

Number knowledge 1 – Practical – Question 2 – Place value chart

Page 22

	H	T	O
The number A			
10 more than A			
100 more than A			
4 more than A			

	H	T	O
The number B			
10 more than B			
100 more than B			
4 more than B			

	H	T	O
The number C			
10 more than C			
100 more than C			
4 more than C			

Number knowledge 1 – Practical – Question 2 – Place value chart

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	H	T	O
The number A			
10 more than A			
100 more than A			
4 more than A			

	H	T	O
The number B			
10 more than B			
100 more than B			
4 more than B			

	H	T	O
The number C			
10 more than C			
100 more than C			
4 more than C			

Number knowledge 1 – Activity 2 Question 1 – Place value charts

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a

	Hundreds	Tens	Ones
start			
change			
end			

b

	Hundreds	Tens	Ones
start			
change			
end			

c

	Hundreds	Tens	Ones
start			
change			
end			

d

	Hundreds	Tens	Ones
start			
change			
end			

e

	Hundreds	Tens	Ones
start			
change			
end			

f

	Hundreds	Tens	Ones
start			
change			
end			

g

	Hundreds	Tens	Ones
start			
change			
end			

h

	Hundreds	Tens	Ones
start			
change			
end			

i

	Hundreds	Tens	Ones
start			
change			
end			

j

	Thousands	Hundreds	Tens	Ones
start				
change				
end				

k

	Thousands	Hundreds	Tens	Ones
start				
change				
end				

l

	Thousands	Hundreds	Tens	Ones
start				
change				
end				

m

	Thousands	Hundreds	Tens	Ones
start				
change				
end				

n

	Thousands	Hundreds	Tens	Ones
start				
change				
end				

Number knowledge 3 – Activity 1 – Fun file

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1

Fun file

Why was the maths book sad?



<u>17</u>	<u>16</u>	<u>9</u>	<u>12</u>	<u>13</u>			
<u>16</u>	<u>6</u>	<u>6</u>		<u>3</u>	<u>12</u>	<u>N</u> <u>5</u>	<u>19</u>
<u>15</u>	<u>11</u>	<u>6</u>	<u>4</u>	<u>8</u>	<u>7</u>	<u>3</u>	<u>10</u>

Put the red letter that is beside each question above its correct answer. The first one has been done.

N 20 – 15 = 5	I 8 + 9 =	L 14 – 6 =	H 15 – 6 =
D 18 – 5 =	T 5 + 11 =	M 17 – 14 =	S 18 – 8 =
R 17 – 6 =	A 5 + 7 =	Y 9 + 10 =	O 14 – 8 =
P 8 + 7 =	B 11 – 7 =	E 16 – 9 =	

Number knowledge 3 – Activity 1 – Fun file

Page 28

1

Fun file

Why was the maths book sad?



<u>17</u>	<u>16</u>	<u>9</u>	<u>12</u>	<u>13</u>			
<u>16</u>	<u>6</u>	<u>6</u>		<u>3</u>	<u>12</u>	<u>N</u> <u>5</u>	<u>19</u>
<u>15</u>	<u>11</u>	<u>6</u>	<u>4</u>	<u>8</u>	<u>7</u>	<u>3</u>	<u>10</u>

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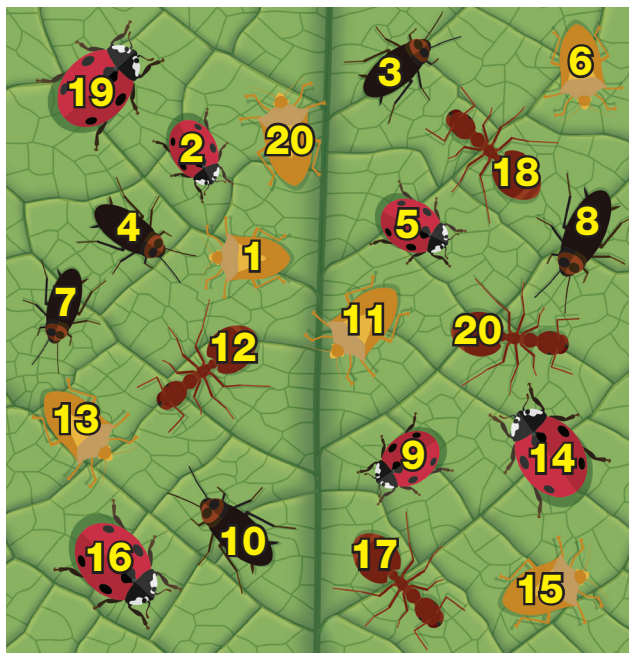
N 20 – 15 = 5	I 8 + 9 =	L 14 – 6 =	H 15 – 6 =
D 18 – 5 =	T 5 + 11 =	M 17 – 14 =	S 18 – 8 =
R 17 – 6 =	A 5 + 7 =	Y 9 + 10 =	O 14 – 8 =
P 8 + 7 =	B 11 – 7 =	E 16 – 9 =	

Number knowledge 3 – Puzzle 1 – Number bugs

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Puzzles

1 Number bugs



Choose numbers from the bugs to make each equation true.

Repeat this five times for each equation.

a $\square + \square = 20$

$\square + \square = 20$

$\square + \square = 20$

$\square + \square = 20$

$\square + \square = 20$

You can use the numbers on the bugs as many times as you like.



b $\square + \square = 19$

$\square + \square = 19$

$\square + \square = 19$

$\square + \square = 19$

$\square + \square = 19$

c $\square + \square = 18$

$\square + \square = 18$

$\square + \square = 18$

$\square + \square = 18$

$\square + \square = 18$

d $\square + \square = 17$

$\square + \square = 17$

$\square + \square = 17$

$\square + \square = 17$

$\square + \square = 17$

e $\square - \square = 3$

$\square - \square = 3$

$\square - \square = 3$

$\square - \square = 3$

$\square - \square = 3$

f $\square - \square = 7$

$\square - \square = 7$

$\square - \square = 7$

$\square - \square = 7$

$\square - \square = 7$

Number knowledge 3 – Puzzles 3 and 4

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3 Square problems

Fill in these addition squares.

a

+	8	3	5	7
9				
11				
12				
6				

b

+	14	15	12	13
0				
4				
3				
5				

4 Addition square

Fill in this addition square in as many ways as possible.

+		
	19	17
	16	

+		
	19	17
	16	

+		
	19	17
	16	

+		
	19	17
	16	

+		
	19	17
	16	

+		
	19	17
	16	

+		
	19	17
	16	

+		
	19	17
	16	

+		
	19	17
	16	

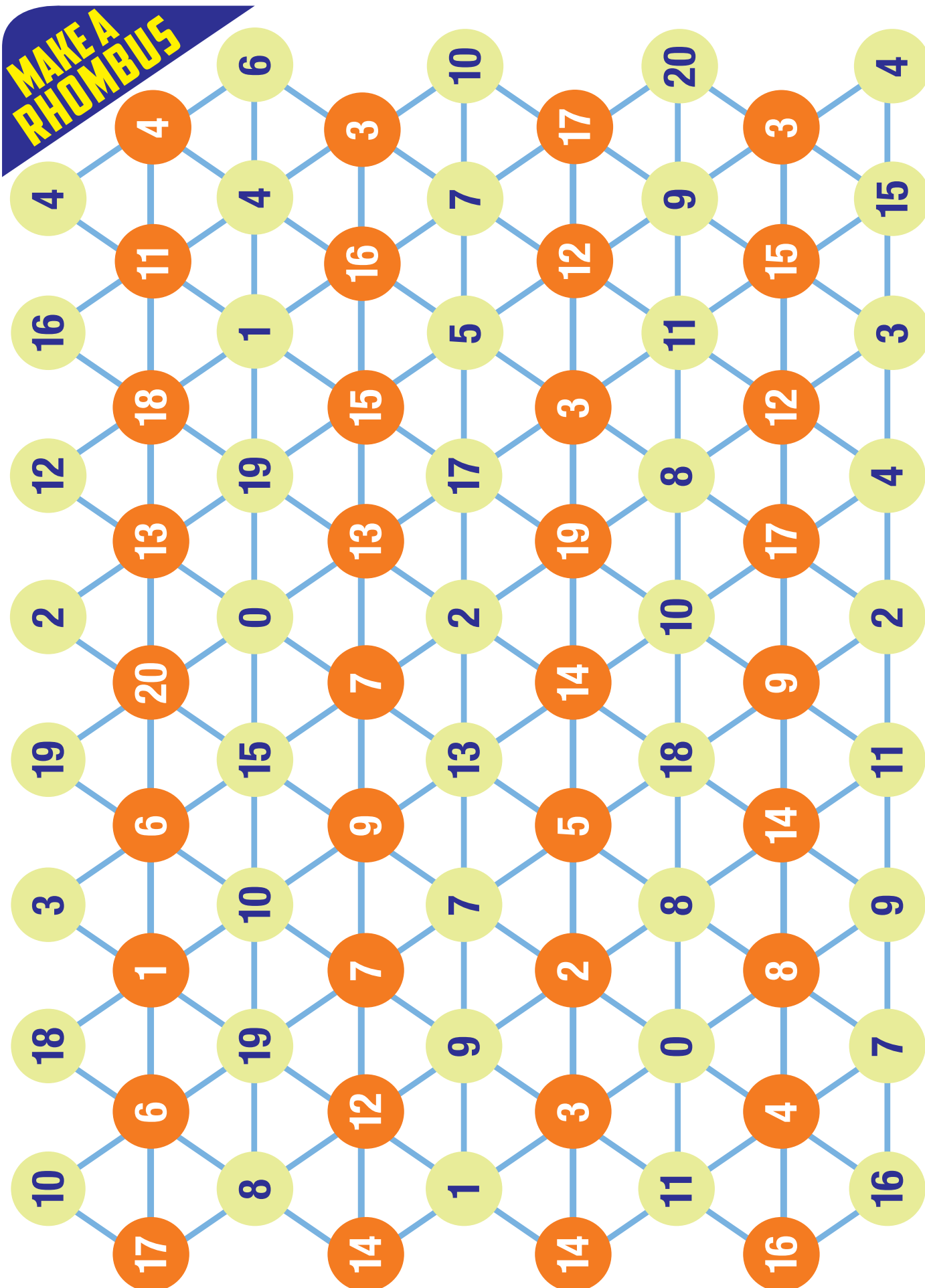
+		
	19	17
	16	

+		
	19	17
	16	

+		
	19	17
	16	

Number knowledge 3 – Make a rhombus game board

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Number knowledge 4 – Activity 2 – Question 1

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SET A

a + 70 = 100

b 20 + = 100

c + 90 = 100

d 100 – 30 =

e 100 – 20 =

f 10 + = 100

g 100 – 60 =

h 100 – = 40

i + 10 = 100

j 100 – = 30

SET B

a + 130 = 200

b 150 + = 200

c + 180 = 200

d 200 – 40 =

e 270 + = 300

f 410 + = 500

g 200 – 30 =

h 300 – = 280

i + 660 = 700

j 400 – = 330

Number knowledge 4 – Activity 2 – Question 1

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SET A

a + 70 = 100

b 20 + = 100

c + 90 = 100

d 100 – 30 =

e 100 – 20 =

f 10 + = 100

g 100 – 60 =

h 100 – = 40

i + 10 = 100

j 100 – = 30

SET B

a + 130 = 200

b 150 + = 200

c + 180 = 200

d 200 – 40 =

e 270 + = 300

f 410 + = 500

g 200 – 30 =

h 300 – = 280

i + 660 = 700

j 400 – = 330

Number knowledge 5 – Activity 1 – Question 1

Page 40

1 Fill in the missing numbers of these charts.

Number	Double
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
15	
20	
25	
30	
40	
50	

Number	Halve
100	
80	
70	
60	
50	
30	
20	
18	
16	
14	
12	
10	
8	
6	
4	
2	

Number knowledge 5 – Activity 1 – Question 1

Page 40

1 Fill in the missing numbers of these charts.

Number	Double
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
15	
20	
25	
30	
40	
50	

Number	Halve
100	
80	
70	
60	
50	
30	
20	
18	
16	
14	
12	
10	
8	
6	
4	
2	

Number knowledge 5 – Activity 1 – Question 4 – Fun file

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4 Fun file

What animal can jump higher than the Auckland Harbour Bridge?

$\frac{50}{38}$	$\frac{24}{14}$	$\frac{24}{6}$	$\frac{50}{38}$	$\frac{23}{20}$	$\frac{46}{46}$	$\frac{30}{42}$	$\frac{50}{11}$	$\frac{24}{14}$	$\frac{34}{34}$	,
$\frac{6}{26}$	$\frac{50}{16}$	$\frac{23}{34}$	$\frac{8}{14}$	$\frac{26}{11}$	$\frac{16}{14}$	$\frac{30}{34}$	$\frac{40}{34}$			



Put the red letter that is beside each question above its correct answer.
The first one has been done.

Double these numbers.

T 4 = 8 **E** 7 **P** 20 **R** 10 **A** 25 **I** 23 **S** 17 **B** 19

Halve these numbers.

C 12 **G** 22 **L** 48 **N** 46 **M** 60 **D** 84 **U** 32 **J** 52

Number knowledge 5 – Activity 1 – Question 4 – Fun file

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4 Fun file

What animal can jump higher than the Auckland Harbour Bridge?

$\frac{50}{38}$	$\frac{24}{14}$	$\frac{24}{6}$	$\frac{50}{38}$	$\frac{23}{20}$	$\frac{46}{46}$	$\frac{30}{42}$	$\frac{50}{11}$	$\frac{24}{14}$	$\frac{34}{34}$	,
$\frac{6}{26}$	$\frac{50}{16}$	$\frac{23}{34}$	$\frac{8}{14}$	$\frac{26}{11}$	$\frac{16}{14}$	$\frac{30}{34}$	$\frac{40}{34}$			



Put the red letter that is beside each question above its correct answer.
The first one has been done.

Double these numbers.

T 4 = 8 **E** 7 **P** 20 **R** 10 **A** 25 **I** 23 **S** 17 **B** 19

Halve these numbers.

C 12 **G** 22 **L** 48 **N** 46 **M** 60 **D** 84 **U** 32 **J** 52

Number knowledge 6 – Activity 1 – Question 4

Page 44

- 4 Fill in this table.
The first two are done for you.

	Number	Numbers on the number line it is between	tens number on the number line it is between	Rounded up or down
a	87	80 and 90	90	up
b	243	240 and 250	240	down
c	76			
d	91			
e	158			
f	184			
g	232			
h	367			
i	589			

Number knowledge 6 – Activity 1 – Question 4

Page 44

- 4 Fill in this table.
The first two are done for you.

	Number	Numbers on the number line it is between	tens number on the number line it is between	Rounded up or down
a	87	80 and 90	90	up
b	243	240 and 250	240	down
c	76			
d	91			
e	158			
f	184			
g	232			
h	367			
i	589			

Number knowledge 6 – Rounding, rounding game board

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380	450	700	300	120	180	310	200	320	410
290	670	280	130	270	500	600	660	460	200
170	420	440	510	610	110	260	620	160	700
520	630	240	370	100	600	150	250	330	400
580	500	230	140	640	480	490	300	340	470
220	570	590	360	540	210	560	350	550	100
400	390	100	530	430	300	200	190	650	400

Number knowledge 8 – Puzzle – What's my name?

Page 50

Puzzle

What's my name?

To work out the bird's name find these.



The **highest** number in each row.

a 272 368 325 377

b 425 455 371 434

c 731 725 780 757

The **lowest** number in each row.

d 375 426 314 330

e 648 638 665 662

f 156 139 152 163

Match the answers, in order, to the code on the bird house below to find the bird's name.

139 = E 152 = W 156 = U 163 = B 272 = A

314 = V 325 = D 330 = H 357 = R 365 = N

371 = T 377 = S 425 = C 426 = O 434 = M

455 = Y 615 = J 638 = I 648 = P 662 = F

725 = K 731 = G 757 = Q 780 = L

Number knowledge 8 – Puzzle – What's my name?

Page 50

Puzzle

What's my name?

To work out the bird's name find these.



The **highest** number in each row.

a 272 368 325 377

b 425 455 371 434

c 731 725 780 757

The **lowest** number in each row.

d 375 426 314 330

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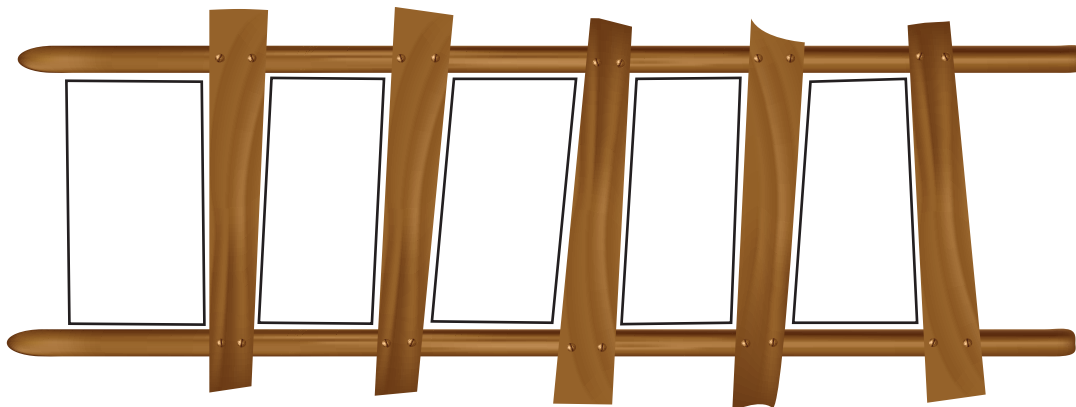
371 = T 377 = S 425 = C 426 = O 434 = M

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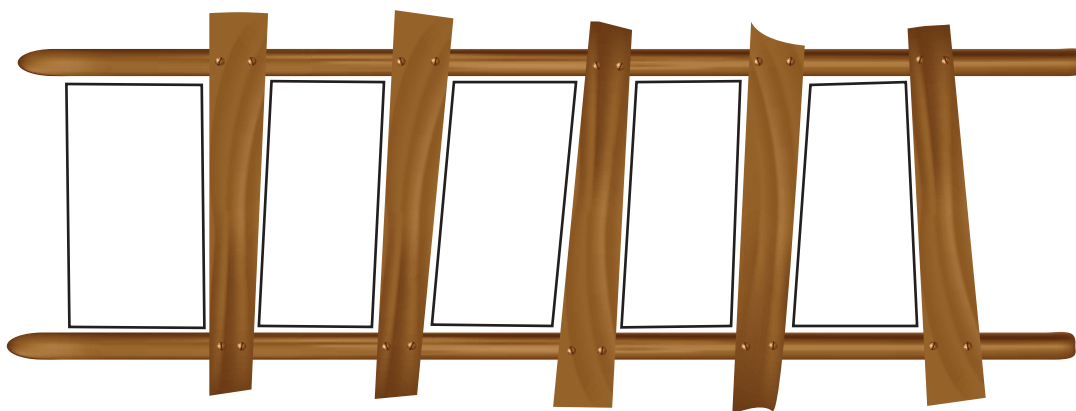
Number knowledge 8 – Right place game – Ladder

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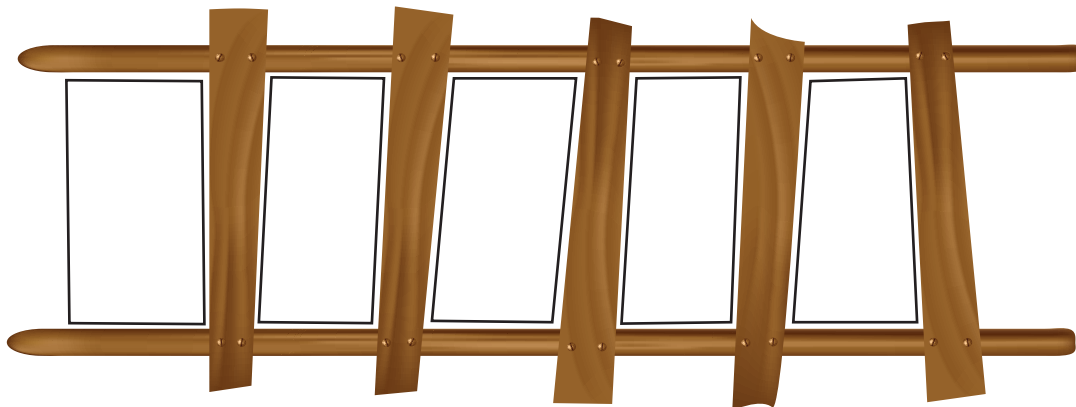
Number knowledge 8 – Right place game – Ladder

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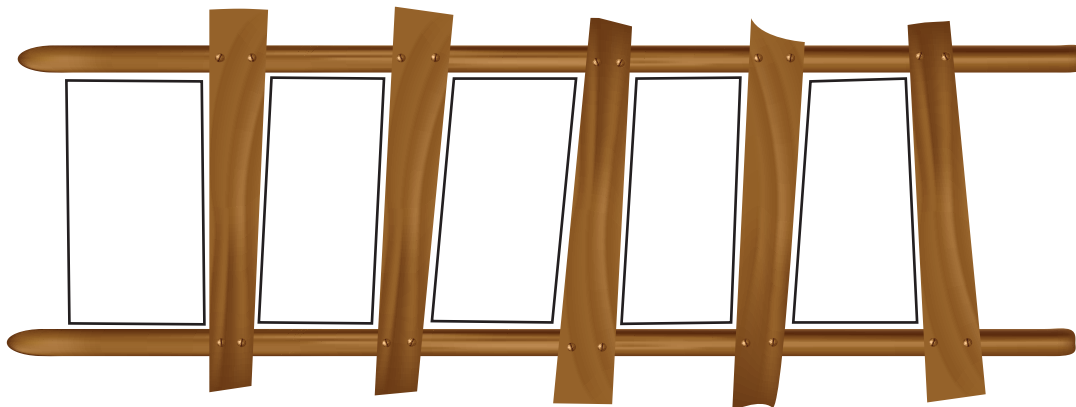
Number knowledge 8 – Right place game – Ladder

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Number knowledge 8 – Right place game – Ladder

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Number knowledge 9 – Practical – What don't I know yet? – Table

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

Number knowledge 9 – Practical – What don't I know yet? – Table

Page 95

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

Number knowledge 9 – Practical – What don't I know yet? – Table

Page 95

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

Number knowledge 9 – Practical – What don't I know yet? – Table

Page 95

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

Number knowledge 9 – Activity 1 – Question 3 – Fun file

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3 Fun file

What did one eye say to the other eye?

8	30	5	3	30	30	80	40	^O 14	18	60	80	50
4	30	20	^O 14	4	30	5	9	2	80	7		
20	4	30	6	6	20							



Put the red letter that is beside each question above its correct answer.
The first one has been done.

O $7 \times 2 = 14$	H $45 \div 5 =$	N $8 \times 10 =$	L $12 \div 2 =$	D $10 \times 5 =$
W $30 \div 10 =$	A $6 \times 10 =$	G $35 \div 5 =$	U $2 \times 9 =$	M $40 \div 10 =$
Y $8 \times 5 =$	T $25 \div 5 =$	S $5 \times 4 =$	B $16 \div 2 =$	I $10 \div 5 =$
E $5 \times 6 =$				

Number knowledge 9 – Activity 1 – Question 3 – Fun file

Page 96

3 Fun file

What did one eye say to the other eye?

8	30	5	3	30	30	80	40	^O 14	18	60	80	50
4	30	20	^O 14	4	30	5	9	2	80	7		
20	4	30	6	6	20							



Put the red letter that is beside each question above its correct answer.
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O $7 \times 2 = 14$	H $45 \div 5 =$	N $8 \times 10 =$	L $12 \div 2 =$	D $10 \times 5 =$
W $30 \div 10 =$	A $6 \times 10 =$	G $35 \div 5 =$	U $2 \times 9 =$	M $40 \div 10 =$
Y $8 \times 5 =$	T $25 \div 5 =$	S $5 \times 4 =$	B $16 \div 2 =$	I $10 \div 5 =$
E $5 \times 6 =$				

Number knowledge 9 – 2s, 5s and 10s game board

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2s, 5s and 10s

START

$2 \times 5 =$	$3 \times 10 =$	$2 \times 2 =$	$3 \times 5 =$	$10 \div 10 =$
$10 \times 5 =$	$12 \div 2 =$	$10 \div 2 =$	$3 \times 2 =$	$20 \div 5 =$
$14 \div 2 =$	$4 \times 5 =$	$25 \div 5 =$	$5 \times 10 =$	$16 \div 2 =$
$6 \times 2 =$	$8 \times 2 =$	$18 \div 2 =$	$7 \times 10 =$	$35 \div 5 =$
$20 \div 2 =$	$9 \times 5 =$	$9 \times 2 =$	$10 \times 10 =$	$50 \div 5 =$
$45 \div 5 =$	$8 \times 5 =$	$30 \div 5 =$	$7 \times 5 =$	$6 \times 10 =$
$40 \div 5 =$				

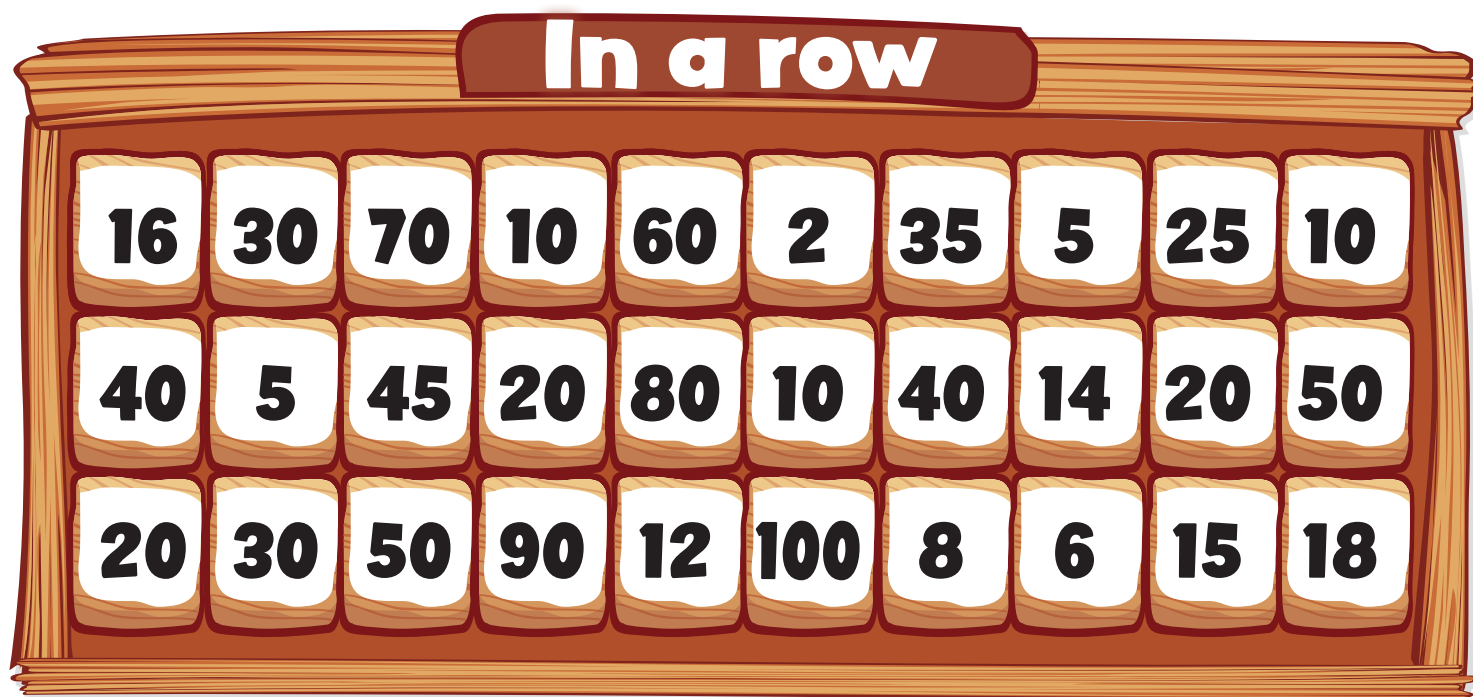
FINISH





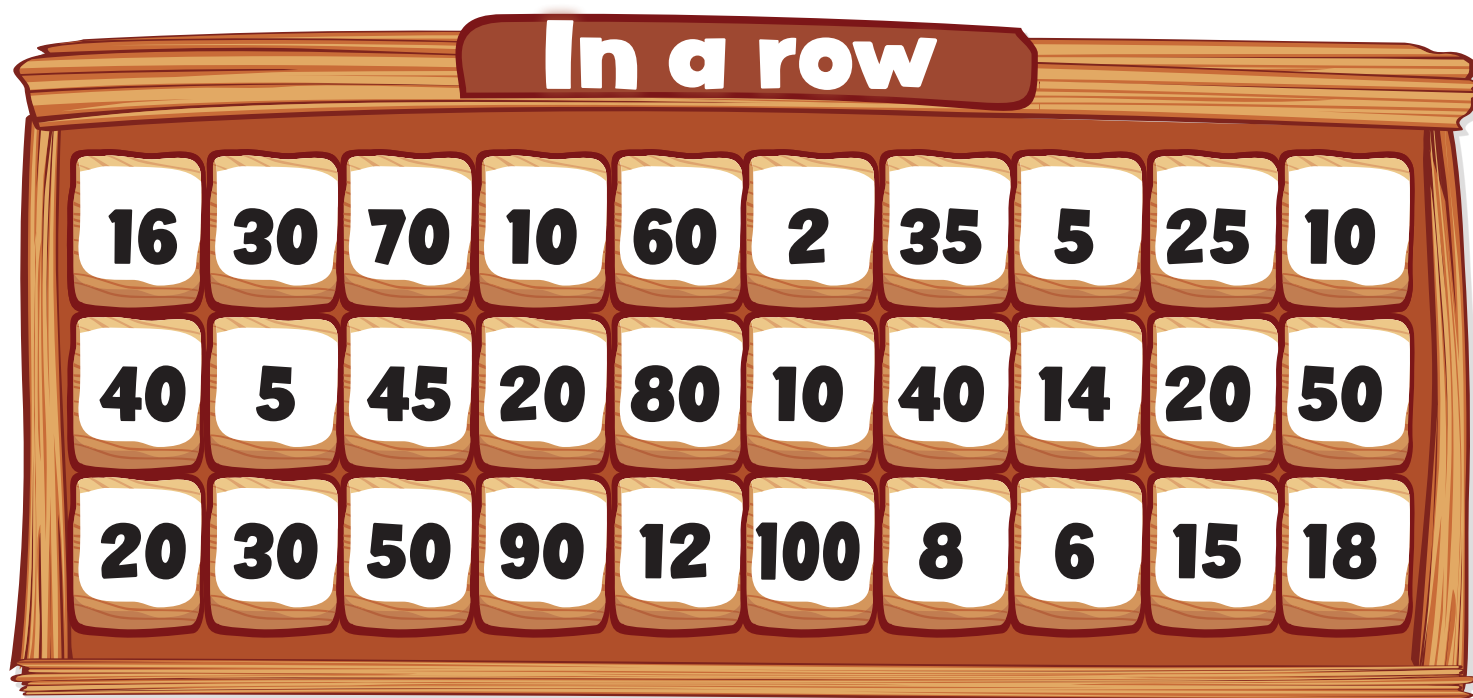
Number knowledge 9 – In a row game board

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Number knowledge 9 – In a row game board

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Number knowledge 10 – Remainders game board

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Remainders

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

Number knowledge 10 – Remainders game board

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Remainders

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

Number knowledge 11 – Activity 1 – Question 4

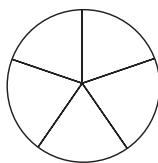
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4 a Shade **three parts** of each of these diagrams.

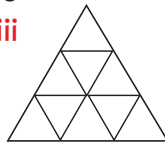
i



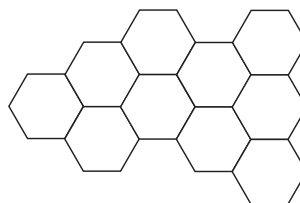
ii



iii



iv



- Write down what fraction of each diagram you have shaded.
- What does each of the top numbers you have written down in **part b** tell you?
- What does each of the bottom numbers tell you?

Number knowledge 11 – Activity 1 – Question 4

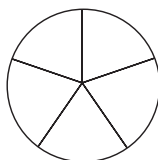
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4 a Shade **three parts** of each of these diagrams.

i



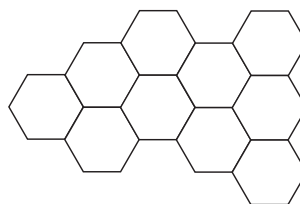
ii



iii



iv



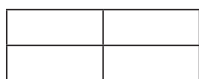
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Number knowledge 11 – Activity 1 – Question 4

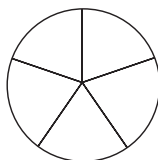
Page 142

4 a Shade **three parts** of each of these diagrams.

i



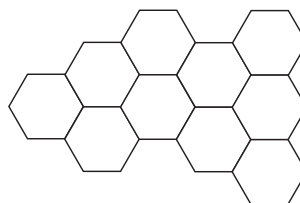
ii



iii



iv



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- What does each of the bottom numbers tell you?