			

Fill in the blank squares by using the even numbers 2 - 10.

A number can only be used once in any row, column or diagonal.

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

−	51	8	21	41	91	121	61	101	11	71	111	31
3	48											
6	45											

−	54	84	65	104	34	75	94	114	64	45	64	24
13	41											
15	39											

−	33	63	113	123	53	93	73	23	103	43	83	16
14	19											
16	17											

Name:_____ Date:_____

OBJECTIVE 21: MIXED ADDITION & SUBTRACTION

WORD NUMBER BITES

21.i The poultry farmer sold 130 out of his 155 hens. How many hens were kept?

Working Space:	
	Answer:

21.ii   In Race 1 there were 13 horses. In Race 2 there were 14 horses and in Race 3 there were 15 horses. How many horses altogether were there in the three races?

Working Space:	
	Answer:

21.iii   Henrietta had 35 marbles and won 16 more at lunchtime, then lost 7 after school. How many marbles does Henrietta have now?

Working Space:	
	Answer:

NIFTY NUMBER BITES

c	o	n	e	s	p	o	t
i	s	t	a	r	e	c	d
r	q	h	l	o	n	u	n
c	u	b	e	r	t	r	o
l	a	d	e	l	a	v	m
e	r	b	n	a	g	e	a
w	e	m	i	v	o	r	i
s	o	b	l	o	n	g	d
e	l	g	n	a	i	r	t

List all the shape words you can find in this diagram.

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

+	12	32	31	42	50	61	73	80	29	10	51	23
51												
73												

-	71	82	63	94	54	60	77	85	93	40	41	52
12												
14												

-	51	72	83	64	95	76	47	83	96	90	71	52
21												
24												

Investigation can often lead to an answer.

Name:_____ Date:_____

OBJECTIVE 22: MULTIPLICATION

WORD NUMBER BITES

22.i   Each carton of cornflakes holds ten packets. How many packets would fit into five cartons?

Working Space:	Answer:

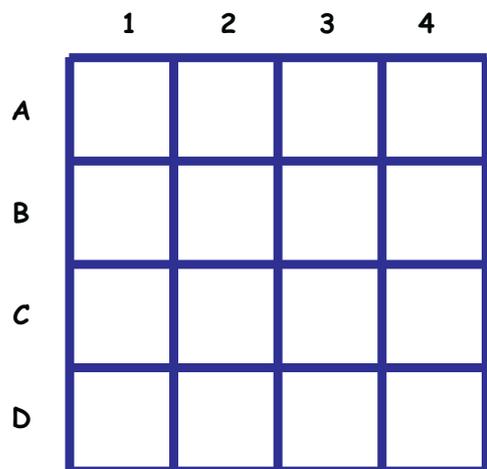22.ii   A golf course has eighteen holes. If it was played four times, how many holes would be played?

Working Space:	Answer:

22.iii   We bundled the notices in fifty lots of five. How many single notices did we have to print?

Working Space:	Answer:

NIFTY NUMBER BITES

Using the key at the bottom of the diagram, fill in the squares.

	1	2	3	4
A				
B				
C				
D				

A4 8x8	C3 6x7	C2 9x6	C4 7x8
B2 9x11	B1 7x12	A1 5x7	D1 5x12
C1 7x7	A3 9x5	B4 8x12	D2 9x9
D4 12x6	D3 4x8	B3 5x8	A2 7x9

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

×	5	3	2	4	9	8	6	12	10	7	11	1
2	10											
5	25											

×	5	8	12	10	3	7	9	11	4	2	6	1
3												
7												

×	3	6	11	12	5	9	7	2	10	4	8	1
4	12											
6	18											

Stay Safe

Name:_____ Date:_____

OBJECTIVE 23: DIVISION

WORD NUMBER BITES

23.i   At the factory, pencils were being put into packs of twelve. How many packs could be made from 150 pencils and how many were left over?

Working Space:	
	Answer:

23.ii   At the market, the seller put pot plants into groups of five. There were forty-four pots. How many groups could be made and how many were left over?
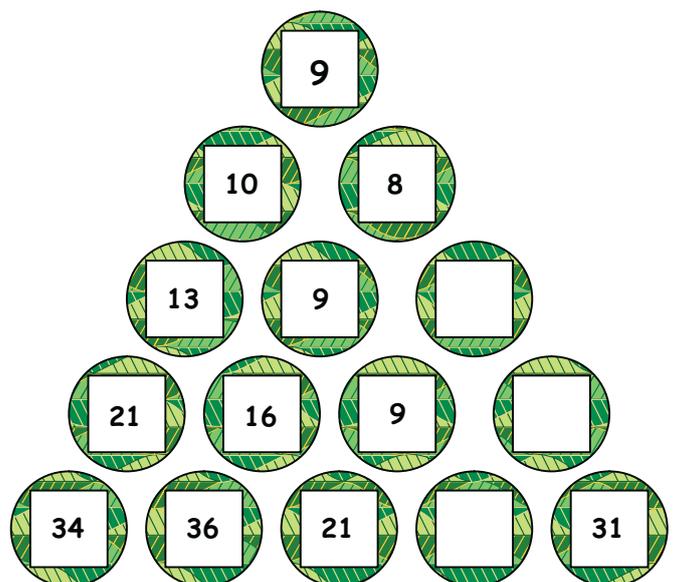
Working Space:	
	Answer:

23.iii   Seeds were put into packets of twelve. From seventy-five seeds, how many packets could be filled and how many were left over?

Working Space:	
	Answer:

NIFTY NUMBER BITES

Fill in the empty squares by ensuring that each row's total is double that of the one above.

9

10   8

13   9   ☐

21   16   9   ☐

34   36   21   ☐   31

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames? Shaded boxes have remainders.

÷	24	20	32	12	18	10	46	22	16	84	0	14
2	12											
1	4											

÷	60	24	48	16	12	72	66	28	18	30	32	20
4	15						▨		▨	▨		
6	10			▨			▨				▨	▨

÷	18	36	48	66	12	135	60	33	30	72	63	21
6	3					▨		▨			▨	▨
3	6											
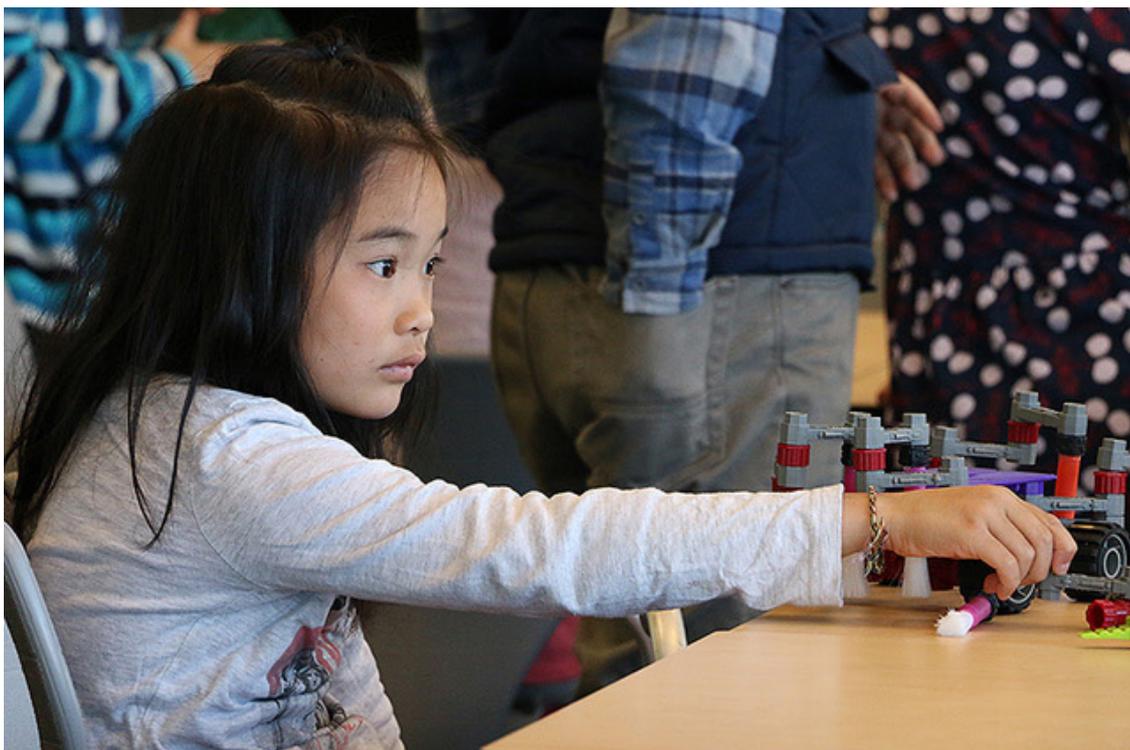
Making it work!

Name:_____ Date:_____

OBJECTIVE 24: MIXED MULTIPLICATION & DIVISION

WORD NUMBER BITES

24.i   Richard's dog 1ikes meaty chews. They cost 50 cents each. If I buy a dozen, how much will they cost?

Working Space:	
	Answer:

24.ii   The librarian placed 36 books evenly onto three shelves. How many books were on each shelf?

Working Space:	
	Answer:

24.iii   Pies are being baked with 20 on each tray. How many pies can be baked if there are nine trays?

Working Space:	
	Answer:

NIFTY NUMBER BITES

What number replaces the question mark?

There is a second correct answer. Can you find it?

Name:_____ Date:_____

Skills Number Bites

Can you solve these number frames? Shaded boxes have remainders.

×	12	23	13	45	53	61	72	81	90	10	15	32
11												
22												

To multiply by eleven, add the two digits of the number and place it between the two digits.

e.g.   42 x 11, 4 + 2 = 6,   so the answer is 462

Double this number to multiply by 22

÷	1	2	3	4	5	6	7	8	9	10	11	12
2												
4												
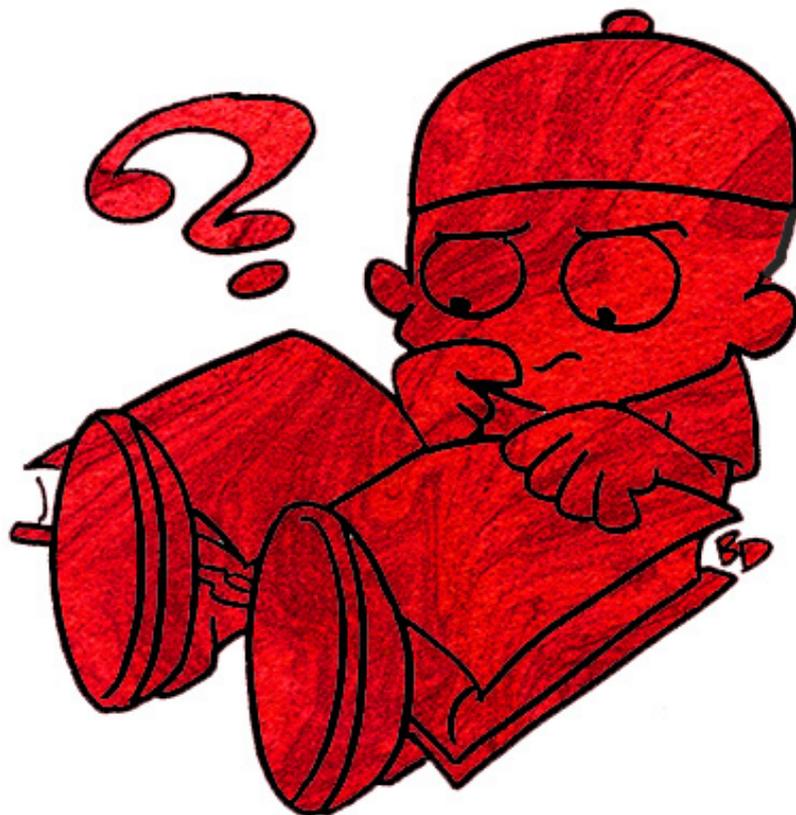
Name:_____ Date:_____

OBJECTIVE 25: MONEY ADDITION

WORD NUMBER BITES

25.i   Samson spent £13.50, £17.25 and £6.60. How much was Samson's total spend?

Working Space:	
	Answer:

25.ii   The books I want are €6.50, €8.65 and €2.70. How much do I need to buy all three?

Working Space:	
	Answer:

25.iii   Marty needs to buy three small cakes for afternoon tea. What will the total cost be if they are 75¢, 95¢ and 65¢.

Working Space:	
	Answer:

NIFTY NUMBER BITES

Using only 4 straight lines, divide the shape below into 4 congruent (same shape & size) sections.
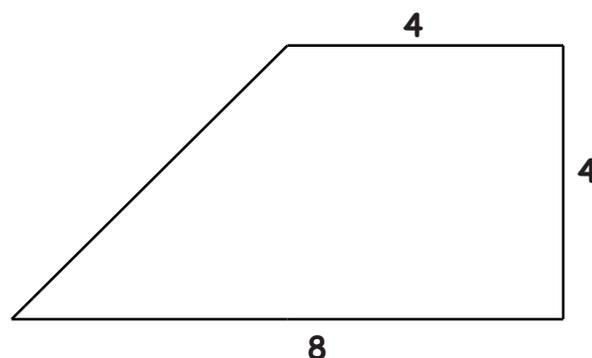
Are you using a strategy or drawing lines randomly?

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

+	$6	$4	$7	$2	$9	$5	$11	$1	$0	$3	$8	$12
$16	$22											
$13	$19											

+	£9	£12	£34	£5	£8	£33	£21	£21	£13	£46	£68	£19
£18	£27											
£14	£23											

+	€12	€42	€39	€83	€12	€41	€57	€6	€2	€55	€22	€78
€25	€37											
€22	€34											

Stretch yourself

Name:_____ Date:_____

OBJECTIVE 26: MONEY SUBTRACTION

WORD NUMBER BITES

26.i   A pack of marker pens costs £1.80 and an eraser costs. £0.55. If I have one £2 coin and one £1 coin how much change will I receive?

Working Space:	
	Answer:

26.ii   We bought a secondhand computer for $129. We had $200 so how much change did we receive?
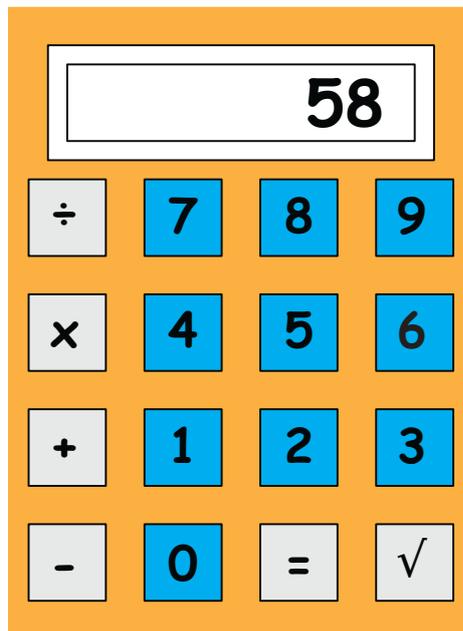
Working Space:	
	Answer:

26.iii   Are two €50 notes and four €20 notes more or less than one €100 note and nine €10 notes?

Working Space:	
	Answer:

NIFTY NUMBER BITES

Use two numbers on the calculator to change 58 to 10.

Record your tries

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

−	11¢	17¢	7¢	12¢	18¢	10¢	6¢	22¢	27¢	8¢	32¢	14¢
2¢	9¢											
6¢	5¢											

−	£9	£15	£22	£31	£18	£16	£24	£13	£16	£36	£51	£65
£5	£4											
£7	£2											

−	€11	€20	€19	€12	€18	€10	€55	€22	€16	€8	€32	€14
€4	€7											
€8	€3											

Learning every day, everywhere.

Name:_____ Date:_____

OBJECTIVE 27: FOUR OPERATIONS REVISION

WORD NUMBER BITES

27.i   Judith took four hours to paint a room. How long would it take to paint eighteen similar rooms?

Working Space:	
	Answer:

27.ii   Alanna, who is learning, kicks a football about fifty metres and Tony, who is teaching, can kick it half that distance again. How far can Tony kick the football?

Working Space:	
	Answer:

27.iii In Gemma's drawer there were 56 socks. How many pairs could this make assuming they can be matched?

Working Space:	
	Answer:

NIFTY NUMBER BITES

Find the numbers that can be divided by 9 without remainders.

Join them together from smalles to largest.

```
                34        36       25
            17        14       8      15
          27       32       33            45
        171   167     133        127
           116      107    98     102
          91        88          93
        153    151         166          63
           89              97
                    67              83
        135           162 54            81
            56           60       65
               144 72
        127       130        139
           115       120      96
        117       126  90        99
            114          95
        111         106       100
            105        108     103
```

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

+	1	2	3	4	5	6	7	8	9	10	11	12
11												
31												

-	71	42	34	41	55	67	17	82	94	30	61	72
12												
14												

×	1	2	3	4	5	6	7	8	9	10	11	12
6												
7												
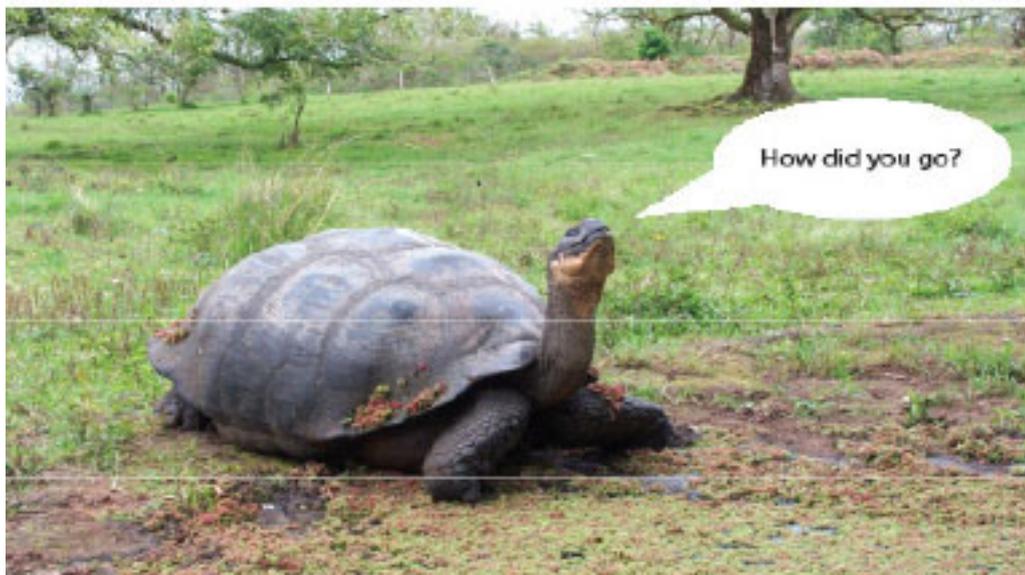
Name:_____ Date:_____

OBJECTIVE 28: TIME PROBLEMS

WORD NUMBER BITES

28.i   The plane is due to depart at 19:35 How long do I have to wait if it is now 16.45?
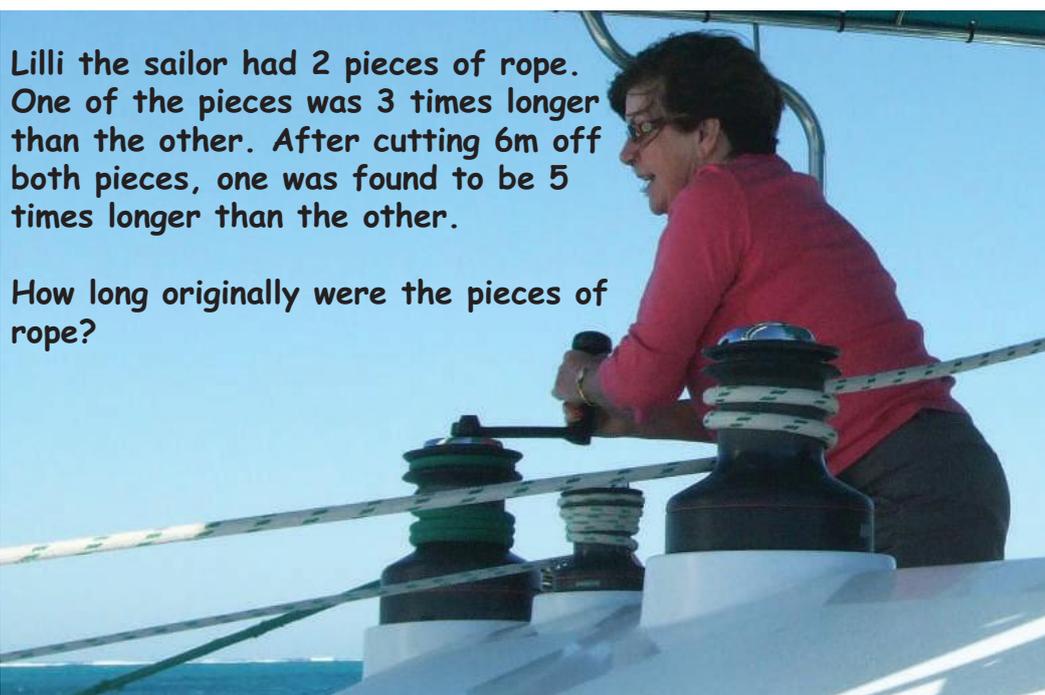
Working Space:	
	Answer:

28.ii   How many seconds are there in 2 hours?

Working Space:	
	Answer:

28.iii   Batches of cakes take 25min per batch. If 9 batches are needed, how long will this take?

Working Space:	
	Answer:

NIFTY NUMBER BITES

Lilli the sailor had 2 pieces of rope. One of the pieces was 3 times longer than the other. After cutting 6m off both pieces, one was found to be 5 times longer than the other.

How long originally were the pieces of rope?

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames? Shaded boxes have remainders.

÷	12s	20s	36s	27s	21s	16s	28s	30s	32s	8s	15s	24s
3	**4s**											
4	**3s**											

÷	20hr	35hr	40hr	24hr	12hr	32hr	28hr	25hr	16hr	30hr	48hr	60hr
4	**5hr**											
5	**4hr**											

÷	24min	32min	8min	48min	0min	64min	40min	80min	44min	36min	88min	72min
4	**6min**											
8	**3min**											

Name:_____ Date:_____

OBJECTIVE 29: LENGTH PROBLEMS

WORD NUMBER BITES

29.i   At the Olympic Games the runners ran a marathon of 42km. What would the kilometre sign say ⅓ of the way

Working Space:	
	Answer:

29.ii   Four fielders threw a softball 25metres, 22metres, 30metres and 23 metres. What was the average distance thrown? (To find an average, add together all the distances and divide by the number of throws.)

Working Space:	
	Answer:

29.iii   Steve threw a cricket ball 45 metres. It went over the wicketkeeper's head by 24metres. How far was it to the wicketkeeper?

Working Space:	
	Answer:

NIFTY NUMBER BITES

In these magic squares, all rows, columns and diagonals must total the assigned number.

27

6		
	5	12

27

4		8
		14

30

4		11
9		

30

	5	
	9	8

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

✕	6m	2m	10m	5m	7m	11m	0m	8m	12m	9m	3m	1m
7												

+	4km	8km	14km	22km	10km	0km	16km	20km	2km	18km	12km	6km
21km												

÷	40m	18m	12m	22m	10m	2m	16m	24m	36m	14m	28m	4m
2	20m											
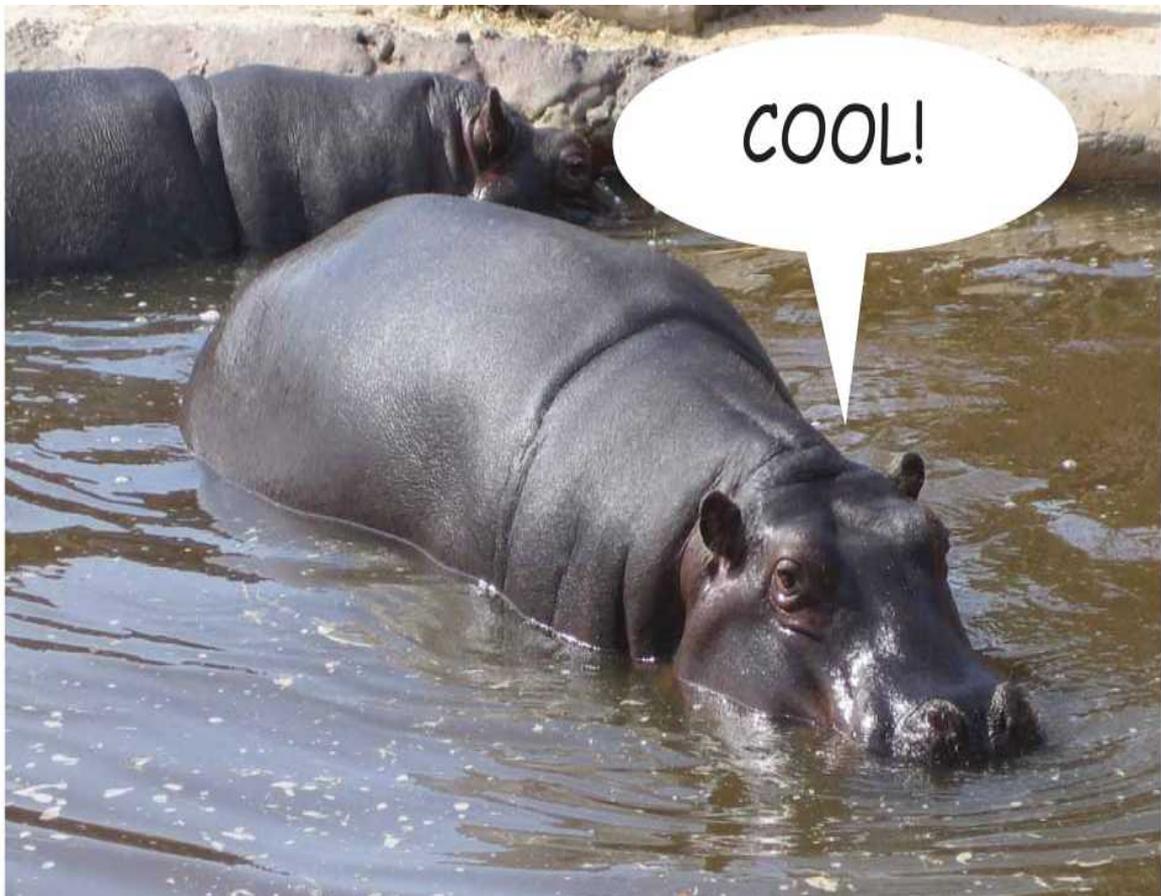
Name:_____ Date:_____

OBJECTIVE 30: MASS PROBLEMS

WORD NUMBER BITES

30.i   Tins of fruit weigh just over 800g. How many tins are needed to weigh over 4000g?

Working Space:	
	Answer:

30.ii   Dogs at the show were weighed. One was 9kg, another 10kg and the third was 7kg What was the total when the weights of the dogs were added together?

Working Space:	
	Answer:

30.iii   A post weighed 12kg. ¼ of it was cut off one . What does the fence post now weigh?

Working Space:	
	Answer:

NIFTY NUMBER BITES

Two cyclists are 25 km apart on the same road. They start at the same time towards each other. Annie rides at a speed of 10 km/hr and Chai rides at a speed of 15 km/hr. Brian the bee starts sitting on Annie's head. As the cylists set off, Brian starts flying towards Chai.

Annie rides at 10 kph

Brian the bee flies at 20 kph

Chai rides at 15 kph

A bit later......

Brian's Flight path
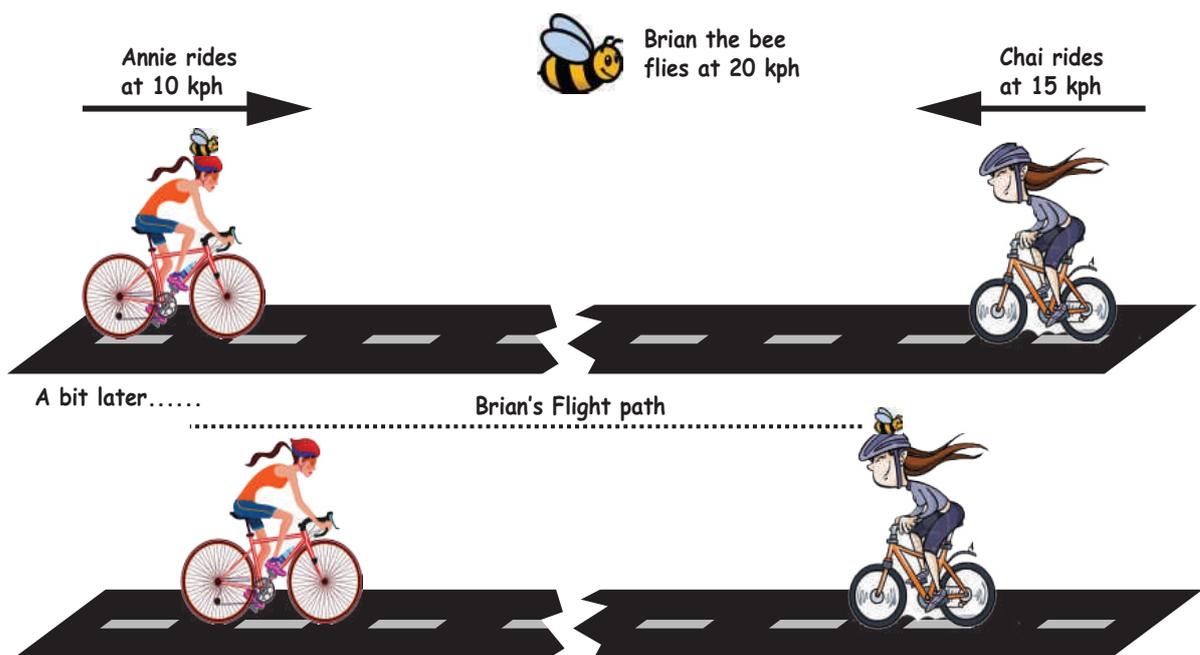
As soon as Brian arrives on Chai's head, he turns round and flies towards Annie. He flies from one head to the other until the cyclists meet. How far does Brian fly?

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

+	1g	2g	3g	4g	5g	6g	7g	8g	9g	10g	11g	12g
15g												
31g												

-	5kg	6kg	7kg	8kg	9kg	10kg	11kg	12kg	13kg	14kg	15kg	16kg
2kg												
4kg												

×	1T	2T	3T	4T	5T	6T	7T	8T	9T	10T	11T	12T
2												
4												

Asking is a good way of finding out.

Name:_____ Date:_____

OBJECTIVE 31: CAPACITY PROBLEMS

WORD NUMBER BITES

31.i   Small bottles of fruit juice hold 250ml. How many bottles could be filled from five litres of juice?

Working Space:	
	Answer:

31.ii   The toddlers' pool could hold 3200 litres of water. 900 litres were drained out. How many litres were left?

Working Space:	
	Answer:

31.iii   When the water pipe from the 5000L tank burst, we lost 1500 litres of water. How much water is now in the tank?

Working Space:	
	Answer:

NIFTY NUMBER BITES

Cross out all numbers exactly divisible by 8.

Cross out all prime numbers.

Cross out the two numbers whose square roots are whole numbers.

17	64	144	13
120	75	121	56
11	19	23	96
37	48	32	43

What number is left?

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

×	2L	9L	5L	10L	7L	11L	8L	0L	12L	6L	3L	1L
7												

+	6ml	15ml	21ml	0ml	33ml	9ml	18ml	24ml	30ml	3ml	27ml	12ml
23ml												

÷	15L	21L	3L	36L	12L	27L	30L	6L	18L	33L	9L	24L
3												

Time for a rest!

Name:_____ Date:_____

OBJECTIVE 32: REVISING MEASUREMENT

WORD NUMBER BITES

32.i　　The groceries came to $18.75. How much change was there from a $20 note?

Working Space:	Answer:

32.ii　　We left home at 11.00a.m. and didn't return until 3:35 in the afternoon. How long were we away?

Working Space:	Answer:

32.iii　　A frog can leap 45cm in one jump. How far could a frog travel in fourteen identical jumps?

Working Space:	Answer:

NIFTY NUMBER BITES

1	3		7	9
				5
5				

Fill in the empty squares with numbers 1, 3, 5, 7 and 9 so that the same number doesn't appear more than once in the same row, column or diagonal.

Name:_____ Date:_____

Skills Number Bites

Can you solve these number frames?

+	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m
1m												
3m												

−	21s	32s	34s	47s	56s	62s	71s	89s	90s	14s	19s	18s
12s												
14s												

×	1T	2T	3T	4T	5T	6T	7T	8T	9T	10T	11T	12T
12												
40												

Name:_____ Date:_____

OBJECTIVE 33: FRACTIONS

WORD NUMBER BITES

33.i   I have spent ½ of my holiday money and have €250 left. How much holiday money did I have at the start?

Working Space:	Answer:

33.ii   ¼ of the way home Daniel's car broke down. If the total journey was 120km, how far from home was Daniel at the break-down?

Working Space:	Answer:

33.iii   After the rains, the tank was ⅓ full. If it holds 3000L how much water was in the tank?

Working Space:	Answer:

NIFTY NUMBER BITES

Record as many measurement words you can find in this puzzle.

k	i	l	o	g	r	a	m
h	o	i	m	d	s	u	e
o	l	t	i	a	w	a	t
u	r	r	n	y	e	a	r
r	a	e	u	r	e	t	e
c	l	o	t	e	k	o	k
e	l	t	e	s	w	n	a
n	o	s	e	c	o	n	d
t	d	e	c	a	d	e	h

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames? Shaded boxes have remainders.

	10	24	30	4	5	64	7	8	9	10	11	12
½ of					�©		▧		▧		▧	

	4	20	30	24	5	16	7	8	9	10	11	12
¼ of			▧		▧		▧		▧	▧	▧	

	10	12	32	40	56	6	7	80	9	10	48	72
⅛ of	▧	▧			▧				▧	▧		

Wonder is often a result of learning.

Name:_____ Date:_____

OBJECTIVE 34: MIXED EXAMPLES - MONEY

WORD NUMBER BITES

34.i   Books in the sale were $2.80 cents each. How much would eight books cost?

Working Space:	Answer:

34.ii   The secondhand car dealer made $150 profit on each car sold. How many cars need to be sold to make $900?

Working Space:	Answer:

34.iii   A meal of fish and chips for a family cost $13.60 How much change will there be from a ten dollar note and two $2 coins?

Working Space:	Answer:

NIFTY NUMBER BITES

	1	2	3	4
A				
B				
C				
D				

Use the clues at the bottom of the diagram to fill in the empty squares.

C3 45+36	B3 55+36	D3 49+31	C2 63+37
B1 24+65	B2 27+55	A4 36+46	D1 48+35
C1 17+44	A3 83+17	B4 19+67	D2 76+17
C4 38+42	D4 66+28	A1 29+48	A2 69+27

Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

+	£3	£9	£8	£5	£10	£6	£0	£7	£11	£4	£2	£1
£3	£9											
£4	£12											

-	€16	€10	€13	€9	€12	€13	€14	€17	€15	€18	€11	€14
€7	€9											
€9	€7											

×	16¢	4¢	11¢	17¢	9¢	12¢	8¢	10¢	3¢	0¢	15¢	1¢
3	48¢											
6	96¢											

Don't stop now!

Name:_____ Date:_____

OBJECTIVE 35: GENERAL REVISION

WORD NUMBER BITES

35.i The champion cricketer scored two centuries and one double century and a 'duck'. How many runs is this?

Working Space:	
	Answer:

35.ii Guy's last five scores in Maths tests have been 11, 15, 20, 13 and 16. What was Guy's average score?

Working Space:	
	Answer:

35.iii If from 100 you take away 35, then 25 and then a further 15, how much is left?

Working Space:	
	Answer:

NIFTY NUMBER BITES

Fill in the empty squares by ensuring that each row totals double the row above it.

Row 1: 8
Row 2: 7, 9
Row 3: 13, 11, ___
Row 4: 25, 12, 16, ___
Row 5: 32, 23, 17, ___, 26
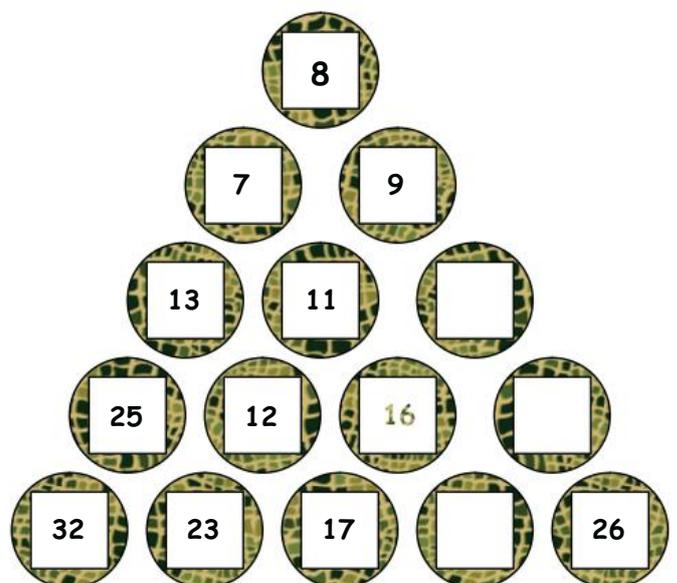
Name:_____ Date:_____

SKILLS NUMBER BITESS

Can you solve these number frames?

×	4	12	0	5	2	8	10	3	7	11	9	6
9												

	70	90	20	50	80	110	10	60	100	30	0	4
½of												

÷	120	70	90	20	100	60	40	10	110	30	50	80
10												

−	94	42	12	63	19	86	39	18	71	11	20	55
7												

How did you go?

Name:_____ Date:_____

OBJECTIVE 36: GENERAL REVISION

WORD NUMBER BITES

36.i   0n each sheet there were 60 stamps. How many sheets do I have if there were 240 stamps altogether?

Working Space:	
	Answer:

36.ii   0ur trip to the city took 1¼ hours. We stayed there 4½ hours and took another 1¼ hours to get home. How long were we away from home?

Working Space:	
	Answer:

36.iii   The motorcyclists had to complete 18 laps of a twelve kilometre track. How long, in total, was the race?

Working Space:	
	Answer:

NIFTY NUMBER BITES

The window (6m x 1m) in the hospital's stairwell has been broken by a runaway trolley.

Linda the carpenter uses a piece of wood (4m x 2m) to fill the gap by cutting it into 2 congruent (same shape & size) pieces. How was this done?

1m

4m

1.5m

6m
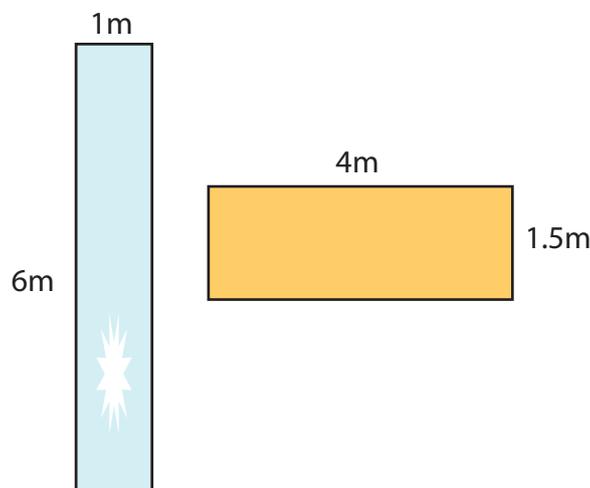
Name:_____ Date:_____

SKILLS NUMBER BITES

Can you solve these number frames?

-	21	32	53	24	65	86	71	80	95	14	19	22
11												
13												

×	1	2	3	4	5	6	7	8	9	10	11	12
7												
0												

Shaded boxes have remainders or fractions in their answers.

	10	24	30	48	50	60	72	80	96	16	11	2
⅛ of												