Mathletics

Series F Student

Addition and Subtraction

My name

Series F – Addition and Subtraction

Contents

Series Authors:

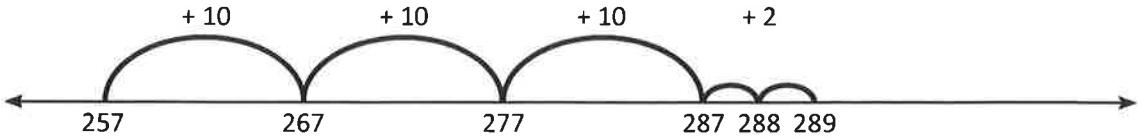
Rachel Flenley
Nicola Herringer

Addition mental strategies – jump strategy

When we add we can use the jump strategy to help us. Look at 257 + 32:

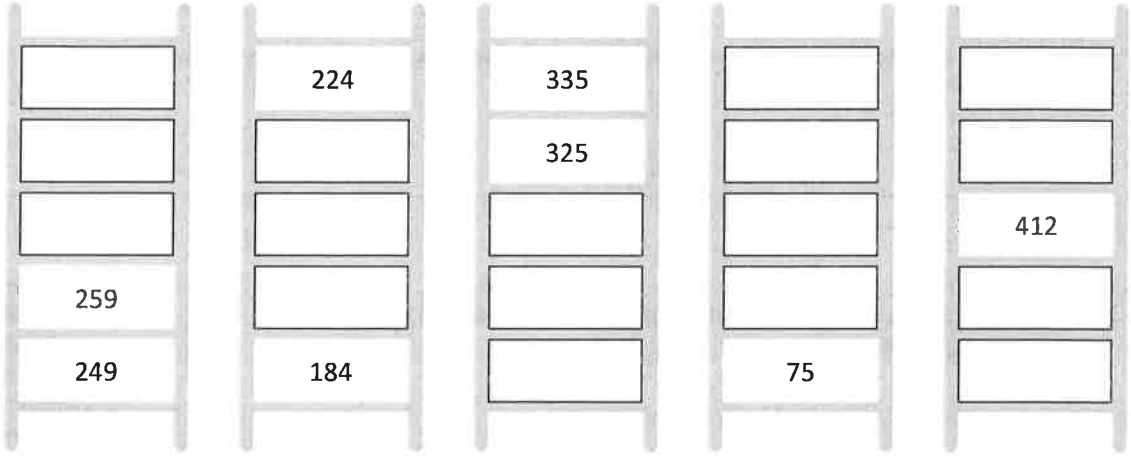
1 First we jump up by the tens

2 Then we jump up by the units



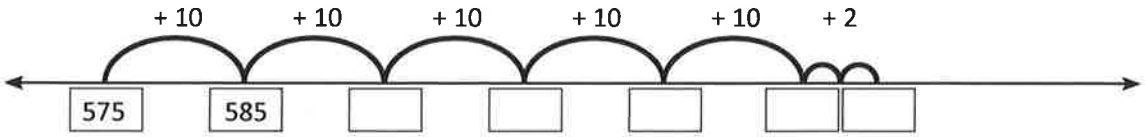
257 + 32 = 289

1 **Warm up with jumping by tens up and down these ladders:**



2 **Use the jump strategy to complete these additions:**

a 575 + 52 = ☐



b 759 + 41 = ☐

c 135 + 73 = ☐

Addition mental strategies – split strategy

When adding large numbers in our heads it can be easier to split one of the numbers into parts and add each part separately.

214 + 138 (100, 30, 8) → 214 + 100 = 314 → 314 + 30 = 344 → 344 + 8 = 352

214 + 138 = 352

1 **Use the split strategy to add the numbers. The first one has been done for you.**

a 623 + 28 (20, 8)

623 + 20 = 643

643 + 8 = 651

623 + 28 = 651

b 38 + 26 (,)

_____

_____

38 + 26 = ☐

c 156 + 142 (, ,)

_____

_____

_____

156 + 142 = ☐

2 **These problems have been split and some have been solved already. Lucky, hey? You just have to work out what the second numbers were before they were split and answer any unsolved problems:**

a 416 + 90 + 1 = 507

was

416 + 91

b 230 + 30 + 3 = ☐

was

230 + _____

c 283 + 60 + 7 = ☐

was

283 + _____

d 532 + 60 + 1 = ☐

was

532 + _____

e 425 + 100 + 40 + 2 = ☐

was

425 + _____

f 129 + 200 + 40 + 6 = ☐

was

129 + _____

3 **Work out the answers to these questions by using the split strategy. See if you can do the working in your head. If it helps, make notes as you go:**

a 173 + 36 = ☐

b 446 + 51 = ☐

c 112 + 83 = ☐

d 724 + 72 = ☐

e 475 + 122 = ☐

f 123 + 164 = ☐

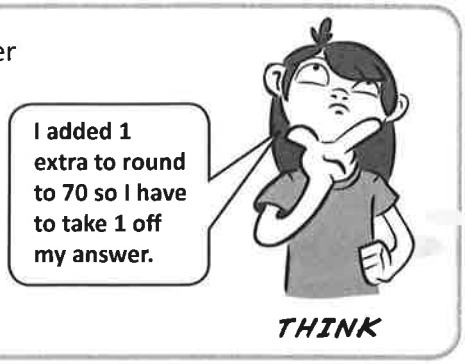
Addition mental strategies – compensation strategy

Sometimes we round one number in the problem to make it easier to do in our heads. Then we adjust our answer to compensate:

405 + 69 = 474

405 + 70 (−1) *I rounded up by 1*

475 (−1) = 474 *so I subtract 1.*



1 **Warm up by rounding these numbers to the closest ten:**

a 48 _____ **b** 67 _____ **c** 232 _____ **d** 74 _____

e 89 _____ **f** 456 _____ **g** 955 _____ **h** 786 _____

2 **Solve these problems using compensation:**

a 45 + 37 = ☐

45 + 40 ◯

____ ◯ = _____

b 66 + 18 = ☐

66 + ____ ◯

____ ◯ = _____

c 86 + 49 = ☐

86 + ____ ◯

____ ◯ = _____

d 124 + 57 = ☐

124 + ____ ◯

____ ◯ = _____

We can also round down to the closest ten. When we do this we add to compensate.

3 **Round these numbers to the closest ten. Then compensate by adding:**

a 26 + 42 = ☐

26 + 40 ◯

____ ◯ = _____

b 35 + 63 = ☐

35 + ____ ◯

____ ◯ = _____

c 96 + 21 = ☐

96 + ____ ◯

____ ◯ = _____

d 145 + 34 = ☐

145 + ____ ◯

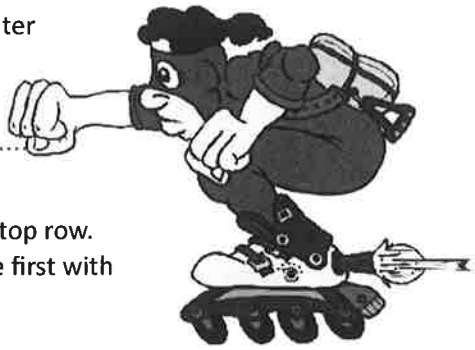
____ ◯ = _____

Checkerboard race

apply

Getting ready

This is a game for 2 players. You will need a counter each, a die and some paper to keep score.



What to do

Each of you will choose a starting square on the top row. The object of this game is to get to the finish line first with the largest total.

Roll a die. If you throw:

- a 1 or 2, you can only move one square across the row in either direction;
- a 3 or 4 means you can move one square diagonally;
- a 5 or 6 means you move one downwards.

Add the two numbers using a strategy of your choice. Record your total as you go. Who will arrive at the finish with the largest score? Good luck!

THINK

81	76	93	42	89	50	66	74
62	28	54	37	63	45	95	39
87	70	69	83	75	57	12	49
63	93	52	44	86	67	37	58
38	47	83	17	95	72	49	56
90	73	68	39	54	23	85	43
41	36	51	91	78	66	17	32
63	81	27	11	44	46	50	74
FINISH							

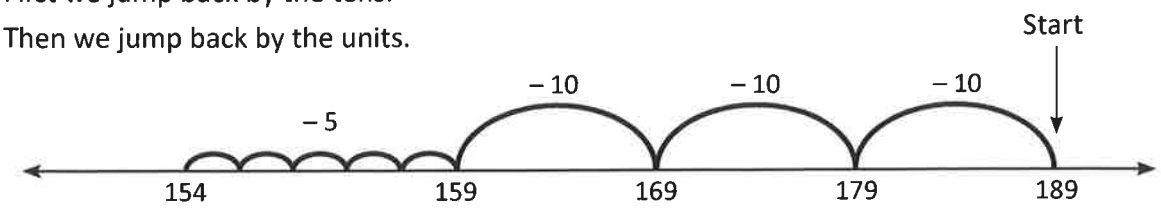
DISCOVER

Subtraction mental strategies – jump strategy

When we subtract we can use the jump strategy to help us. Look at 189 – 35:

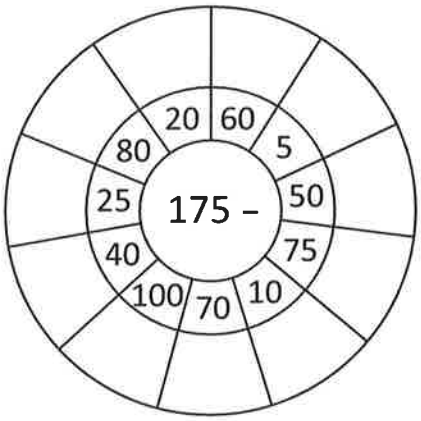
1 First we jump back by the tens.

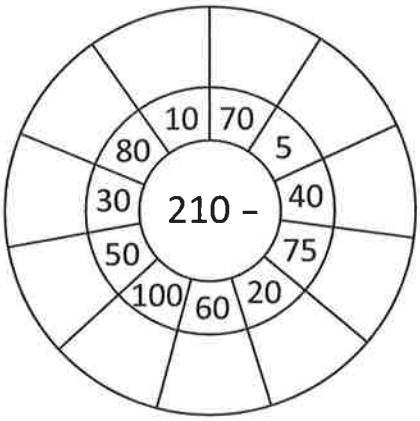
2 Then we jump back by the units.



189 – 35 = 154

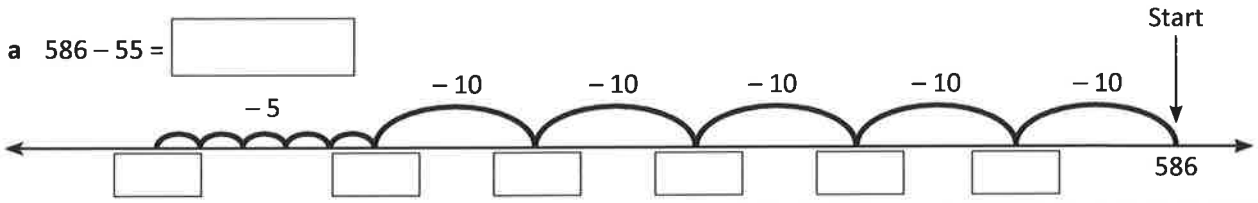
1 **Warm up with these subtraction wheels:**





2 **Use the jump strategy to complete these subtraction problems. The first one has been started for you:**

a 586 – 55 = ☐



b 388 – 45 = ☐

c 624 – 31 = ☐

d 155 – 95 = ☐

Subtraction mental strategies – split strategy

When subtracting large numbers in our heads it can be easier to split the number to be subtracted into parts and work with each part separately.

468 – 215 ⟨ 200, 10, 5 → 468 – 200 = 268 → 268 – 10 = 258 → 258 – 5 = 253

468 – 215 = 253

1 **Practise splitting these numbers into hundreds, tens and units. The first one is done for you.**

a 356 = 300 + 50 + 6 **b** 289 = _____ **c** 867 = _____

d 923 = _____ **e** 442 = _____ **f** 294 = _____

2 **Use the split strategy to subtract:**

a 468 – 316 ⟨ ☐ ☐ ☐

468 – 300 = _____

_____ – 10 = _____

_____ – 6 = _____

468 – 316 = _____

b 574 – 155 ⟨ ☐ ☐ ☐

_____ – _____ = _____

_____ – _____ = _____

_____ – _____ = _____

574 – 155 = _____

c 457 – 323 ⟨ ☐ ☐ ☐

_____ – _____ = _____

_____ – _____ = _____

_____ – _____ = _____

457 – 323 = _____

3 **Work out the answers to these questions then cross out the letter above each answer in the puzzle. The letters that remain will form the answer to the riddle.**

a 484 – 74 = ☐ **b** 400 – 80 = ☐ **c** 406 – 106 = ☐

d 410 – 40 = ☐ **e** 403 – 13 = ☐ **f** 455 – 60 = ☐

g 497 – 92 = ☐ **h** 505 – 25 = ☐ **i** 520 – 25 = ☐

j 795 – 150 = ☐ **k** 410 – 100 = ☐

S	Y	H	O	U	E	R	X	E	L	A
300	195	410	305	150	320	505	370	595	405	200

K	Z	R	I	D	R	J	U	M	V	A
390	495	220	395	210	385	480	500	205	645	310

Riddle: What is the most rhythmic part of your body? ☐☐☐☐ ☐☐☐ ☐☐☐☐

Subtraction mental strategies – compensation strategy

Sometimes we round one number in the problem to make it easier to do in our heads. Then we adjust our answer to compensate:

486 – 59 = 427

486 – 60 (+1) *I rounded up by 1, which means I subtracted*

426 (+1) = 427 *1 extra so we need to add 1 back.*

1 **Round these numbers to the closest ten. Then compensate by subtracting or adding to get back to the first number. The first one is done for you.**

a 93 = *90 + 3* **b** 48 = _____ **c** 52 = _____ **d** 76 = _____

e 57 = _____ **f** 37 = _____ **g** 27 = _____ **h** 68 = _____

2 **Solve these subtraction problems using compensation. Show all your working out:**

a 585 – 78 = ☐

585 – 80 (+2)

_____ ◯ = _____

b 894 – 71 = ☐

894 – 70 (–1)

_____ ◯ = _____

c 163 – 149 = ☐

163 – 150 (+1)

_____ ◯ = _____

3 **Solve these problems using compensation. Decide if you need to round up or down and compensate accordingly:**

a 555 – 63

b 775 – 98

c 644 – 139

d 594 – 329

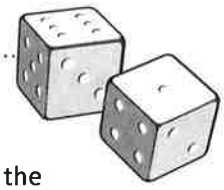
e 432 – 204

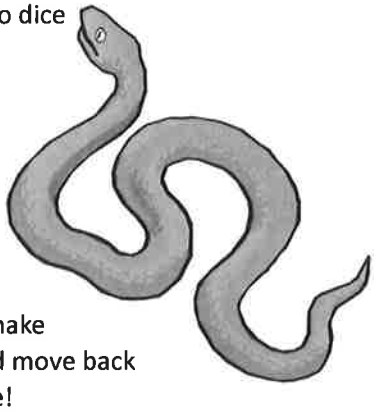
Snakes but no ladders

apply

Getting ready

You can play with 1 to 4 players and you will need two dice and a love of snakes!





What to do

Start at 200. Throw the dice and add the numbers. The answer is the number of spaces you can move.

Follow the numbers. If you land on a square with a snake you must work out the answer to the subtraction and move back to that square! The winner is the first to finish ... alive!

263 **Finish**	262 (–25)	261	260	259 (–32)	258	257	256
248	249 (–14)	250	251	252	253 (–50)	254	255 (–17)
247	246	245	244 (–9)	243	242	241	240
232 (–20)	233	234	235	236 (–3)	237	238 (–14)	239
231	230	229 (–21)	228	227	226 (–11)	225	224
216 (–8)	217	218	219 (–5)	220 (–17)	221	222	223
215	214	213 (–10)	212	211	210	209 (–6)	208
200 **Start**	201	202	203	204 (–3)	205	206	207

Written methods – addition

	H	T	U
	$^{1}2$	$^{1}3$	5
+	4	8	9
	7	2	4

How do we add using a written strategy?
First we estimate: 235 + 500 = 735. Our answer will be around 735.
We start with the units. 5 + 9 is 14 units. We rename this as 1 ten and 4 units.
We put the 4 in the units column and carry the 1 to the tens column.
3 tens plus 8 tens plus the carried ten is 12 tens.
We rename this as 1 hundred and 2 tens
We put the 2 in the tens column and carry the 1 to the hundreds column.
We add the hundreds. We put 7 in the hundreds column.
Finally we check against our estimate – do they match?

1 **Solve these addition problems. First estimate the answers:**

a e:

	H	T	U
	5	4	1
+	3	1	3

b e:

	H	T	U
	1	7	3
+	5	9	2

c e:

	H	T	U
	3	8	4
+	2	1	3

d e:

	H	T	U
	2	6	8
+	4	9	3

e e:

	Th	H	T	U
	2	2	1	7
+	3	4	0	8

f e:

	Th	H	T	U
	4	5	1	6
+	1	3	4	3

g e:

	Th	H	T	U
	5	3	8	9
+	1	2	7	4

h e:

	Th	H	T	U
	3	2	8	1
+	1	4	2	8

2 **Use these cards to make 5 different addition problems using 2 and 3 digit numbers. Show your working out:**

2	3	4	5	6	7	8	9	=	+

Written methods – subtraction

	H	T	U
	9	$^{8}\not{9}$	$^{1}4$
–	2	7	8
	7	1	6

First we estimate: 1000 – 300 = 700

We start with the units. We can't take 8 away from 4 so we must rename one of the tens as units. We now have 14 units.

14 subtract 8 is 6 so we put the 6 in the units column.

8 tens subtract 7 tens is 1 ten so we put a 1 in the tens column.

We subtract the hundreds. 9 hundred subtract 2 hundred is 7 hundred. Put a 7 in the hundreds column.

We check the answer against our estimate.

1 **Complete the subtraction problems:**

a

e:

	Th	H	T	U
	4	9	8	2
–		1	5	3

b

e:

	Th	H	T	U
	2	9	5	1
–		8	7	8

c

e:

	Th	H	T	U
	3	8	7	2
–		5	8	6

When a problem asks us to find the difference, we subtract. We always start with the larger number.

Showtown	4129 km	Tidings	1233 km
Normanville	3262 km	Ringer	7869 km
Roper	7419 km	Harpville	486 km
Ace Bay	1226 km	Eagle Bay	595 km

2 **Solve these to find the difference problems:**

a How far from Showtown to Ringer?

	Th	H	T	U

b What is the distance from Normanville to Tidings?

	Th	H	T	U

c What is the distance from Roper to Eagle Bay?

	Th	H	T	U

d How far from Normanville to Ace Bay?

	Th	H	T	U

Written methods – adding and subtracting decimals

When we add and subtract decimals we follow the same rules we use when working with whole numbers. We need to make sure we line up the place values and the decimal points:

	T	U	T
	$^{3}\not{4}$	$^{1}3$	• 3
−	1	7	• 2
	2	6	• 1

1 **Estimate and solve these addition problems. Remember to put the decimal point into your answers:**

e:

a

	T	U	T
	5	4	• 1
+	3	1	• 3

e:

b

	T	U	T
	3	2	• 3
+	5	8	• 1

e:

c

	T	U	T
	4	8	• 4
+	4	1	• 3

e:

d

	T	U	T
	2	7	• 8
+	3	9	• 3

e:

e

	T	U	T	H
	5	2	• 1	7
+	3	5	• 9	2

e:

f

	T	U	T	H
	4	5	• 1	
+	1	4	• 0	5

e:

g

	T	U	T	H
	5	3	• 8	9
+	1	2	• 1	4

e:

h

	T	U	T	H
	3	2	• 4	1
+	1	9	• 3	3

2 **Estimate and solve these subtraction problems. Remember to put the decimal point into your answers:**

e:

a

	T	U	T
	8	• 4	3
−	3	• 2	3

e:

b

	T	U	T
	9	• 0	8
−	5	• 3	2

e:

c

	T	U	T
	7	• 6	3
−	2	• 0	4

e:

d

	T	U	T
	9	• 7	
−	3	• 2	3

3 **Bart finished his race in a time of 10.67 secs. Lisa finished in 11.24 secs. How much faster was Bart?**

Written methods – word problems

1 **Solve the following word problems using addition or subtraction. Circle the process you use to calculate the answer:**

a Joe scored 346 more points than Zac. Joe scored 589 points. How many points did Zac score?

\+ .....

− .....

Answer _____

b Jenny is 32 cm taller than Jaala. Jaala is 143 cm tall. How tall is Jenny?

\+ .....

− .....

Answer _____

c Maitland recorded 117 mm of rain. Balaklava recorded 58 mm more. How much rain did Balaklava record?

\+ .....

− .....

Answer _____

d Wayne has $17. How much more money does he need to buy a t-shirt that costs $39?

\+ .....

− .....

Answer _____

e Charlene had $132. After she paid for a ticket, she had $84. How much did the ticket cost?

\+ .....

− .....

Answer _____

f Sanjay spent $34 and had $92 left. How much did he have before the purchase?

\+ .....

− .....

Answer _____

g Jarred's bike cost $189. Molly's bike cost $263. What is the price difference between the two bikes?

\+ .....

− .....

Answer _____

h The rainfall in Two Wells was 73 mm. Gawler recorded 36 mm less. How much rainfall did Gawler record?

\+ .....

− .....

Answer _____

i Write your own word problem and solve it.

\+ .....

− .....

Answer _____

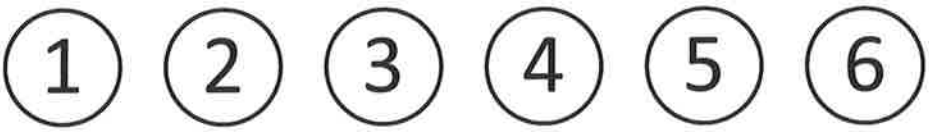
Subtraction puzzles

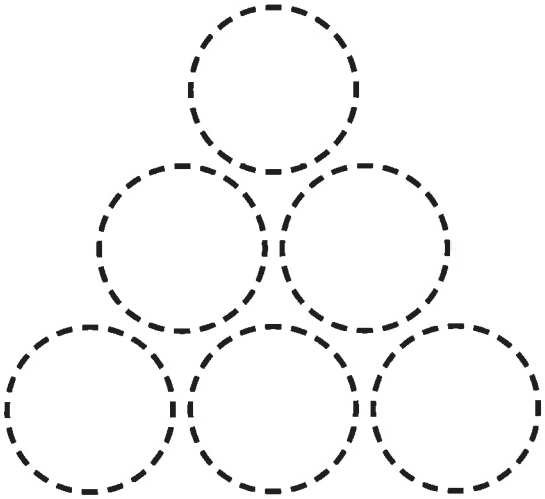
solve

What to do

Puzzle 1

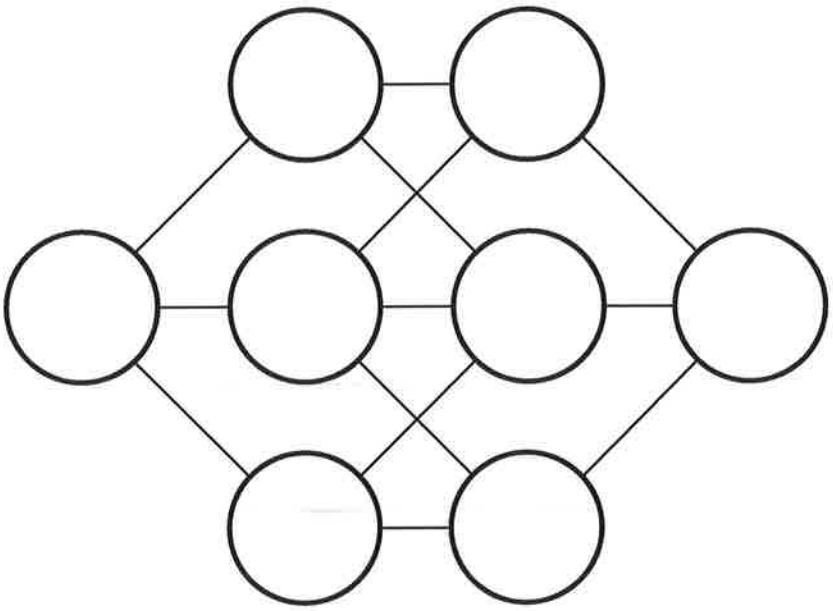
Place the numbers 1 to 6 in the grey circles so that each number is the difference between the two numbers just below it.





Puzzle 2

Place eight digits from 1 to 8 in each circle. Numbers with a difference of 1 cannot be placed in circles directly connected by a straight line.



Mathletics

Series F Student

Multiplication and Division

My name

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Contents

Series Authors:

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Mental multiplication strategies – doubling strategy

Doubling is a useful strategy to use when multiplying.

To multiply a number by four, double it twice.

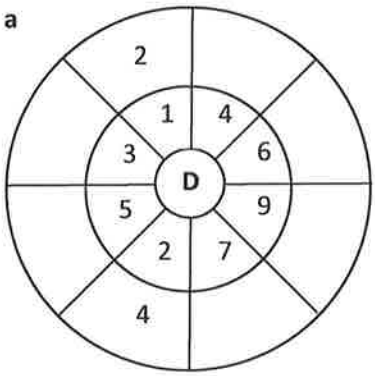
15 × 4 double once = 30
double twice = 60

To multiply a number by eight, double it three times.

13 × 8 double once = 26
double twice = 52
double three times = 104

1 **Warm up with some doubling practice:**

a



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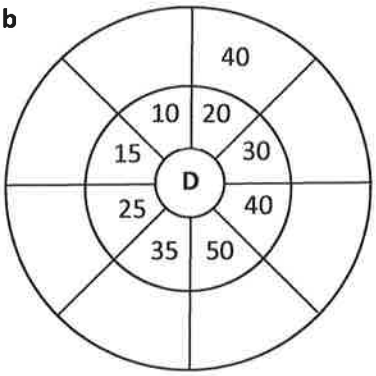
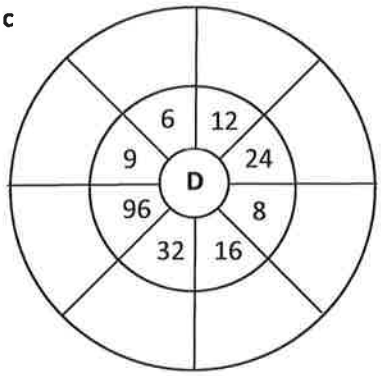


c



2 **Finish the doubling patterns:**

a 4	8	16		64	
b 3					96
c 5			40		
d 25	50				
e 7		28			224
f 75		300			

3 **Choose a number and create your own doubling pattern. How high can you go? What patterns can you see within your pattern?**

4 **Two sets of twins turn 12. They decide to have a joint birthday party with 1 giant cake but they all want their own candles. How many candles will they need?**

Mental multiplication strategies – multiply by 10s, 100s and 1 000s

When we multiply by 10 we move the number one place value to the left.
When we multiply by 100 we move the number two place values to the left.
When we multiply by 1 000 we move the number three place values to the left.
Look at how this works with the number 45:

Ten Thousands	Thousands	Hundreds	Tens	Units	
			4	5	
		4	5	0	× 10
	4	5	0	0	× 100
4	5	0	0	0	× 1 000

1 **Multiply the following numbers by 10, 100 and 1 000:**

a

T Th	Th	H	T	U	
			1	7	
					× 10
					× 100
					× 1 000

b

T Th	Th	H	T	U	
			4	3	
					× 10
					× 100
					× 1 000

c

T Th	Th	H	T	U	
			8	5	
					× 10
					× 100
					× 1 000

d

T Th	Th	H	T	U	
			9	9	
					× 10
					× 100
					× 1 000

2 **Try these:**

a 14 × 10 = ☐ **b** 14 × 100 = ☐ **c** 14 × 1 000 = ☐

d 92 × 10 = ☐ **e** 92 × 1 000 = ☐ **f** 92 × 100 = ☐

g 11 × 1 000 = ☐ **h** 11 × 100 = ☐ **i** 11 × 10 = ☐

3 **You'll need a partner and a calculator for this activity. Take turns giving each other problems such as "Show me 100 × 678". The person whose turn it is to solve the problem, writes down their prediction and you both check it on the calculator. 10 points for each correct answer, and the first person to 50 points wins.**

Mental multiplication strategies – split strategy

Sometimes it's easier to split a number into parts and work with the parts separately.

Look at 64 × 8

Split the number into 60 and 4

Work out (60 × 8) and then (4 × 8)

Add the answers together 480 + 32 = 512

1 **Use the split strategy to answer the questions:**

a 46 × 4

(40 × 4) + (6 × 4)

_____ + _____

= ☐

b 74 × 5

(___ × ___) + (___ × ___)

_____ + _____

= ☐

c 48 × 4

(___ × ___) + (___ × ___)

_____ + _____

= ☐

d 37 × 7

(___ × ___) + (___ × ___)

_____ + _____

= ☐

e 62 × 8

(___ × ___) + (___ × ___)

_____ + _____

= ☐

f 91 × 5

(___ × ___) + (___ × ___)

_____ + _____

= ☐

2 **Use the split strategy to answer the questions. This time see if you can do the brackets in your head:**

a 48 × 8 = _____ + _____ = ☐

b 52 × 7 = _____ + _____ = ☐

c 9 × 43 = _____ + _____ = ☐

d 8 × 29 = _____ + _____ = ☐

e 86 × 7 = _____ + _____ = ☐

3 **These problems have been worked out incorrectly. Circle where it all went wrong.**

a 37 × 6

(30 × 6) + (7 × 6)

180 + 13

= 193

b 17 × 5

(10 × 5) + (7 × 5)

70 + 35

= 105

c 32 × 9

(30 × 9) + (2 × 9)

27 + 18

= 45

Mental multiplication strategies – compensation strategy

When multiplying we can round to an easier number and then adjust.
Look how we do this with 4 × 29
29 is close to 30. We can do 4 × 30 in our heads because we know 4 × 3 = 12
4 × 30 = 120
We have to take off 4 because we used one group of 4 too many: 120 – (1 × 4) = 116
4 × 29 = 116

1 **Use the compensation strategy to answer the questions. The first one has been done for you.**

a 19 × 3 = 20 × 3 – 3 = 57

b 8 × 29 = _____ × _____ – _____ = _____

c 18 × 6 = _____ × _____ – _____ = _____

d 7 × 39 = _____ × _____ – _____ = _____

e 28 × 5 = _____ × _____ – _____ = _____

We can also adjust up. Look how we do this with 6 × 62:
62 is close to 60. We can do 6 × 60 in our heads because we know 6 × 6 = 36
6 × 60 = 360
We have to then add 2 more lots of 6: 360 + 12 = 372
6 × 62 = 372

2 **Use the compensation strategy and adjust up for these. The first one has been done for you.**

a 41 × 3 = 40 × 3 + 3 = 123

b 81 × 4 = _____ × _____ + _____ = _____

c 22 × 9 = _____ × _____ + _____ = _____

d 32 × 9 = _____ × _____ + _____ = _____

e 7 × 62 = _____ × _____ + _____ = _____

Mental multiplication strategies – factors and multiples

Factors are the numbers we multiply together to get to another number:

factor × factor = whole number

How many factors does the number 12 have? $4 \times 3 = 12$, $6 \times 2 = 12$, $1 \times 12 = 12$

4, 3, 6, 2, 1 and 12 are all factors of 12.

1 **List the factors of these numbers:**

a 18

b 25

c 14

d 9

e 16

f 15

g 30

h 42

2 **Fill the gaps in these sentences. The first one has been done for you.**

a 1 or 16 or 2 or 8 or 4 people can share 16 lollies evenly.

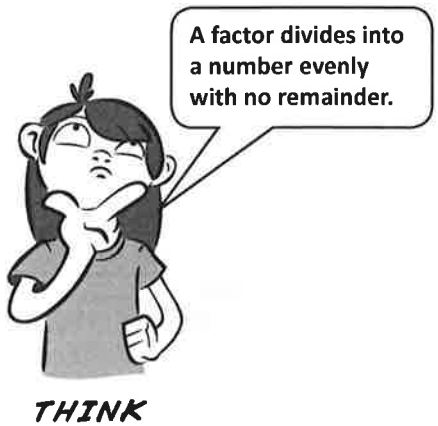
b _____ or _____ or _____ or _____ or _____ or _____ people can share 20 slices of pie evenly.

c _____ or _____ or _____ or _____ or _____ or _____ or _____ or _____ people can share 24 cherries.

d _____ or _____ or _____ or _____ or _____ or _____ or _____ or _____ people can share 30 pencils.

e _____ or _____ people can share 5 balls evenly.

3 **Use a calculator to help you find as many factors of 384 as you can:**



Mental division strategies – use multiplication facts

Knowing our multiplication facts helps us with division as they do the reverse of each other. They are inverse operations.

$3 \times 5 = 15$ $\qquad$ $15 \div 5 = 3$

1 **Use your knowledge of multiplication facts to help answer these division questions:**

a $56 \div 7$ → $\underline{8} \times 7 = 56$ → $56 \div 7 =$ ☐

b $121 \div 11$ → $\underline{\quad} \times 11 = 121$ → $121 \div 11 =$ ☐

c $72 \div 8$ → $\underline{\quad} \times 8 = 72$ → $72 \div 8 =$ ☐

d $49 \div 7$ → $\underline{\quad} \times 7 = 49$ → $49 \div 7 =$ ☐

e $36 \div 9$ → $\underline{\quad} \times 9 = 36$ → $36 \div 9 =$ ☐

f $64 \div 8$ → $\underline{\quad} \times 8 = 64$ → $64 \div 8 =$ ☐

g $108 \div 12$ → $\underline{\quad} \times 12 = 108$ → $108 \div 12 =$ ☐

2 **Now try these:**

a $81 \div 9 =$ ☐ $\qquad$ b $40 \div 5 =$ ☐

c $21 \div 3 =$ ☐ $\qquad$ d $54 \div 6 =$ ☐

e $42 \div 7 =$ ☐ $\qquad$ f $63 \div 9 =$ ☐

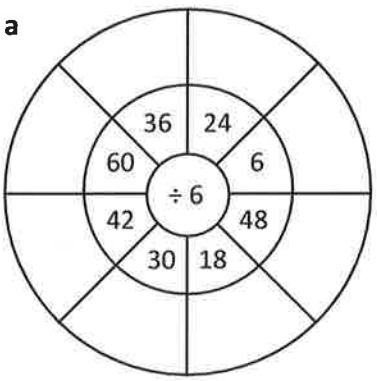
g $36 \div 4 =$ ☐ $\qquad$ h $45 \div 9 =$ ☐

i $39 \div 3 =$ ☐ $\qquad$ j $24 \div 6 =$ ☐

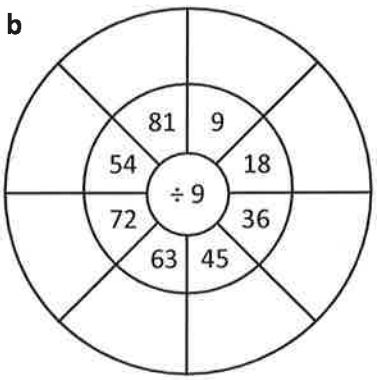
Doing maths without knowing your multiplication facts is hard. Learning them makes your life much easier. It's worth persevering to conquer them!

3 **Fill in the division wheels. Use multiplication facts to help you.**

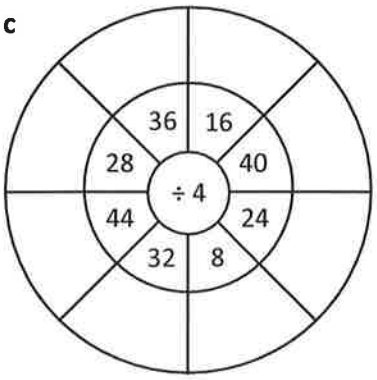
a



b



c



Mental division strategies – divide by 10s, 100s and 1 000s

When we divide by 10 we move the number one place value to the right.
When we divide by 100 we move the number two place values to the right.
When we divide by 1 000 we move the number three place values to the right.
Look what happens to 45 000 when we apply these rules:

Ten Thousands	Thousands	Hundreds	Tens	Units	
4	5	0	0	0	
	4	5	0	0	÷ 10
		4	5	0	÷ 100
			4	5	÷ 1 000

1 **Divide the following numbers by 10, 100 and 1 000:**

a

T Th	Th	H	T	U	
4	5	0	0	0	
					÷ 10
					÷ 100
					÷ 1 000

b

T Th	Th	H	T	U	
4	3	0	0	0	
					÷ 10
					÷ 100
					÷ 1 000

c

T Th	Th	H	T	U	
8	5	0	0	0	
					÷ 10
					÷ 100
					÷ 1 000

d

T Th	Th	H	T	U	
8	8	0	0	0	
					÷ 10
					÷ 100
					÷ 1 000

2 **Draw lines to match the answers with the questions:**

a	What number is one thousand times smaller than 32 000?	9 500
b	What number is one hundred times smaller than 32 000?	88
c	What number is one hundred times smaller than 95 000?	950
d	What number is ten times smaller than 95 000?	880
e	What number is one hundred times smaller than 8 800?	320
f	What number is ten times smaller than 8 800?	32

Mental division strategies – halving strategy

Sometimes we need to keep halving until we reach an easy division fact.

144 ÷ 36 → 72 ÷ 18 → 36 ÷ 9 = 4

4 **Keep halving until you get to a fact you can work with. If you can do it in your head, just fill in the last box. Otherwise, use the lines to help you.**

a 216 ÷ 36 = _____ ÷ _____ = _____ ÷ _____ = ☐

b 196 ÷ 28 = _____ ÷ _____ = _____ ÷ _____ = ☐

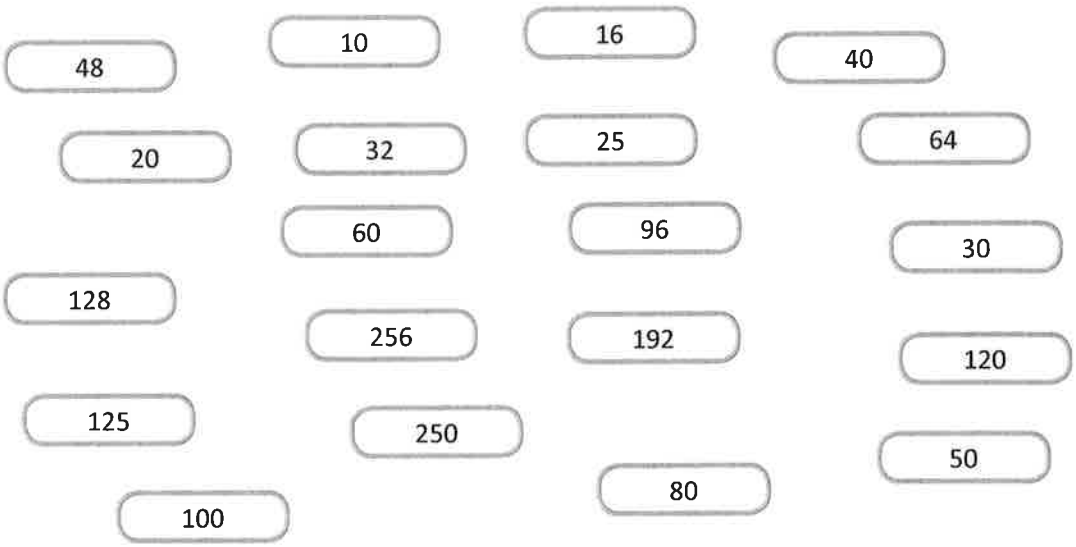
c 224 ÷ 32 = _____ ÷ _____ = _____ ÷ _____ = ☐

d 168 ÷ 24 = _____ ÷ _____ = _____ ÷ _____ = ☐

e 144 ÷ 36 = _____ ÷ _____ = _____ ÷ _____ = ☐

f 288 ÷ 72 = _____ ÷ _____ = _____ ÷ _____ = ☐

5 **Draw lines to connect numbers that could be doubled or halved to reach each other.**



6 **Work with a partner to solve this problem using halving:**

You have an after school job at the local lolly shop, making up the mixed lolly bags. Today, you have to evenly share 288 freckles among 48 bags. How many freckles will you put in each bag? Show each halved sum.

Mental division strategies – split strategy

3 **Play this game with a partner. Use one copy of this page between you. Cut out the problems on the left and stack them face up. Cut out and spread the other cards face up. Work together (or race) to find two numbers you could divide to solve the problem on the top card of the pile. One card in the pair will be grey, the other white. For example, if the problem was 76 ÷ 4, you could locate 36 and 40.**

96 ÷ 4	45	90
75 ÷ 5	25	21
87 ÷ 3	60	50
98 ÷ 7	80	70
135 ÷ 9	55	36
78 ÷ 6	30	60
112 ÷ 8	60	60
51 ÷ 3	27	32
95 ÷ 5	24	40
84 ÷ 6	28	18

Mental division strategies – tests of divisibility

2 **These numbers can all be divided with no remainders. Work with a partner to find the rule/s that can be used to divide them. Fill in the tables.**

36	90	84	99	50	72
456	330	888	120	981	548
1 025	3 486	6 993	1 256	9 050	10 072

÷ 4

÷ 9

÷ 5

÷ 3

÷ 8

Written methods – contracted multiplication

3 **Below are Jess and Harry's tests. Check them and give them a mark out of 5. If they made mistakes, give them some feedback as to where they went wrong.**

Jess

$$\begin{array}{r} {}^{1}{}^{1} \\ 387 \\ \times \quad 2 \\ \hline 774 \end{array}$$

$$\begin{array}{r} \\ 119 \\ \times \quad 7 \\ \hline 773 \end{array}$$

$$\begin{array}{r} \\ 203 \\ \times \quad 3 \\ \hline 609 \end{array}$$

$$\begin{array}{r} {}^{1} \\ 436 \\ \times \quad 3 \\ \hline 1208 \end{array}$$

$$\begin{array}{r} \\ 401 \\ \times \quad 7 \\ \hline 2807 \end{array}$$

Harry

$$\begin{array}{r} {}^{1}{}^{1} \\ 387 \\ \times \quad 2 \\ \hline 774 \end{array}$$

$$\begin{array}{r} {}^{1}{}^{6} \\ 119 \\ \times \quad 7 \\ \hline 833 \end{array}$$

$$\begin{array}{r} \\ 203 \\ \times \quad 3 \\ \hline 69 \end{array}$$

$$\begin{array}{r} {}^{1}{}^{1} \\ 436 \\ \times \quad 3 \\ \hline 1308 \end{array}$$

$$\begin{array}{r} \\ 401 \\ \times \quad 7 \\ \hline 287 \end{array}$$

Written methods – extended multiplication

3 **Use extended multiplication to solve these problems:**

a Jack and his 2 friends bought tickets to the World Cup. Each ticket costs $124. How much did they spend altogether?

e:

b Jack has a paper round and earns $7 per day. He works for 18 days and saves it all. Has he earned enough to pay for his World Cup ticket?

e:

c Yusuf's highest Level 1 Live Mathletics score is 112. Yep, he's fast. If he scores this 7 times in a row, how many correct answers has he achieved?

e:

d Kyra's class of 24 all had to stay in for 11 minutes of their recess. Something to do with too much talking. How many minutes is this in total?

e:

4 **Once you have the hang of extended multiplication, you can apply it to larger numbers. Try these:**

a

		2	4	5	
×			3	2	
					(2 × 5)
					(2 × 40)
					(2 × 200)
					(30 × 5)
					(30 × 40)
					(30 × 200)

b

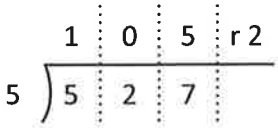
		3	2	9	
×			4	3	
					(3 × 9)
					(3 × 20)
					(3 × 300)
					(40 × 9)
					(40 × 20)
					(40 × 300)

c

		2	3	8	
×			5	2	
					(2 × 8)
					(2 × 30)
					(2 × 200)
					(50 × 8)
					(50 × 30)
					(50 × 200)

Written methods – short division with remainders

Sometimes numbers don't divide evenly. The amount left over is called the **remainder**.



Look at 527 divided by 5.
500 divided by 5 is 100.
27 divided by 5 is 5 with 2 left over (this is the remainder).
This can be written as r 2.
527 ÷ 5 = 105 r 2.

1 **Divide these 2 digit numbers. Each problem will have a remainder.**

a 9) 7 5 r

b 4) 4 7 r

c 6) 3 8 r

d 5) 6 3 r

e 4) 4 9 r

f 6) 6 2 r

2 **Divide these 3 digit numbers. Each problem will have a remainder.**

a 5) 5 5 7 r

b 3) 6 6 1 r

c 4) 4 8 1 r

d 9) 9 9 4 r

e 4) 8 4 5 r

f 6) 6 3 8 r

3 **Solve these problems:**

a Giovanni's Nonna has given him a bag of gold coins to share among him and his two sisters. There are 47 gold coins altogether. How many does each child get if they're shared evenly? How would you suggest they deal with the remainder?

_____

b You have 59 jubes to add to party bags. Each bag gets 5 jubes. How many full party bags can you make?

Written methods – solving problems

We regularly come across multiplication and division problems in our everyday life. It doesn't matter which strategy we use to solve them, we can choose the one that suits us or the problem best.

1 **One real-life problem is comparing prices to find the best deal. It's easy if the prices and amounts are the same but what if the amounts are different? Use a strategy to help you find the best deal on these:**

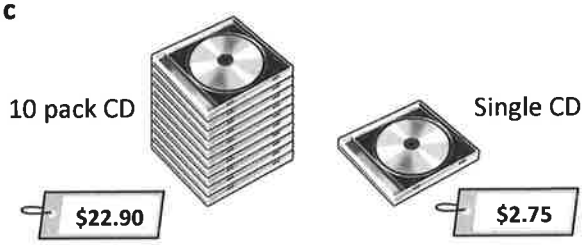
a

Best deal is _____

b

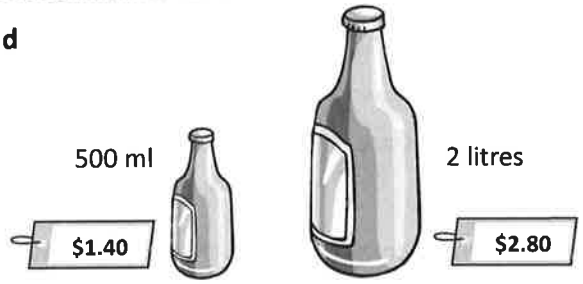
Best deal is _____

c



Best deal is _____

d



Best deal is _____

2 **You go to the service station with your weekly pocket money of $5. When you take a $1.75 chocolate bar to the counter, they offer you the special of 3 bars for $4.50. Which is a better deal? Show why.**

Crack the code

apply

What to do

Use the code below to work out the hidden message.

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

A × A = A	**A is** ____	F = H + L	**F =** ____
M × M = M + M	**M is** ____	E = F ÷ 2	**E =** ____
T − M = A	**T is** ____	2 × L = I	**I =** ____
T + T = H	**H is** ____	(2 × L) − A = C	**C =** ____
H − M = L	**L is** ____	F + A = N	**N =** ____
3 × L = U	**U is** ____	3 × T = S	**S =** ____

DISCOVER

What to do

Try this one:

2	9	4	12	13	8	2	7	4	9		2	12	3		

4	2	6	6	3	12		0	8		9	1	2	5	3	

A × A = A + A	**A is** ____	L + E = S	**S is** ____
A + A = T	**T is** ____	N − N = I	**I is** ____
T × 2 = N	**N is** ____	U − A = C	**C is** ____
AT ÷ N = E	**E is** ____	S − (2 × T) = P	**P is** ____
2 × E = L	**L is** ____	2 × U − P = O	**O is** ____
E + T = U	**U is** ____	S + E = R	**R is** ____

Puzzles

apply

What to do

Use your knowledge of multiplication to work out the missing values:

a

	2	8
×		3
	8	□

b

	7	□
×		4
	2	8	8

c

	□	7
×		5
	2	3	5

d

	8	□
×		9
	7	2	9

e

	6	8
×		□
	2	0	4

f

	□	2	3
×			□
	6	5	8	4

g

	2	6	1
×			□
	□	□	4	4

h

		4	2
×			□
		1	2	6
	□	6	8	0
	□	□	□	□

i

		5	6
×		2	7
	3	9	2
	□	□	□	□
	□	□	□	□

What to do

Fill in the multiplication and division tables by working out the missing digits. The arrows show you some good starting places.

×			7	6
	20	16	14	
5		40		
				36
3	30			

×		8	9	
12	24			
3				12
	14			
			54	

×			3	
4				32
		14		
	45		27	
12		24		

×			9	
	6			
11	33	44		
			63	
8				64

NEW WAVE MENTAL MATHS (BOOK B) – ANSWERS

WEEK 1 – pages 2–3

MONDAY

1. Teacher check
2. Dan
3. 9
4. 6
5. 6
6. 3
7. A
8. 5
9. January
10. 33, 38, 44, 80

TUESDAY

1. Teacher check
2. Answers will vary.
3. 4, 7, 9
4. 7, 5, 3, 1
5. Teacher check
6. 5, 12, 16, 18, 21
7. after
8. 8
9. 8
10. 14

WEDNESDAY

1. 4
2. 3
3. 6
4. Curly
5. 5
6. 4
7. 15
8. ←
9. 7
10. 22, 30

THURSDAY

1. 9
2. 8
3. 24
4. 28, 31, 44, 80, 87
5. 112, 120
6. 5
7. 6
8. 5
9. 5
10. 10

PROBLEM-SOLVING

Monday	1
Tuesday	5c
Wednesday	8
Thursday	7

FRIDAY REVIEW

1. 8
2. 23
3. 38, 40
4. 8, 10
5. 10
6. 9
7. after
8. 9
9. A
10. Answers will vary.
11. 3
12. 5

WEEK 2 – pages 4–5

MONDAY

1. 3
2. 14
3. Teacher check
4. Sunday
5. 11
6. 9
7. 20, 29, 38
8. 7
9. 30
10. 29

TUESDAY

1. 7
2. 9
3. 11
4. Teacher check
5. 12
6. Answers will vary.
7. 5
8. 15
9. Teacher check
10. 5

WEDNESDAY

1. 2
2. 10c
3. Teacher check – yacht/boat/sailing boat
4. Thursday
5. 10
6. 24
7. after
8. 4
9. 4
10. 8

THURSDAY

1. 
2. 40
3. Teacher check
4. 33
5. 14
6. 1
7. 22, 34
8. Teacher check
9. ●
10. M

PROBLEM-SOLVING

Monday	●
Tuesday	4
Wednesday	Dad
Thursday	7

FRIDAY REVIEW

1. 20c
2. 15
3. 100
4. 2
5. 6
6. 49, 48
7. 28
8. 50
9. 32, 41, 50
10. 
11. Saturday
12. T

WEEK 3 – pages 6–7

MONDAY

1. Teacher check – square
2. 12
3. 3 + 2 + 3 = 8
4. 5
5. 𝍸 III
6. 2
7. no
8. Sunday
9. two 5c coins
10. 5c

TUESDAY

1. 10
2. ➡
3. no
4. 26
5. 37
6. (a) two 10c
   (b) 20c
7. 10c
8. Teacher check
9. Teacher check
10. 4

WEDNESDAY

1. 57, 71, 79, 84, 86
2. (a) C, B, E
   (b) D
3. □
4. 2
5. (a) three 5c coins
   (b) 10c
6. 5c
7. 14
8. 5
9. 35
10. before

THURSDAY

1. 2, 3, 7
2. 
3. Monday
4. 15
5. (a) Teacher check
   (b) 10
6. 39, 36
7. 3 + 1 + 3 = 7
8. Y
9. Z
10. 7

PROBLEM-SOLVING

Monday	1 + 8
	2 + 7
	3 + 6
Tuesday	2, 1, 7
Wednesday	13
Thursday	7

FRIDAY REVIEW

1. $1
2. 5
3. two 10c coins and one 5c coin
4. 7
5. ⚠
6. 28, 36, 43, 69
7. 3 + 2 + 1 = 6
8. yes
9. March
10. Saturday
11. 12
12. 𝍸 IIII

WEEK 4 – pages 8–9

MONDAY

1. C
2. 10
3. 9
4. C
5. 17
6. 37
7. 9, 8, 7, 6, 5
8. (a) 23
   (b) 4
   (c) 40
9. 9
10. 60

TUESDAY

1. 6
2. (a) 6
   (b) 70
   (c) 20
3. Answers will vary.
4. after
5. 18
6. 2
7. Teacher check
8. Teacher check
9. 30, 32
10. 43

WEDNESDAY

1. Teacher check
2. 19
3. A
4. 2
5. 46, 54
6. (a) 3
   (b) 28
7. 3 + 4 = 7
8. 12
9. 15
10. (a) 80
    (b) 20
    (c) 40

THURSDAY

1. (a) 6
   (b) 7
   (c) 9
   (d) 8
2. 7
3. 3 4
   8 1
   12 9
   2 11
   7 6
   10 5
4. 10
5. 20
6. 10
7. 40
8. 11
9. 500
10. Answers will vary.

PROBLEM-SOLVING

Monday	$15
Tuesday	2
Wednesday	March
Thursday	17

FRIDAY REVIEW

1. 5c
2. 700
3. 24
4. 9
5. (a) 10
   (b) 5
   (c) 9
6. 14
7. ●
8. Teacher check
9. 31, 45, 50, 72, 99
10. 5
11. June
12. B

WEEK 5 – pages 10–11

MONDAY

1. Teacher check
2. 14
3. 10
4. the third ruler
5. 24
6. (a) 10
   (b) 9
   (c) 30
7. ◁
8. 2
9. 3
10. 5

TUESDAY

1. 8
2. A
3. the second ruler
4. 48
5. one 10c coin or two 5c coins
6. 800
7. 3, 1, 2
8. 6 – 4 = 2
9. Teacher check
10. (a) 70
    (b) 8
    (c) 40 + 2

WEDNESDAY

1. C, D
2. the fourth ruler
3. 300

NEW WAVE MENTAL MATHS (BOOK C) – ANSWERS

WEEK 1 – pages 2–4

MONDAY

1. 
2. 93
3. (a) 30 (b) 700
4. 381, 382, 383, 384, 390, 391, 393, 394, 400, 402, 403, 404, 405
5. 100
6. 10
7. 5
8. 100
9.  $\frac{1}{4}$ turn
10. (a) 135 (b) 287
11. 10
12. 8
13. 16
14. 4
15. 10

TUESDAY

1. 1
2. 92
3. Answers will vary
4. 6
5. A4, B1, C3, C2, E5
6. 111
7. 23
8. 14
9. 100
10. (a) 236 (b) 697
11. 6 green
    10 yellow
    7 blue
12. 6
13. 18
14. 3
15. 9

WEDNESDAY

1. 130
2. 13
3. 7
4. 8
5. 14
6. 9 green
   6 yellow
   10 blue
7. 2
8. 20
9. 6
10. 14
11. 9
12. Saturday
13. Tues, Wed, Thur
14. 31
15. Tuesday

THURSDAY

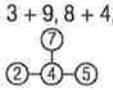
1. (a) 8 (b) 4
   (c) 2 (d) 4
2. 7
3. 50
4. (a) 12 (b) 32
5. 30 + 8
6. 500
7. 890
8. 
9. 9
10. (a) 30 (b) 100
11. 6
12. 35
13. 5 m
14. 15
15. 4 km

PROBLEM-SOLVING

Monday

1. 1, 7, 2
2. 3, 5, 2

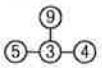
Tuesday

1. 3 + 9, 8 + 4, 7 + 5
2. 

Wednesday

1. June
2. 5

Thursday

1. June
2. 

FRIDAY REVIEW

1. 1.20
2. 22
3. 17
4. (a) 200 (b) 1000
5. $1.20
6. 16
7. 50
8. 38
9. 10
10. 25
11. 212
12. 80
13. 75
14. 7
15. 2
16. square E
    pentagon B
17. 7
18. 5.15, 5
19. Uki
20. 49 m

WEEK 2 – pages 5–7

MONDAY

1. 
2. (a) 371 (b) 864
3. 80
4. 4
5. 170
6. 1 | 1 | 1
7. 8
8. B
9. 14
10. A = 4
    B = 3
11. 13
12. 4
13. 10
14. 12
15. 40 green
    20 yellow
    30 blue

TUESDAY

1. 3.30, 3
2. 20
3. 20
4. sunset
5. 93
6. 9, 3, 5
7. 8 tens, 4 ones
8. dark
9. Teacher check
10. octagon
11. 17
12. 3
13. 15 blue
    17 green
    14 yellow
14. 3
15. 9

WEDNESDAY

1. 6
2. (a) 10 (b) 20
3. 30
4. sunrise
5. 119, 115
6. $5
7. B
8. 9.30, 9
9. 3
10. 17
11. 15
12. 8
13. 21
14. 34
15. 6

THURSDAY

1. 12
2. 1.45, 2
3. Answers will vary
4. Answers will vary
5. cylinder C
   cube B
   pyramid A
6. 100
7. 100
8. 4, 8, 12
9. 4
10. (a) 4 (b) 10
11. 286
12. 700
13. 17
14.  $\frac{1}{2}$ turn
15. $1.10

PROBLEM-SOLVING

Monday

1. 40
2. 20

Tuesday

1. 16
2. 22

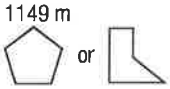
Wednesday

1. $3.50
2. $1.80

Thursday

1. 3
2. 12

FRIDAY REVIEW

1. 700
2. 90
3. (a) 12
   (b) 12 ÷ 3 = 4
   (c) 3
4. 94
5. 90
6. 150
7. 35c
8. 8
9. 18
10. 910, 480
11. 380
12. 18 blue
    13 yellow
    19 green
13. 9, 7
14. 7, 5
15. 11.45, 12
16. B
17. Einin C
    Jess A
    Vina B
18. 1149 m
19. 
20. cylinder B
    cube A

WEEK 3 – pages 8–10

MONDAY

1. 118, 116, 112
2. 11
3. 109
4. 6.15, 6
5. sunset
6. 5 | 2 | 7
7. 100
8.

0–100	81, 47
110–130	111
131–200	199, 133
201–500	215

9. 43
10. $20, $100, $50, $10, $5
11. 14
12. 9
13. 6
14. 10 blue
    5 green
    15 yellow
15. 3

TUESDAY

1. 8.30, 8
2. column
3. midday
4. (a) 1000 (b) 18
5. 135
6. 16
7. +
8. –
9. 14
10. 8
11. 11
12. 18
13. 10 yellow
    14 green
    0 blue
14. A
15. C

WEDNESDAY

1. round
2. 21
3. 4
4. row
5. E
6. 30 + 5
7. 100 + 10
8. ÷
9. 5
10. 10 green
    11 blue
    12 yellow
11. 22
12. 13
13. 8
14. C
15. B

THURSDAY

1. sphere, prism or cone
2. 3, 2
3. water
4. $2.60
5. D
6. +
7. ×
8. ÷
9. –
10. 8
11. B and C
12. 180 m
13. 101
14. D
15. C

PROBLEM-SOLVING

Monday

1. 5
2. 5

Tuesday

1. triangle
2. square

Wednesday

1. 4
2. $1.90

Thursday

1. 12
2. 15

FRIDAY REVIEW

1. 14
2. one hundred and thirty-five
3. 120 + 10
4. 303
5. 20
6. $1.05

NEW WAVE MENTAL MATHS (BOOK C) – ANSWERS

7. 24, 27
8. 100
9. 110
10. 700
11. 690
12. +
13. $1.50
14. 102
15. 12
16. 12 am
17. 5
18. False
19. B
20. even

WEEK 4 – pages 11–13

MONDAY

1. circle
2. 34
3. 15
4. 15
5. 3, 3
6. $1.60
7. (a) 3 (b) starfish
8. 11 green
   10 blue
   9 yellow
9. 12
10. 1
11. 5
12. 10
13. 5
14. Tuesday
15. Thursday

TUESDAY

1. 6, 6.30
2. 
3. 4
4. 53
5. $4.50
6. 88
7. 90
8. 150 + 10
9. 65 m
10. 6 hours
11. 8
12. 10
13. 2
14. 11
15. 1

WEDNESDAY

1. 
2. 107, 170, 299, 303
3. C
4. 190 + 10
5. 6
6. +
7. ×
8. C
9. 10
10. 16
11. 10
12. 4
13. 13 yellow
    12 blue
    14 green
14. B
15. D

THURSDAY

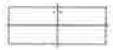
1. 
2. 100
3. 4
4. 11, 11
5. 20
6. 80
7. 10
8. 302, 399, 401
9. 16
10. 15
11. (7, 9)
12. 21
13. 1000
14. Teacher check
15. 298, 292

PROBLEM-SOLVING

Monday

1. $\frac{1}{3}$
2. $\frac{3}{4}$

Tuesday

1. 
2. 

Wednesday

1. 100
2. 150

Thursday

1. 80
2. 100

FRIDAY REVIEW

1. 10
2. $18
3. 190, 196, 200
4. 4 + 6
   5 + 6
   5 + 7
   4 + 9
5. 2
6. +
7. ×
8. 120
9. 3
10. 1
11. 15 green
    13 yellow
    14 blue
12. 60
13. 12
14. 1, 12
15. B
16. A = 4
    B = 1.5
    C = 3
17. 81 m
18. cone B
    pyramid A
    cube C
19. 34
20. 7

WEEK 5 – pages 14–16

MONDAY

1. 6
2. 4, 4
3. 7
4. (a) 12 (b) 22
5. 1926
6. ••
7. ×
8. +
9. 12
10. 3
11. 7
12. 1, 3, 5, 7, 9
13. 10
14. Teacher check
15. (a) Teacher check
    (b) one half of AB

TUESDAY

1. 12, 12
2. 110
3. 520, 522, 524
4. 24
5. west
6. column
7. (a) 300 (b) 3000
8. 6
9. 3
10. 15
11. 8
12. 10
13. M
14. K, July
15. K, June

WEDNESDAY

1. yes
2. Answers will vary
3.
4. +
5. ×
6. (a) 700 (b) 7000
7. C
8. 440
9. $40
10. 7, 7
11. 3
12. 23
13. 2, 4, 6, 8, 10
14. 8
15. 10

THURSDAY

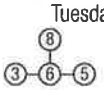
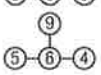
1. yes
2. 
3. 30
4. $100
5. 2378
6. 6 + 8 = 14 or
   8 + 6 = 14,
   14 – 8 = 6 or
   14 – 6 = 8
7. +
8. B
9. ÷
10. (10, 4)
11. Buy 1 full tub
12. 900
13. 8
14. 11, 5, 2
15. A, D, E, F, G, C, B

PROBLEM-SOLVING

Monday

1. 33
2. August

Tuesday

1. 
2. 

Wednesday

1. 
2. 

Thursday

1. 6
2. 28

FRIDAY REVIEW

1. ×
2. ÷
3. 495, 500
4. 31
5. 352
6. 998, 996, 994
7. 9, 7, 5, 3, 1
8. 27
9. 12
10. 8
11. square
12. Sunday
13. 
14. 60
15. 14
16. Domenic
17. 2017
18. Teacher check
19. Teacher check
20. 15

WEEK 6 – pages 17–19

MONDAY

1. (a) × (b) +
2. 20
3. 20
4. 1, 1
5. ×
6. ÷
7. B
8. 16
9. 7
10. 2
11. 60 yellow
    30 green
    80 blue
12. 3
13. 28
14. 8
15. Friday

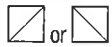
TUESDAY

1. 2, 3
2. 23
3. 5
4. 12, array
5. 20
6. (a) 8301
   (b) 8310
7. (a) × (b) –
8. 409, 411
9. 40, 40
10. 2
11. 50 yellow
    70 blue
    20 green
12. 16
13. 4
14. 6
15. 44

WEDNESDAY

1. 5
2. 80 green
   90 yellow
   40 blue
3. 5
4. 4
5. 24
6. ⇦⇨
7. $\frac{3}{4}$
8. 150 °C
9. 120, 190
10. 530
11. kilometre
12. each
13. hour
14. 24
15. 4

THURSDAY

1.  or
2. 10,11
3. 45
4. (a) 8429
   (b) 9842
5. 40 + 12 = 52
6. 5
7. 1000
8. 36
9. curved surface
10. 50c
11. ×
12. 100
13. (a) 35
    (b) 20
14. 750
15. $2.15

PROBLEM-SOLVING

Monday

1. 10
2. 5

Tuesday

1. 600 m
2. 750

NEW WAVE MENTAL MATHS (BOOK D) – ANSWERS

WEEK 1 – pages 2–4

MONDAY

1. 3.00 or 3 o'clock
2. 5 + 5
3. B + C
4. 7 + 7 + 7
5. 8
6. 3, 3, 3
7. 365
8. 14
9. Answers will vary.
10. 
11. 100
12. 200
13. 5
14. 18
15. (a) 110 (b) yes
16. B
17. A
18. C
19. 14
20. 10

TUESDAY

1. 3.30 or half past 3
2. 9 + 9 + 9
3. 4 + 4 + 4
4. 
5. 5, 5, 5, 2
6. (a) 292 (b) 305
7. 1100
8. 7
9. $\frac{1}{4}, \frac{3}{4}, \frac{9}{10}, 1$
10. 10
11. 
12. $\frac{1}{4}$ turn
13. (a) odd (b) 13
14. 200
15. 89
16. D
17. A
18. B
19. 15
20. 18.70

WEDNESDAY

1. B
2. 0
3. 10 + 10 + 10
4. 1919
5. 950
6. 3, 3, 3, 2
7. (a) 22 (b) 32
8. 3
9. 
10. 30
11. 366
12. 24
13. (a) 100 (b) 1000
14. 1
15. summer
16. 12
17. $\frac{1}{2}$ turn
18. (a) 16 (b) 160
19. 70
20. 32

THURSDAY

1. A
2. 7 + 7 = 14
3. 70
4. It is equally likely to be a head or tail.
5. 8
6. 991, 1011
7. ×, ÷
8. Teacher check
9. 10
10. ×
11. (a) 10 (b) 100
12. Teacher check
13. 1
14. (a) 110 (b) 1100
15. 60
16. 
17. (a) 9 (b) 90
18. C
19. 3935
20. 290

PROBLEM-SOLVING

Monday

1. 
2. 

Tuesday

1. 6
2. 18

Wednesday

1. 63
2. 57

Thursday

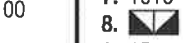
1. 
2. 18

FRIDAY REVIEW

1. 16
2. 1010
3. 413
4. 6
5. 1020, 1000
6. 60
7. ×
8. 4
9. C
10. 999, 1001
11. (a) 120 (b) even
12. 8
13. 1009
14. ×
15. 525
16. 40
17. 4.30
18. 365
19. 100
20. 
21. $\frac{1}{4}$ turn
22. 14
23. 10
24. 24
25. Hugo

WEEK 2 – pages 5–7

MONDAY

1. 8.00 or 8 o'clock
2. 16
3. 4 + 4 + 4 + 4 + 4 = 20
4. 3
5. 16 ÷ 4 = 4
6. +
7. 1010
8. 
9. 15
10. pentagon
11. 30 mm
12. (a) 4 cm (b) 40 mm
13. spring
14. 365
15. 52
16. 197
17. 990
18. 42
19. (a) 78 (b) 678
20. Chantelle

TUESDAY

1. A
2. 7 + 7 + 7 + 7 = 28
3. 1000
4. (a) 8523 (b) 2358
5. 15 ÷ 3 = 5
6. (a) 10 (b) 100
7. 100
8. 200
9. XYZ
10. 6
11. Teacher check
12. 1
13. hexagon
14. B
15. (a) 11 (b) 110
16. (a) 14 (b) 140
17. 60
18. 24
19. 6
20. 1

WEDNESDAY

1. A
2. 10
3. 22
4. (a) 87 (b) 107
5. 3 + 3 + 3 + 3 + 3 = 15
6. 3 x 4 = 12
7. 12
8. 4
9. 24
10. (a) 11 (b) 110
11. $\frac{1}{2}$
12. 9009
13. a square
14. 10 + 8 + 10 + 8 = 20 + 16 = 36
15. (a) 48 (b) 480
16. 14
17. (a) 120 (b) 1200
18. 5
19. cherries
20. plums

THURSDAY

1. 10.45
2. (a) 37 (b) 127
3. 159
4. (a) 83 (b) 103
5. 4
6. 8 + 8 + 8 = 24
7. 6 × 3 = 18
8. 10
9. 405
10. $\frac{1}{4}$
11. pentagon
12. (a) 11 (b) 110
13. 7
14. 
15. (a) 5 (b) 50
16. (a) 3 (b) 30
17. $\frac{1}{5}, \frac{1}{3}, \frac{1}{2}, 1$
18. D
19. A
20. 2.95

PROBLEM-SOLVING

Monday

1. 57
2. 9

Tuesday

1. $3
2. Sat 19 August

Wednesday

1. 1, 15
2. Sat 2 September

Thursday

1. $13
2. $1 × 1, $2 × 6

FRIDAY REVIEW

1. 9 + 9 + 9 = 27
2. 9
3. 0
4. 8, 10
5. 24
6. 13, 130
7. ÷
8. 2010
9. 36
10. 38
11. 134
12. $\frac{1}{5}, \frac{1}{4}, \frac{1}{3}, \frac{1}{2}, 1$
13. 705
14. B
15. 65c
16. 6.15 am
17. 366
18. 24 cm
19. autumn
20. 
21. B
22. YYY
23. 6
24. 5
25. 21

WEEK 3 – pages 8–10

MONDAY

1. 2.15
2. 60
3. 7 × 10
4. 5
5. 3 + 3 + 3 + 3 = 12
6. 3 × 7 = 21
7. 91
8. 1012
9. 8
10. 52
11. 24
12. (a) 13 (b) 23
13. 20
14. 6
15. square
16. 2 × 300 = 600
17. 40
18. 100
19. 8
20. 2

TUESDAY

1. 12
2. 8 + 8 + 8 = 24
3. 75
4. (a) 31 (b) 131
5. 105
6. 70
7. (a) 14 (b) 140
8. 48
9. 6
10. 18 ÷ 3 = 6
11. (a) 130 (b) 1300
12. 91
13. 
14. triangular prism
15. 100
16. 6
17. 5
18. 8
19. (a) 50 (b) 500
20. 900

WEDNESDAY

1. 5.15
2. 4
3. (a) 84 (b) 840
4. 9
5. 27
6. 9 × 3 = 27
7. 12
8. $\frac{1}{2}$
9. 12
10. (a) 40 (b) 400
11. 7, 7
12. square prism or cube
13. $2.50 + $2.50 + $2.50 + $2.50 = $10
14. 

NEW WAVE MENTAL MATHS (BOOK D) – ANSWERS

15. 980, 1080
16. autumn, spring
17. $\frac{1}{3}$
18. 50
19.–20. Teacher check

THURSDAY

1. 9.15
2. 2 + 2 + 2 + 2 = 8
3. 5
4. 5, 5
5. 100
6. C
7. 12, 1200
8. 3000, 300, 30, 3, 3333
9. 81
10. 14
11. 1100
12. (a) 6 (b) 60
13. 10
14. square-based pyramid
15. even, or 1 in 2
16. 8
17. odd
18. 44, 44
19. (a) + (b) 8
20. 40

PROBLEM-SOLVING

Monday

1. 2 in 4
2. $\frac{1}{4}$

Tuesday

1. C
2. Dave

Wednesday

1. 4
2. 24

Thursday

1. | 1 | 6 |
   |---|---|
   | 16 | 11 |
2. | 16 | 8 |
   |---|---|
   | 24 | 32 |

FRIDAY REVIEW

1. 3 + 3 + 3 + 3 = 12
2. 3000
3. 45 km
4. 150
5. 6, 3
6. 103
7. 1015
8. 5
9. 96
10. ×
11. 20
12. $2.50 + $2.50 + $2.50 = $7.50
13. 4
14. 12 ÷ 3 = 4
15. 12
16. odd
17. (a) 10 (b) 100
18. 7.15
19. 2
20. 6
21. 1
22. 52
23. 
24. 
25. 0 in 4

WEEK 4 – pages 11–13

MONDAY

1. 1
2. 500
3. 16
4. 20
5. 100
6. 365
7. 101, 91, 61
8. square-based pyramid
9. ×
10. ÷
11. 350
12. 
13. 55, 5
14. 60
15. 1 in 6
16. $\frac{3}{6}$ or $\frac{1}{2}$
17. 1
18. 9
19. 5
20. 10

TUESDAY

1. 3
2. 25
3. 
4. 
5. (a) 15 (b) 150
6. 80
7. 4
8. 50c
9. 12
10. 36 ÷ 3 = 12
11. 3
12. even
13. 52
14. kg
15. g
16. 240, 300
17. 25
18. kilograms
19. (a) 5 (b) 50
20. 100

WEDNESDAY

1. 11
2. 25
3. 3
4. 70
5. 36
6. 54
7. 9
8. December, January and February
9. 44, 47, 3
10. 10
11. 1, 9
12. pentagon
13. 31
14. Teacher check
15. 438
16. even
17. 2, 20
18. 60c
19. 4
20. 

THURSDAY

1. 4
2. 16, 4
3. 3.30
4. 30, 50
5. 100
6. triangular prism
7. 1100
8. 100
9. 72
10. 10
11. 8
12. odd
13. (a) 9 (b) 900
14. B and D
15. 28 or 29
16. green
17. 7
18. 20
19. 4
20. 27

PROBLEM-SOLVING

Monday

1. 3
2. no

Tuesday

1. $100
2. 3 hrs 30 min or $3\frac{1}{2}$ hrs

Wednesday

1. 4
2. 2.25

Thursday

1. Mon 10.20 am
2. Tues 10.20 am

FRIDAY REVIEW

1. 0
2. 36, 9, 36
3. odd
4. 6
5. 33, 11, 33
6. 60
7. 14
8. 
9. 60c
10. 100
11. 30
12. 1
13. 12
14. 26
15. C and G
16. kilograms
17. pyramid
18. A
19. D
20. 28
21. 19
22. $42
23. 3
24. 1 in 4
25. 2 in 4 or $\frac{1}{2}$

WEEK 5 – pages 14–16

MONDAY

1. 6
2. 19
3. 16, Teacher check array
4. 4
5. 33, 11
6. rectangle
7. 15
8. 155, 170, 15
9. (a) 11 (b) 21
10. 5, 50
11. 31
12. 896
13. 6
14. (a) 18 (b) 38
15. 10
16. vertical
17. hexagon
18. 365
19. 10 862
20. ×

TUESDAY

1. 11
2. (a) 14 (b) 24
3. 30
4. 21, Teacher check array
5. 6
6. 100
7. 4, 40
8. 48, 51, 3
9. triangular prism
10. 25
11. (a) 10 (b) 4
12. 1020
13. 80c
14. $1.50
15. 6
16. 5
17. (a) 0.3 (b) 0.5
18. 30
19. horizontal
20. ÷

WEDNESDAY

1. Teacher check
2. 8
3. $14.50
4. 30
5. 366
6. 4
7. 88
8. octagon
9. 52
10. ÷
11. 5
12. $\frac{4}{10}$
13. June, July, August
14. 60
15. vertical
16. 2
17. sphere
18. 
19. 29
20. Teacher check

THURSDAY

1. 4
2. 4
3. 40
4. 1007
5. 8
6. 30c
7. 28
8. $4.50
9. cm
10. 16
11. 88
12. (a) 24 (b) 6
13. am
14. 28 or 29
15. 80
16. 100
17. 16
18. 5
19. no
20. 0.5

PROBLEM-SOLVING

Monday

1. 10, 4
2. 3, 8

Tuesday

1. camping, judo
2. 5

Wednesday

1. 48
2. 9

Thursday

1. square or rectangular pyramid
2. Teacher check

FRIDAY REVIEW

1. Teacher check
2. 24, 24
3. 1009
4. 90
5. 10
6. 10
7. (a) 15 (b) 150
8. (a) 98 (b) even
9. (a) 6 (b) 5 (c) 3
10. (a) ÷ (b) 21
11. $28
12. 4 × $7 = $28
13. 3
14. 30
15. rectangular prism
16. Teacher check
17. km
18. am
19. 
20. 6
21. horizontal
22. June, July, August
23. 28
24. 9
25. 2

WEEK 6 – pages 17–19

MONDAY

1. 7.45
2. 93
3. 6
4. 5

NEW WAVE MENTAL MATHS (BOOK E) – ANSWERS

WEEK 1 – pages 2–4

MONDAY

1. 4.15
2. 16
3. 18
4. 5301
5. pentagon
6. 20
7. 5
8. 0.07
9. semi-circle
10. pm
11. 18
12. 5000
13. 100
14. 14
15. $\frac{2}{3}$
16. 1 m
17. 8
18. 4
19. 4
20. true

TUESDAY

1. 2.45
2. 4
3. 49
4.

3	6	9	12	15
18	21	24	27	30
33	36	39	42	45

5. 4
6. 5005
7. am
8. 17 km
9. hexagon
10. 29 February
11. 108
12. 365
13. 90
14. 
15. 1 kg
16. 8
17. 60 + 3 = 63
18. false
19. 1500
20. $\frac{2}{4}$ or $\frac{1}{2}$

WEDNESDAY

1. 7.30
2. 12
3. 81
4. 3
5. octagon
6. 12 801
7. 366
8. trapezium, square, rhombus, kite
9. 32
10. $\frac{5}{10}$ or $\frac{1}{2}$
11. 4
12. Monday
13. 54th Street
14. 10
15. 800
16. ÷
17. 350
18. 290
19. 36 cm
20. true

THURSDAY

1. 5.20
2. 60
3. hexagon
4. 60 000
5. 52
6. $6.50
7. 80
8. 5
9. $\frac{6}{9}$ or $\frac{2}{3}$
10. parallelogram
11.

	Prime	Composite
Odd	7	9
Even	2	10

12. 100
13. 21
14. morning
15. 509
16. 11
17. (a) Year 1
    (b) Answers will vary
18. true
19. 8
20. 0.02

PROBLEM-SOLVING

Monday

1. 8
2. $\frac{3}{10}$

Tuesday

1. 8
2. 26 May

Wednesday

1. 3975
   354
2. 5368
   2812

Thursday

1. B
2. B

FRIDAY REVIEW

1. 12
2. 6
3. 4
4. $5.50
5. 80
6. $\frac{8}{9}$
7. 6
8. 2352
9. 12, 24, 28
10. 24
11. 6
12. true
13. 10
14. 126
15. 350
16. 230
17. 11 110
18. 1099
19. 0.04
20. 2 m
21. 365, year
22. 9.45
23. hexagon
24. 2 kg
25. 7

WEEK 2 – pages 5–7

MONDAY

1. 1.05
2. 45
3. kite
4. 60
5. 40
6. 205 km
7. 6
8. 21
9. 
10. 500
11. 1000
12. 81
13. 
14. 50
15. 40 000
16. 35
17. 5
18. 100
19. $1.50
20. $\frac{4}{5}$

TUESDAY

1. 8.25
2. 290
3. 27
4. 750
5. 60, 300
6. 10
7. ÷
8. 5
9. cylinder
10. $3.00
11. 16 000
12. 73
13. 
14. 4
15. rhombus
16. 24, 95
17. 10
18. $\frac{9}{10}$
19. 160, 24
20. odd

WEDNESDAY

1. 10.40
2. less
3. 40 004
4. 900
5. 5000
6. 24
7. 3.10
8. octagon
9. 49
10. 
11. 24
12. distance in kilometres
13. 1000
14. (a) 24
    (b) 56
15. $\frac{7}{8}$
16. 4
17. 1000
18. 64
19. even
20. 4080

THURSDAY

1. 9.50
2. 2
3. rhombus
4. 370
5. 550
6. $1.10
7. 5
8. 1000
9. 
10. 266
11. $\frac{1}{10}, \frac{1}{6}, \frac{1}{5}, \frac{1}{4}, \frac{1}{2}$
12. 0.04
13. (a) 84 km
    (b) 272 km
14. 1400
15. 40
16. 1000
17. 5
18. even
19. 24 cm
20. $7.50

PROBLEM-SOLVING

Monday

1. (2,3) (3,3) (4,3)
   (5,3) (6,3)
2. Teacher check

Tuesday

1. 
2. 2000, 2020

Wednesday

1. 4
2. 5

Thursday

1. 180
2. 360

FRIDAY REVIEW

1. 150
2. $\frac{1}{8}, \frac{1}{6}, \frac{1}{5}, \frac{1}{4}, \frac{1}{2}$
3. 1200
4. 160, 16, 176
5. 1000
6. 195 km
7. 48
8. 3070
9. $3.50
10. $\frac{7}{9}$
11. 12 000
12. 25
13. 24
14. <10
15. odd
16. $2.00
17. 40 km
18. false
19. 4.05
20. 1000
21. 
22. 
23. ——
24. rhombus
25. Teacher check

WEEK 3 – pages 8–10

MONDAY

1. 
2. 16
3. $\frac{4}{4}$
4. 609
5. triangular pyramid
6. 1.6
7. 54
8. $\frac{1}{3}, \frac{1}{4}, \frac{1}{5}, \frac{1}{10}$
9. 
10. 270
11. (a) 36
    (b) 54
12. $\frac{4}{5}$
13. 24 cm
14. N
15. 1400
16. October
17. $45.00
18. 33
19. $2.80
20. 1430

TUESDAY

1. 
2. 1
3. triangular prism
4. 3789
5. 2100
6. 95
7. less than
8. 10
9. 240, 32, 272
10. 
11. 1.4
12. 800
13. 85
14. 40
15. $3.80
16. 800
17. 350 000
18. C
19. A
20. B

WEDNESDAY

1. 
2. 950
3. 175
4. 4300

NEW WAVE MENTAL MATHS (BOOK E) – ANSWERS

5. 510 000
6. 17 500
7. $5.90
8. 25, 49
9. 28
10. $\frac{1}{4}$
11. B
12. Spring
13. 4
14. 2000
15. false
16. (a) north
    (b) 9th Road
17. 2941
18. 90 kg
19. 1200
20. 4

THURSDAY

1. 
2. 
3. 7489
4. (a) 21 (b) 42
5. $1.90
6. 5964
7. 252
8. $\frac{1}{4}$
9. $2.50
10. Summer
11. 
12. 550
13. 36
14. square-based pyramid
15. 52
16. 21 km
17. 40, 4, 396
18. false
19. 30
20. 118

PROBLEM-SOLVING

Monday

1. (5,2) (5,3) (5,4) (5,5) (4,5) (3,5) (2,5)
2. Teacher check

Tuesday

1. 150
2. 725

Wednesday

1. 201
2. 65

Thursday

1. 3
2. 2

FRIDAY REVIEW

1. 16
2. 2364
3. 240, 24, 264
4. 1.3
5. 100
6. $\frac{1}{2}$
7. 1740
8. 1200
9. 1978
10. 24
11. 6
12. 25 kg
13. $7.50
14. $2.50
15. 812
16. 68 km
17. 
18. 
19. Autumn
20. Teacher check
21. square-based pyramid
22. 3200
23. triangular prism
24. C
25. 28 cm

WEEK 4 – pages 11–13

MONDAY

1. 1.25
2. 150
3. right angled/scalene
4. 40, 5, 200, 25, 225
5. 8, 2
6. 1
7. 1.3
8. Teacher check
9. 
10. 90 090
11. 210 cm
12. 8990
13. 32 cm
14. F
15. 12
16. 0.1
17. 15 April
18. $12 \times 7 = 84$
19. 1.08, 1.8, 1.99, 2.01, 2.1, 2.2
20. 0.2

TUESDAY

1. 2.40
2. 800
3. 50 kg
4. 100
5. 1
6. 3, 1
7. 4
8. equilateral
9. 22, 33, 44, 55, 66, 77, 88, 99, 110, 121, 132
10. 40, 8, 56, 336
11. 
12. $30 \times 12 = \$360$
13. 0.3
14. 2 July
15. 9400
16. 3100 m
17. 0.8
18. 1000
19. 1.8
20. 370

WEDNESDAY

1. 10.35
2. 9
3. 3.05
4. $\frac{3}{4}, \frac{2}{3}, \frac{2}{5}, \frac{1}{4}$
5. 15 500
6. 1
7. 5, 2
8. 
9. false
10. 160
11. 1100 g
12. scalene
13. 7000
14. 0.1
15. $24 \div 8 = 3$
16. 31 January
17. 1000
18. $2.40
19. $\frac{2}{5}, \frac{3}{5}$
20. 160

THURSDAY

1. 4.25
2. 60
3. $60.00
4. 15
5. 0.8
6. 1100 kg
7. 30, 9, 180, 54, 234
8. 4, 7
9. 1100 mm
10. isosceles
11. 800
12. K
13. 20
14. 13 January
15. 0.7
16. 1.7
17. 3000
18. January
19. rhombus
20. $\frac{1}{4}, \frac{3}{4}$

PROBLEM-SOLVING

Monday

1. 30 000
2. 110 000

Tuesday

1. 6
2. 18

Wednesday

1. 3
2. 1

Thursday

1. Teacher check
2. 60%

FRIDAY REVIEW

1. 900
2. 5
3. 1
4. 2.9, 2.99, 3.03, 3.1, 3.2
5. 1.25
6. 1
7. 7, 3
8. $8 \times 7 = 56$
9. 0.7
10. 270
11. 2.08
12. 4000
13. 0.9
14. 6980
15. true
16. 50
17. $\frac{3}{4}, \frac{2}{3}, \frac{1}{2}, \frac{2}{5}$
18. 4.40
19. 2100 m
20. 3100 kg
21. 100
22. equilateral
23. 
24. 17 March
25. pentagonal pyramid

WEEK 5 – pages 14–16

MONDAY

1. 7.30
2. 66
3. A = 0.5, B = 0.75, C = 1.25, D = 1.50
4. 90, 270, 279
5. 4200 m
6. 4000
7. 3.5
8. equilateral
9. 43 500
10. 130
11. 3.08
12. 6, 2
13. cube
14. 0.9
15. 30 September
16. $3.20
17. 8
18. 34 cm
19. 1.6
20. $12 \times 3 = 36$

TUESDAY

1. 11.45
2. 15
3. $1.30
4. 6200 g
5. 390
6. 1.2
7. 7000
8. 
9. $2.50
10. triangular pyramid
11. 50
12. 2004, 2012
13. 
14. 7917
15. 9
16. true
17. 12,16, 20, 28
18. 4, 5
19. $\frac{3}{4}$
20. 1

WEDNESDAY

1. 9.40
2. 1010
3. 3.0
4. 31 July
5. 24, 36, 48, 60, 72, 84, 96, 108, 120, 132, 144
6. 35
7. 7200 kg
8. scalene
9. 7
10. 4, 320, 336
11. 6737
12. $2\frac{1}{4}$
13. spring
14. 85 070
15. 10
16. 1884
17. 1
18. $2.50
19. 12
20. 4×3

THURSDAY

1. 0.10, 0.15, 0.20, 0.25
2. 1006
3. right-angle triangle
4. 25
5. 65
6. 5200 mm
7. 10.1
8. 9
9. summer
10. cylinder
11. 0.2
12. 125
13. true
14. Teacher check
15. 8874
16. 28
17. 32
18. 1
19. 10, 3, 10.3
20. 10

PROBLEM-SOLVING

Monday

1. $75 000
2. $785 000

Tuesday

1. Answers will vary. Possible answers:
   Pentagon (5)
   Octagon (8)
   Square (4)
2. 9

Wednesday

1. 108
2. 45

Thursday

1. 3 bags of apples for $10.50
2. 18

Your Daily Remote Learning Timetable

Create and design your own timetable for Remote Learning and what a learning schedule may look like for you each day.

RICH TASKS

WEEK 1 - Addition & Subtraction

This week's tasks are focussed on Addition and Subtraction. Use your Maths book (if you're working online) or this page (for hard copy users) to record your answers. Each question will have more than one answer, think hard and see if you are able to record as many as possible. Begin this task with the 'STARTER' question, followed by 'CHALLENGER' then 'EXTENDER' (if able to). Have fun coming up with multiple answers.

STARTER

_____ + _____ + _____ = 13 What might the missing numbers be? Can you think of more than 2 possibilities?

CHALLENGER

I did a subtraction task and the answer was 215 but I cannot remember the other numbers.
Find as many solutions to this subtraction as possible.

EXTENDER

2__6 + __8 = __2__

Work out all possible answers for this addition

Figurative Language

Simile

Similes are used to compare two things that are different in most ways but are the same in one, important way. The words "like" and "as" are used to compare the two things.

Examples:

The lake was as smooth as glass.

The trees stood like soldiers.

Figurative Language

Metaphor

Metaphors are used to compare two things that are different in most ways but are the same in one, important way. A metaphor states that one thing is something else.

Examples:

This kitchen is a disaster area.

The clouds were marshmallows.

Figurative Language

Idiom

An idiom is a well-known phrase that means something different than what the words seem to mean.

Examples:

It's raining cats and dogs.

You're pulling my leg.

Figurative Language

Hyperbole

Hyperbole is when a statement is exaggerated to make a point.

Examples:

My backpack weighs a ton.

We waited for days.

Figurative Language

Personification

Personification is giving human qualities (actions, feelings, thoughts) to nonhuman objects.

Examples:

The cozy house invited us in.

The sad little flower wilted in the sun.

Figurative Language

Onomatopoeia

An onomatopoeia is a word that sounds like its meaning.

Examples:

buzz, squeak, zip, crackle, sniffle

Figurative Language

Alliteration

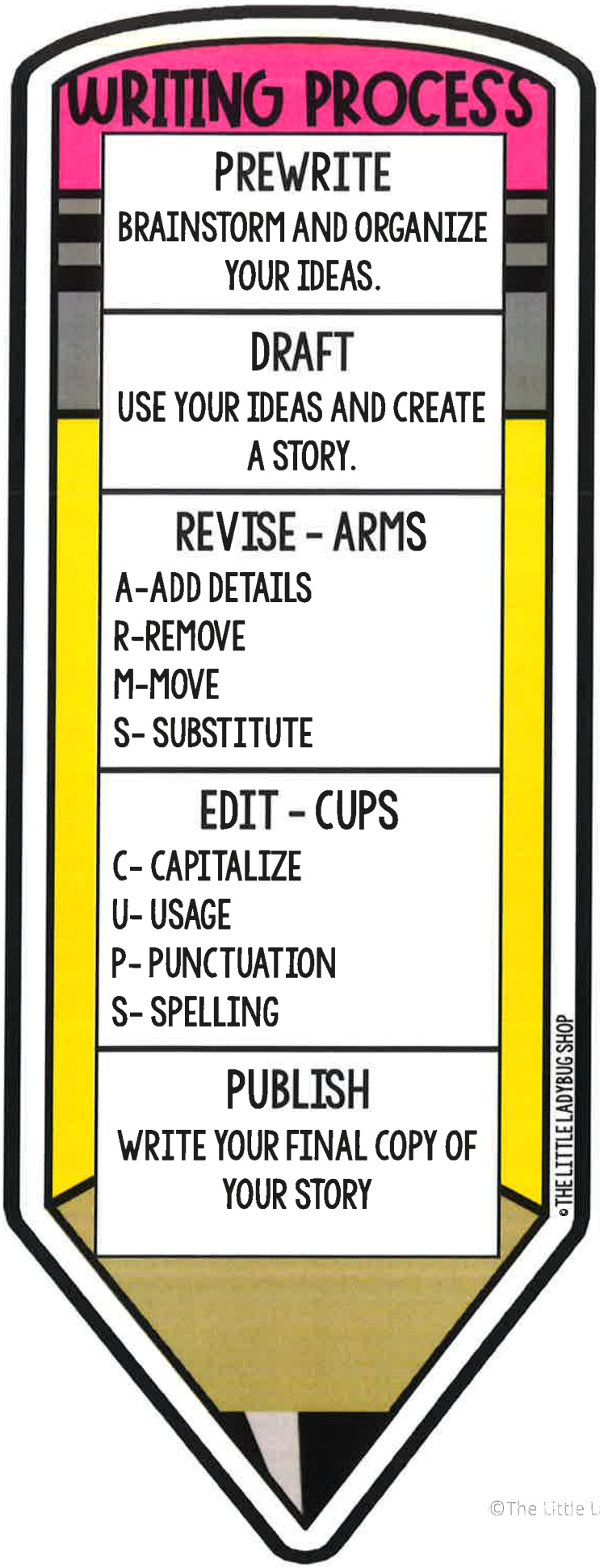
Alliteration is when the beginning sound of a word is repeated two or more times in a phrase or sentence.

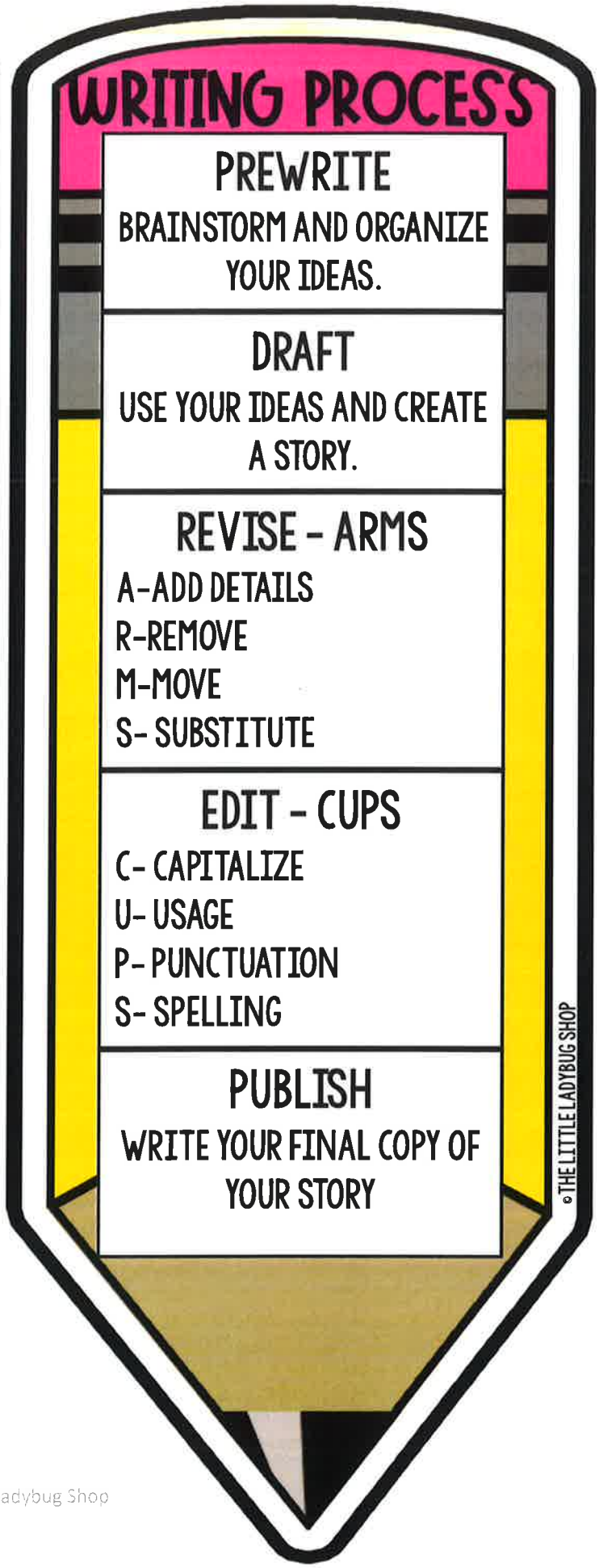
Examples:

Greta's glasses glow green.

Rachel raises ravens and rams.

Figurative Language Task Cards





I WONDER...

WHAT IS SCIENCE?

I FEEL...

I THINK...

TEXT TYPES

-
-
-

Wellbeing Choice Board

Directions: Choose any activity from the choice board to improve your physical, social and emotional health. Reflect on your chosen activity in your online Wellbeing Diary ☺

Dance Like nobody's watching

- ❑ pump up the tunes and shake the energy out!
- ❑ make up a dance to teach to your family
- ❑ head to just dance kids on youtube and follow on

Mindful meditation

https://www.smilingmind.com.au/mindfulness

Cook a meal for your family

maybe something from SAKG or check out the cook books on your shelves.

Skipping

Learn some new tricks

https://www.heartfoundation.org.au/jump-rope-for-heart/skipping-skills

Lego 30 day Challenge

https://drive.google.com/open?id=18Gg9Go970jg2a9sSPvdn4okjUj5Vemym

Mindfulness Colouring and drawing

Origami

Gardening

- ❑ weeding
- ❑ pruning
- ❑ propagating

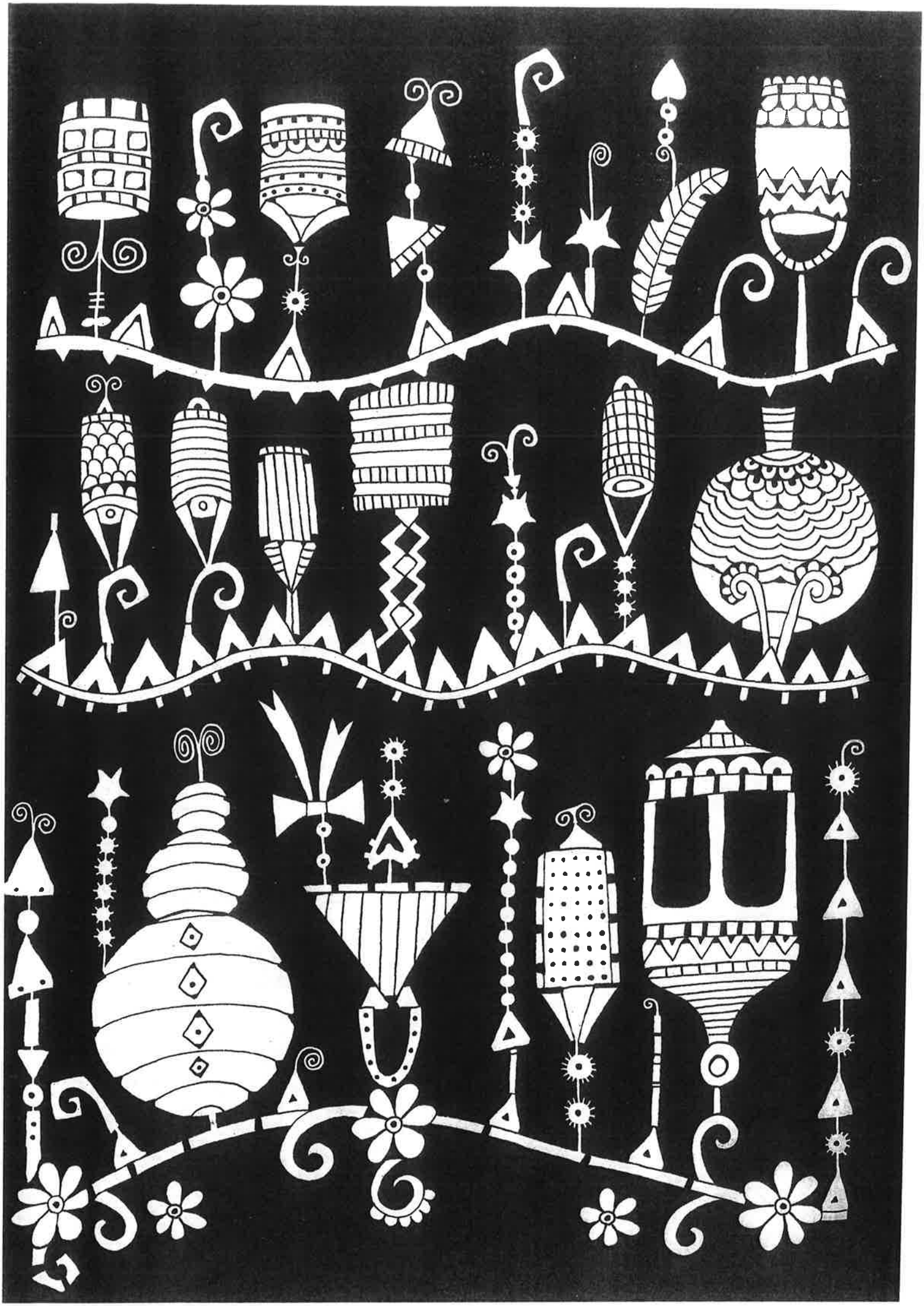
Design, make and play a board game with your family

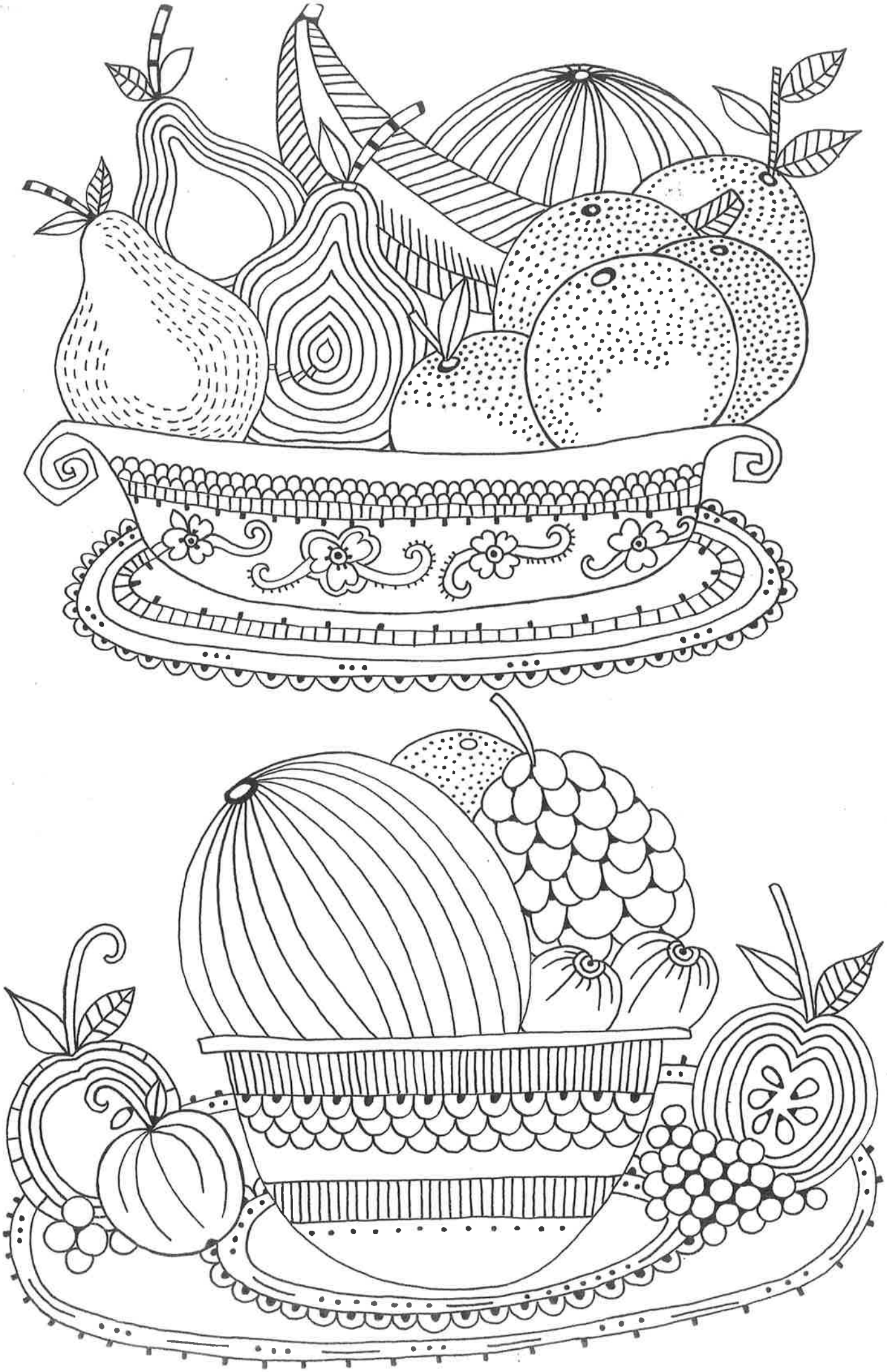
WELLNESS DIARY

Date:
Activity:
Describe what you did:
How did this make you feel?
Date:
Activity:
Describe what you did:
How did this make you feel?
Date:
Activity:
Describe what you did:
How did this make you feel?

30 Day LEGO Challenge

Follow the instructions for each day. The only rule is to have fun and use your imagination!			Day 1 You were hired by an amusement park to create a new roller coaster.	Day 2 NASA needs you to build a new rocket.	Day 3 Your parents want to build a new home and they want you to build it.	Day 4 Hollywood hires you to build a movie set for a new Star Wars movie.
Day 5 You enter a contest to build the world's tallest tower. Will you win?	Day 6 You are stuck on Mars and need to build a new ship to get home.	Day 7 Ford hires you to create the toughest pick up truck in the world.	Day 8 You and 4 friends are stranded on an island. Build a boat to find a way home.	Day 9 Captain Hook needs a new pirate ship and wants you to build it.	Day 10 You and your friends decide to build a tree house.	Day 11 Prince Charming hires you to build a castle for him & Cinderella.
Day 12 Dr. Who hires you to build a new TARDIS.	Day 13 You are asked by the President to build a new monument to George Washington.	Day 14 Mr. Hilton hires you to build a new hotel.	Day 15 There is a circus in town. Build a place for the performance.	Day 16 Help your fellow pioneers build a wagon to make it across the country.	Day 17 Build the fastest car around and join the big car race.	Day 18 Do you wanna build a snowman? Get in the winter mood and build a snow scene.
Day 19 The city wants you to build a bridge to connect one side of the town to the other.	Day 20 Pizza party! It is up to you to make a pizza for all the guests.	Day 21 You are hired to build a brand new hospital.	Day 22 The fence is broke and the dog keeps escaping. Build one he can't get out of.	Day 23 You are now in medieval times. You are commissioned to build a jousting arena.	Day 24 The local bank keeps getting robbed. Build a safe no one can crack.	Day 25 Design and build your dream bedroom.
Day 26 You are elected ruler. Build a flag for your land.	Day 27 Aliens are invading and you need to build a war robot to defeat them.	Day 28 The aliens have taken over. They are impressed by your robot. They want you build one for them.	Day 29 You are hired to build a house entirely out of yellow Legos.	Day 30 There is blizzard. You will need to build a snowmobile		What was your favorite day?





Chemical and Physical Science

Week 1
Inquiry

Name:

	Let's see what we know about science. Try as following questions. Remember this is what y started the unit so if you are unsure it is ok.
Q1	Draw a type of solid. How does it behave that shows us it
Q2	Draw a type of liquid. How does it behave that shows it is a liquid?
Q3	Draw a type of gas. How does it behave that shows us it is a gas?
Q4	Describe how solids, liquids and gases change with heating and cooling.
Q5	Can a substance behave like a solid and a liquid? How is this so?
Q6	What do these words mean? Transparent, opaque or translucent.

Chemical and Physical Science.

Name:

Q9	Does light have a colour? If so what colour is it?
Q10	What does refraction mean? Can you draw it?