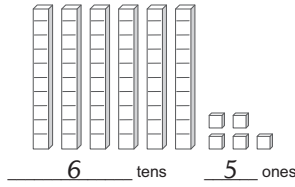


	5	2	6	9	0	4	10	7
+4	9	6	10	13	4	8	14	11

CYCLE 1

Whole Numbers	1
Place Value	2
Number Sense	3
Basic Operations	4

1



65  
Write the number.

2

- a) What is the DIGIT in the *hundreds* place in 524?  
b) What is the DIGIT in the *tens* place in 694?

a) 5  
b) 9

3

Circle the EVEN NUMBERS.



4

Find the SUM.

43 + 26 =

69

# PLUM 1 ANSWERS



CYCLE 1

Fractions	5
Fractions	6
Patterns	7
Vocabulary	8

	14	6	11	7	10	13	8	16
-6	8	0	5	1	4	7	2	10

5

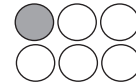
Write the fraction for the shaded part.



$\frac{1}{4}$

6

What fraction of the circles is shaded?



$\frac{1}{6}$

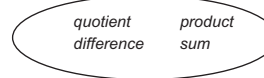
7

Fill in the blanks.

2, 4, 6, 8, 10, 12, 14  
The rule is +2.

8

Write the word to make a true statement.



7 + 4 = 11  
11 is the sum.

	3	7	6	0	5	9	2	4
x 2	6	14	12	0	10	18	4	8

CYCLE 1

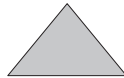
Algebra	9
Geometry	10
Geometry	11
Measurement	12
Measurement	13

9

Make a true number sentence.      23 + 34 = 57

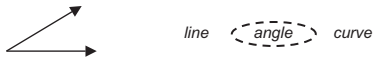
10

Draw a shape with 3 SIDES and 3 VERTICES.



11

Circle the word that best describes the figure.



12



The length of a worm is best measured in:

centimetres      metres      kilometres

13

Grace has one 50¢-coin, two 20¢-coins, and two 10¢-coins.  
How much money does she have?

\$1.10

	45	10	55	25	40	50	15	5
+ 5	9	2	11	5	8	10	3	1

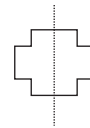
CYCLE 1

Graphing	14
Statistics	15
Statistics	16

14

The dotted line is a LINE OF SYMMETRY for this figure.

True or False



true

15

Callie did a tally of the favourite colours of two groups.

Group 1		Group 2	
red		red	
yellow		yellow	
blue		blue	
green		green	

- a) How many more in Group 1 than in Group 2 chose blue?  
b) How many fewer in Group 1 than in Group 2 chose green?

a) 2  
b) 2

16



How likely is Hone to pick a instead of a ?

more likely    less likely    equally likely

equally likely

- Strategies**
- Guess and check
  - Look for a pattern
  - Draw a picture or diagram
  - Make a table or list
  - Work backwards
  - Write a number sentence / equation

**KYLE'S  
DESIGN WITH  
HEARTS**



Kylie is making a design using ♥'s.

She draws four ♥'s, then seven ♥'s, then ten ♥'s, then thirteen ♥'s.

If she continues with the same pattern, how many ♥'s will she draw next?

**POSSIBLE STRATEGY** - Make a table / Look for a pattern

**Information Need:**

- First Kyle draws 4 ♥'s.
- Next she draws 7 ♥'s.
- Next she draws 10 ♥'s.
- Next she draws 13 ♥'s.

**The Problem:**

4 ♥	7 ♥	10 ♥	13 ♥	16 ♥	
	+ 3	+ 3	+ 3	+ 3	

**ANSWER** - She will draw 16 ♥'s.

**PLUM 1**

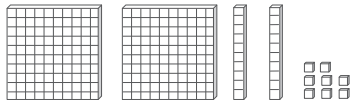
**ANSWERS**



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

**CYCLE 2**

Whole Numbers	1
Place Value	2
Number Sense	3
Basic Operations	4



2 hundreds 2 tens 8 ones

228  
Write the number.



- a) What is the DIGIT in the *tens* place in 1206?  
b) What is the DIGIT in the *hundreds* place in 8109?

a) 0  
b) 1



Circle the ODD NUMBERS.    12    23    64    10    15



Find the SUM.    65 + 27 = 92

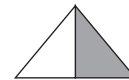
	9	3	11	7	4	8	10	6
- 2	7	1	9	5	2	6	8	4

**CYCLE 2**

Fractions	5
Fractions	6
Patterns	7
Vocabulary	8



Write the fraction for the shaded part.



1/2



What fraction of the circles is shaded?



1/3



Fill in the blanks.

5, 10, 15, 20, 25, 30, 35  
The rule is +5.



Write the word to make a true statement.

product  
quotient    product  
difference    sum


3 x 6 = 18  
18 is the product.


	5	6	7	3	9	0	8	2
x 10	50	60	70	30	90	0	80	20

CYCLE 2

Algebra	9
Geometry	10
Geometry	11
Measurement	12
Measurement	13

9 Make a true NUMBER SENTENCE.  $46 - 34 = 12$

10 Draw a shape with 4 equal SIDES and 4 equal VERTICES. 

11 Circle the word that best describes the figure.  line angle curve

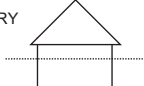
12 The length of a shoe is best measured in: centimetres  
metres centimetres kilometres

13 Rangi has one 50¢-coin, two 20¢-coins, and one 10¢-coin. How much money does he have? \$1.00

	6	1	9	0	7	2	5	4
+ 1	6	1	9	0	7	2	5	4

CYCLE 2




Graphing	14
Statistics	15
Statistics	16

14 The dotted line is a LINE OF SYMMETRY for this figure.  false  
True or False

15 Callie did a tally of the favourite colours of two groups.

Group 1	Group 2
red II	red IIII
yellow IIII	yellow II
blue IIII	blue III
green II	green IIII

a) Which group chose more yellow? Group 1  
b) How many people were surveyed? 26

16  How likely are you to pick a  instead of a .  
less likely  
more likely less likely equally likely

CYCLE 2  
PROBLEM SOLVING

RAMONA'S TRIP

- Strategies**
- Guess and check
  - Look for a pattern
  - Draw a picture or diagram
  - Make a table or list
  - Work backwards
  - Write a number sentence / equation

It is fourteen kilometres from Huntly to Ngaruawahia.

It is eighteen kilometres from Ngaruawahia to Hamilton.

Ramona must drive through Ngaruawahia to get to Hamilton from Huntly.

How far will she have to go?



POSSIBLE STRATEGY - Draw a picture

Information Need:

It is 14 kilometres between Huntly and Ngaruawahia. It is 18 kilometres between Ngaruawahia and Hamilton.

You must go through Ngaruawahia to get to Hamilton from Huntly.

The Problem:

14 kilometres from Huntly to Ngaruawahia + 18 kilometres from Ngaruawahia to Hamilton = # of kilometres from Huntly to Hamilton

$14 + 18 = 32$  ANSWER: Ramona will have to go 32 kilometres.

	4	7	6	0	2	10	3	9
+ 3	<u>7</u>	<u>10</u>	<u>9</u>	<u>3</u>	<u>5</u>	<u>13</u>	<u>6</u>	<u>12</u>

CYCLE 5

Whole Numbers	1
Place Value	2
Number Sense	3
Basic Operations	4

1 Write the number.  
6 hundreds 9 tens 5 ones

695

2 What is the value of the underlined DIGIT?  
a) 580     500 or 5 hundreds  
b) 715     1 or 1 tens

3 Mark 77 on the number line.

Is it closer to 70 or 80? 80  
77 rounded to the nearest ten is 80.

4 a) Find the SUM.  $48 + 21 =$      a) 69  
b) Write two related number facts for  $48 + 21 =$  .  
c)  $69 - 21 = 48$   
 $69 - 48 = 21$   
 $21 + 48 = 69$

# PLUM 1 ANSWERS



CYCLE 5

Fractions	5
Fractions	6
Patterns	7
Vocabulary	8

	12	18	13	17	14	10	16	9
- 8	<u>4</u>	<u>10</u>	<u>5</u>	<u>9</u>	<u>6</u>	<u>2</u>	<u>8</u>	<u>1</u>

5 Shade  $\frac{3}{4}$  of the SQUARE.

6 Circle  $\frac{2}{6}$  of the hearts.

7 Continue the pattern.

↑ ⇒ ↓ ⇐ ↑ ⇒ ↓ ⇐ ↑.

8 Write the word that makes the sentence true.

scale     ruler  
calendar     thermometer

Temperature is best measured with a thermometer.

	4	0	10	6	1	7	3	8
x 3	<u>12</u>	<u>0</u>	<u>30</u>	<u>18</u>	<u>3</u>	<u>21</u>	<u>9</u>	<u>24</u>

CYCLE 5

Algebra	9
Geometry	10
Geometry	11
Measurement	12
Measurement	13

9 Write a NUMBER SENTENCE for:  
Rita bought five red stickers, three blue stickers, and four yellow ones.  
How many stickers did she buy?

$5 + 3 + 4 = 12$

10 Circle the shapes that are CONGRUENT.

11 Circle the ANGLES in this figure.

There are 4 ANGLES.

12 Calculate the PERIMETER of this shape.

$6 + 6 + 6 = 18$

18 metres

13 Write this time on the digital clock.

2:20

	72	18	27	99	81	9	45	63
+ 9	<u>8</u>	<u>2</u>	<u>3</u>	<u>11</u>	<u>9</u>	<u>1</u>	<u>5</u>	<u>7</u>

CYCLE 5

Graphing	14
Statistics	15
Statistics	16

14 This figure shows a  
flip     slide     turn

slide

15 CLASS SURVEY FAVOURITE FRUIT

apple	6
banana	3
pear	6
grapes	11

c) Which fruit did the fewest students like?  
d) Which fruits did students like equally?

a) bananas  
b) apples  
pears

16 It is (*certain, likely, unlikely, impossible*) that you will climb Mt. Everest next year.

impossible

- Strategies**
- Guess and check
  - Look for a pattern
  - Draw a picture or diagram
  - Make a table or list
  - Work backwards
  - Write a number sentence / equation

**THE CHRISTMAS PARADE**  
Eli was watching the Christmas Parade.  
For every unicycle he saw, there were three bikes and four tricycles.  
How many bikes did he see if he saw twenty tricycles?



**POSSIBLE STRATEGY** - Make a table or list

Bikes	Trikes	Unicycles
3	4	1
6	8	2
9	12	3
12	16	4
15	20	5

**ANSWER** - Eli saw 15 bikes at the parade.

	7	1	10	8	0	5	2	4
+ 0	7	1	10	8	0	5	2	4

- CYCLE 6**
- Whole Numbers 1
  - Place Value 2
  - Number Sense 3
  - Basic Operations 4

1 Write the number.  
7 hundreds 6 tens

760

2 What is the value of the underlined DIGIT?  
a) 4624     4 or 4 ones  
b) 9650     600 or 6 hundreds

3 Mark 136 on the number line.

Is it closer to 130 or 140? 140  
136 rounded to the nearest ten is 140.

4 a) Find the DIFFERENCE.  $77 - 31 =$      a) 43  
b) Write two related number facts for  $77 - 31 =$ .     b)  $43 + 34 = 77$   
    $77 - 43 = 34$   
    $34 + 43 = 77$

HINT : These are related facts for  $7 + 9 = 16$   
 $9 + 7 = 16$      $16 - 9 = 7$      $16 - 7 = 9$

# PLUM 1 ANSWERS



	13	6	8	7	11	10	4	9
- 4	9	2	4	3	7	6	0	5

- CYCLE 6**
- Fractions 5
  - Fractions 6
  - Patterns 7
  - Vocabulary 8

5 Shade  $\frac{2}{6}$  of the figure.

6 Circle  $\frac{2}{3}$  of the smiling faces.

7 Continue the PATTERN.

8 Put the abbreviation with its word.

a) litre     L  
b) kilometre     km  
c) centimetre     cm  
d) metre     m

km   L   m   cm