

# Shapes and Patterns

## Chapter 8

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

### Worksheet 1

#### Recognising Solids

1 Match.



•

• Sphere



•

• Cuboid



•

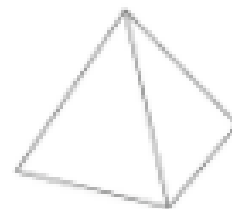
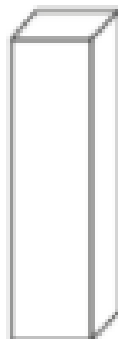
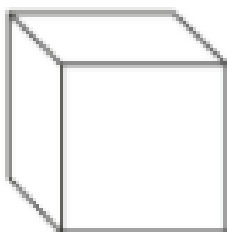
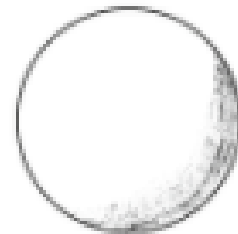
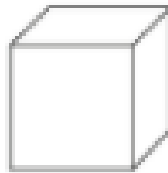
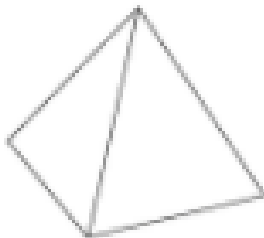
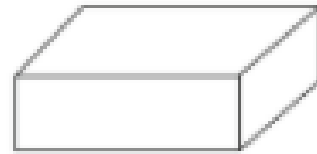
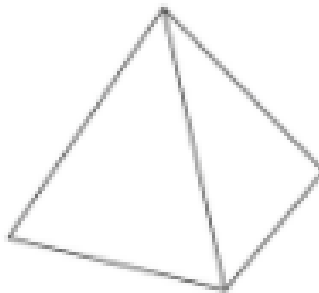
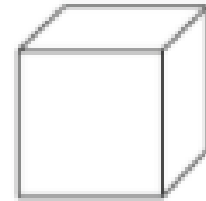
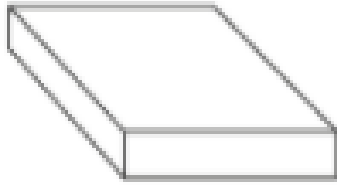
• Cube



•

• Pyramid

- 2 Colour the spheres green.  
Colour the cubes blue.  
Colour the cuboids red.  
Colour the pyramids yellow.

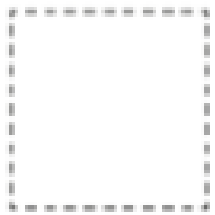


Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## Worksheet 2

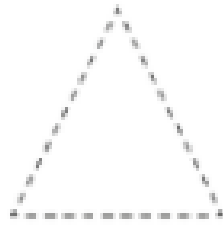
### Recognising Shapes

1 Trace the shapes.  
Match.



●

● Triangle



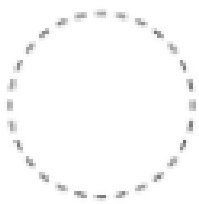
●

● Circle



●

● Rectangle

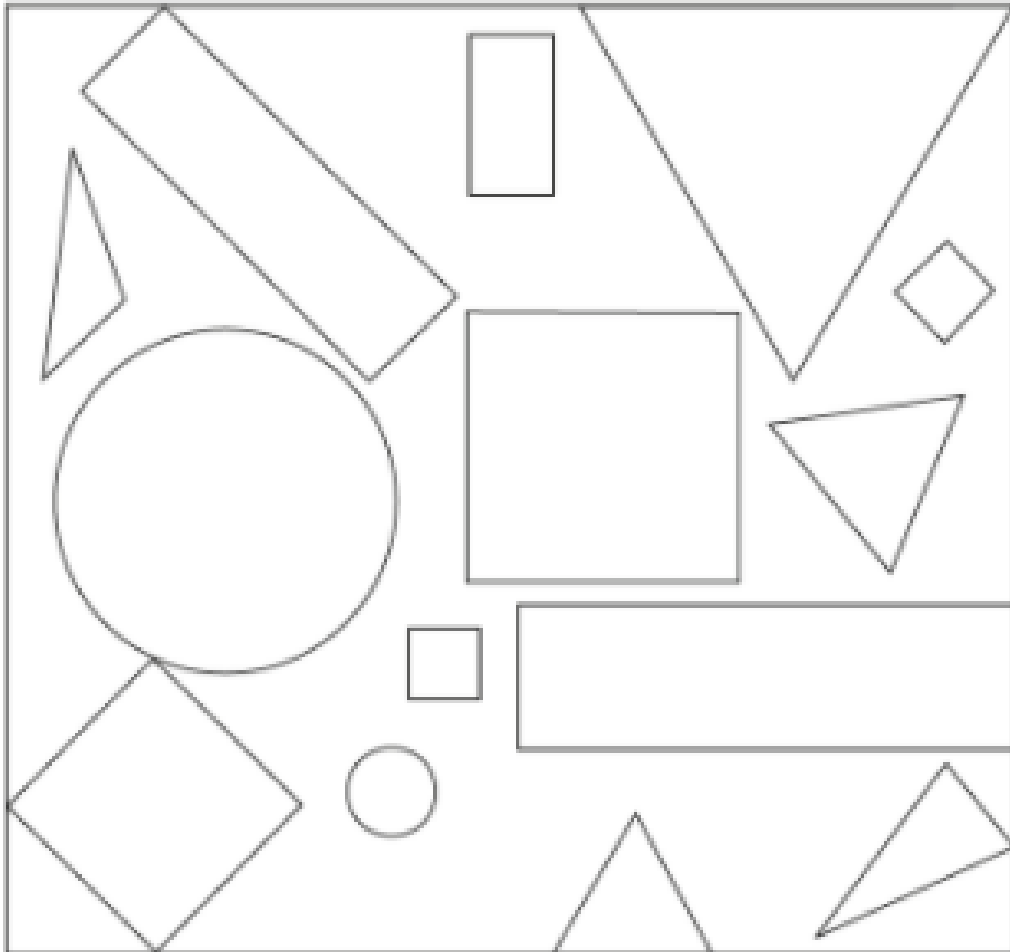


●

● Square

2 Colour.

Write the missing numbers.



- (a) There are  rectangles.
- (b) There are  squares.
- (c) There are  circles.
- (d) There are  triangles.

3 Colour the shape that matches each object.


4 Trace the common shape found in the objects in each group.  
Write the name of the shape.

(a)

(b)

(c)

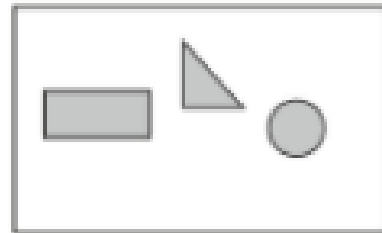
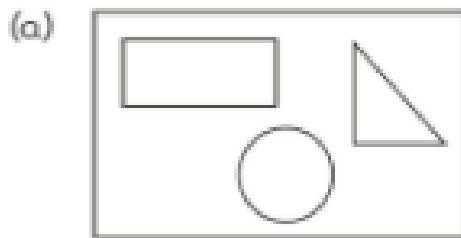
(d)

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

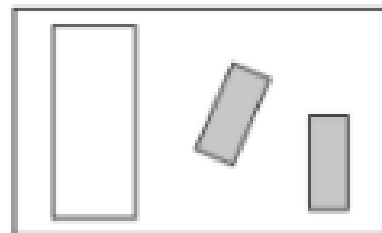
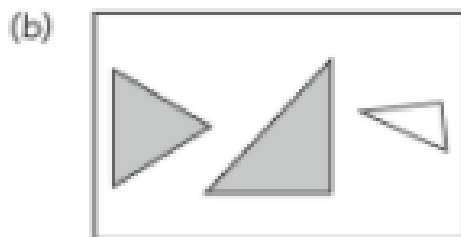
## Worksheet 3

### Grouping Shapes

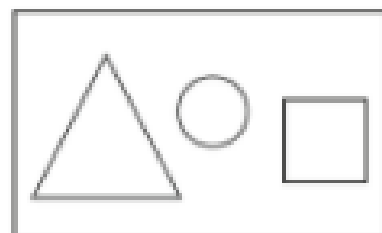
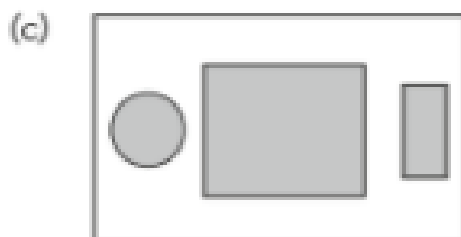
1 Compare using shape or colour.



The shapes are grouped by .



The shapes are grouped by .



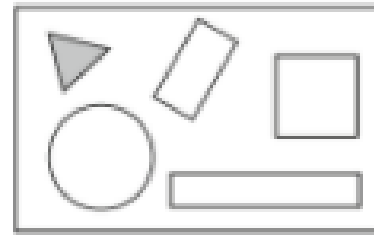
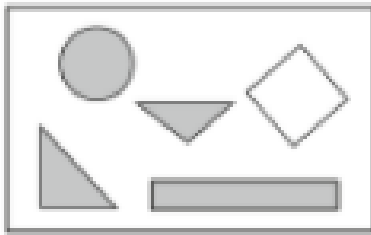
The shapes are grouped by .

2

Circle the shape that does not belong in each group.

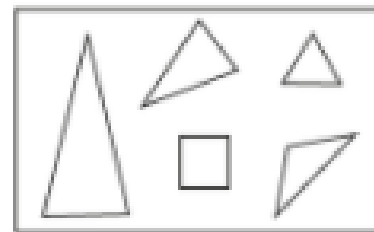
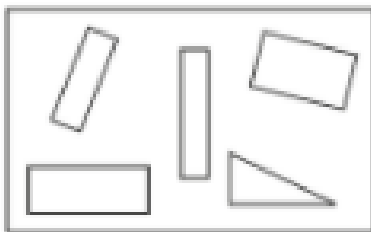
Compare using shape or colour.

(a)



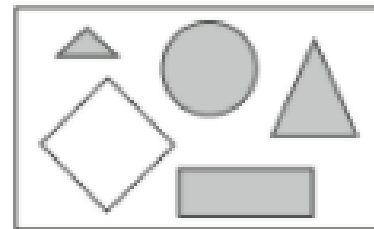
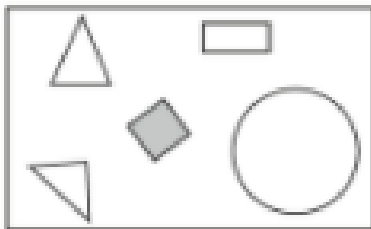
The shapes are grouped by

(b)



The shapes are grouped by

(c)



The shapes are grouped by

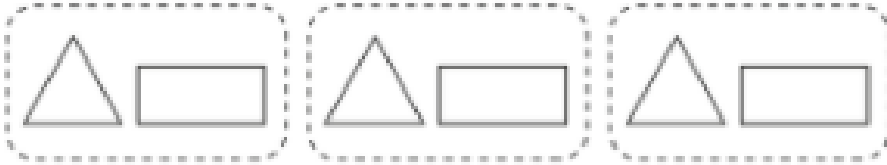
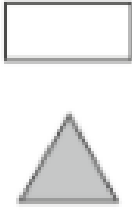
Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

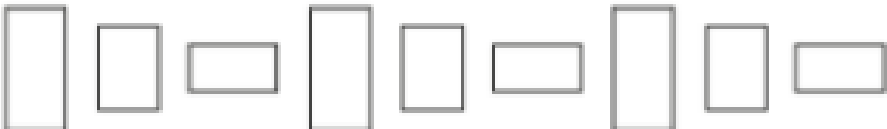



## Worksheet 4

### Making Patterns

- 1 Circle the shapes that are repeated to form each pattern. Then colour the shape that comes next.

<p>Example</p> 	
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<p>(a)</p> 	
---	---

<p>(b)</p> 	
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2 Circle the shape that comes next.

(a)

A sequence of five squares: large, small, large, small, large. To the right are two options: a large square and a small square.

(b)

A sequence of five rectangles: tall white, short grey, tall white, short grey, tall white. To the right are two options: a tall white rectangle and a short grey rectangle.

(c)




A sequence of ten diamonds: grey, white, grey, white, grey, white, grey, white, grey, white. To the right are three options: a grey diamond, a white diamond, and a grey diamond.

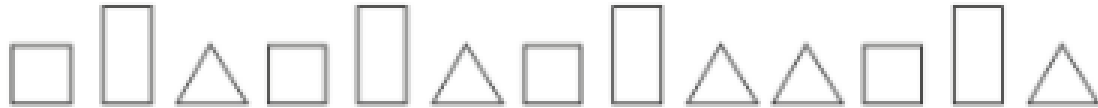
(d)

A sequence of eight shapes: small circle, tall triangle, large circle, small circle, tall triangle, large circle, small circle, tall triangle. To the right are three options: a large circle, a tall triangle, and a small circle.

## Mind Workout

Date: \_\_\_\_\_

Ravi makes a pattern with three shapes, ,  and .  
He makes a mistake in the pattern below.










Colour the shape that Ravi should remove to make a pattern.  
Draw the correct pattern in the space below.

## Maths Journal

Date: \_\_\_\_\_

Draw the missing shape for each pattern.  
Write the missing words.

Pattern A     ?  

Pattern B        ?

(a) The missing shape in Pattern A is a .

(b) The missing shape in Pattern B is a .

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_



## Review 8

1 Draw the shapes.

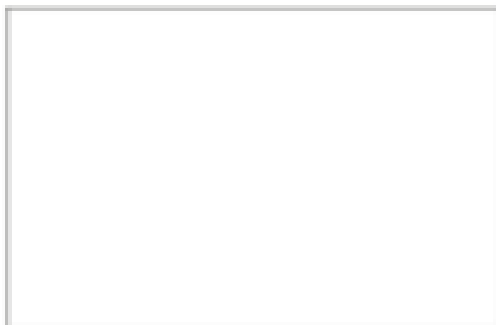
(a) Triangle



(b) Rectangle



(c) Square

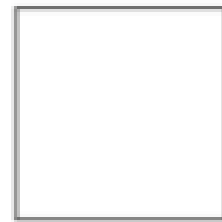
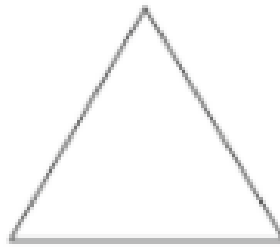
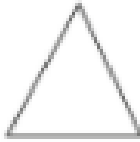
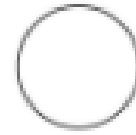
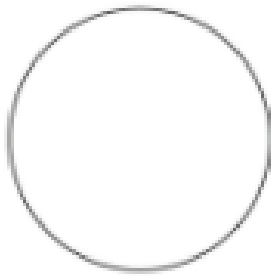


(d) It is round



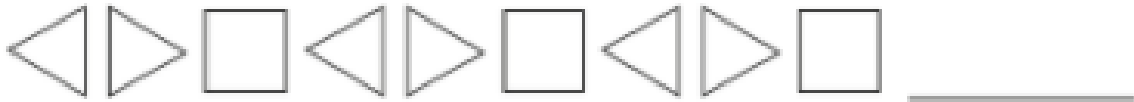


- 2** Colour the triangles red.  
Colour the circles green.  
Colour the squares blue.

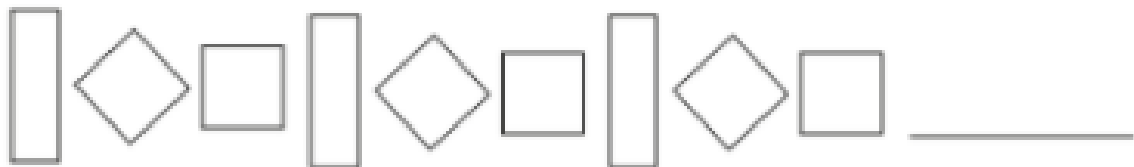


- 3** Complete the patterns.  
Draw the shape that comes next in each pattern.

(a)



(b)



# Length and Height

## Chapter 9

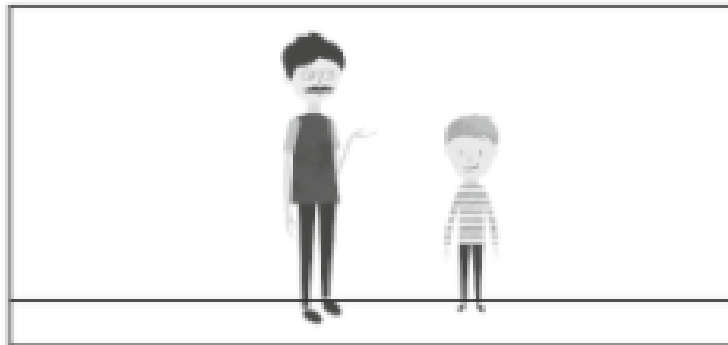
Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

### Worksheet 1

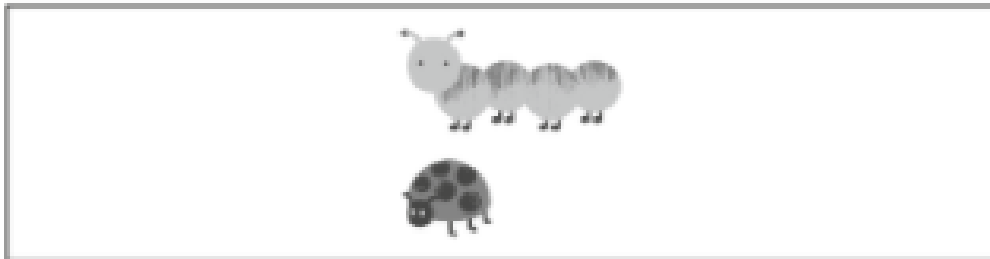
#### Comparing Height and Length

1 Circle the correct answer.

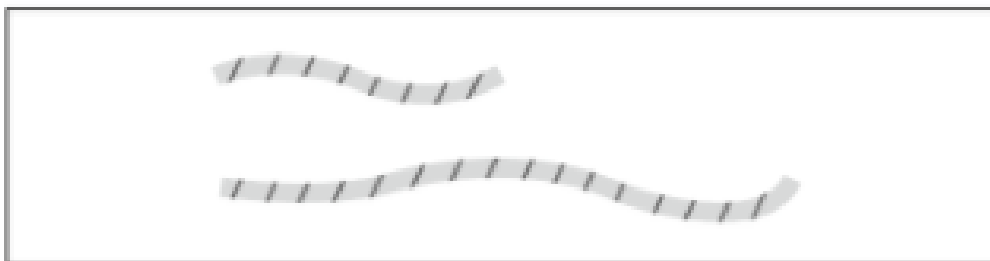
(a) Who is taller?



(b) Which is shorter?

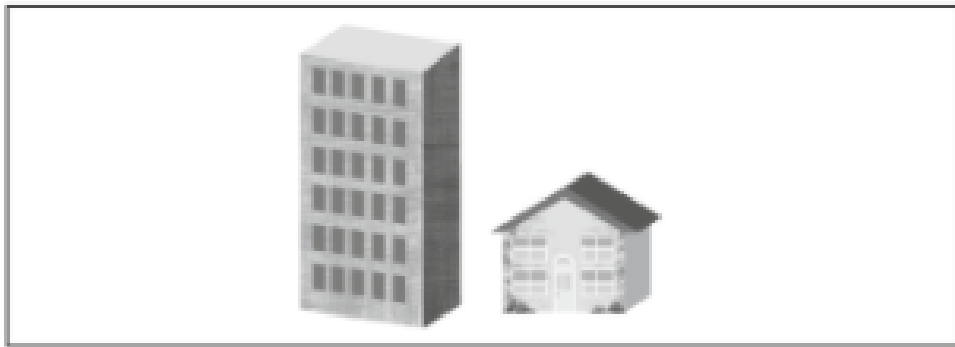


(c) Which is longer?



2 Compare using taller, longer or shorter.

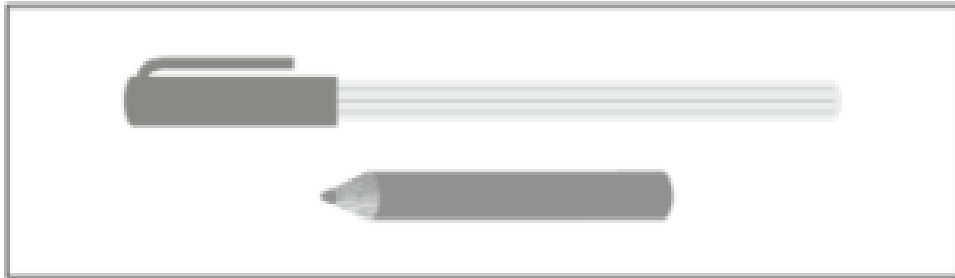
(a)



The house is  than the building.

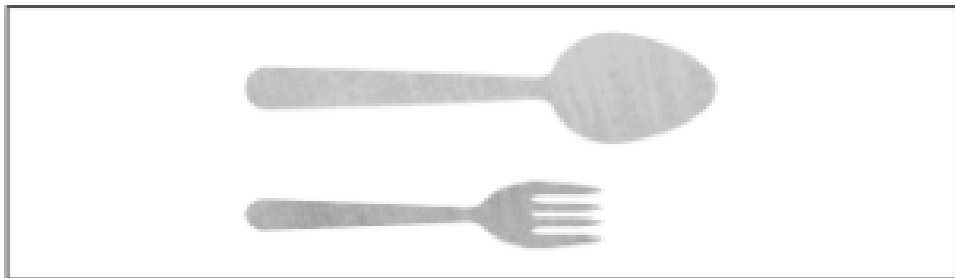
The building is  than the house.

(b)



The pen is  than the pencil.

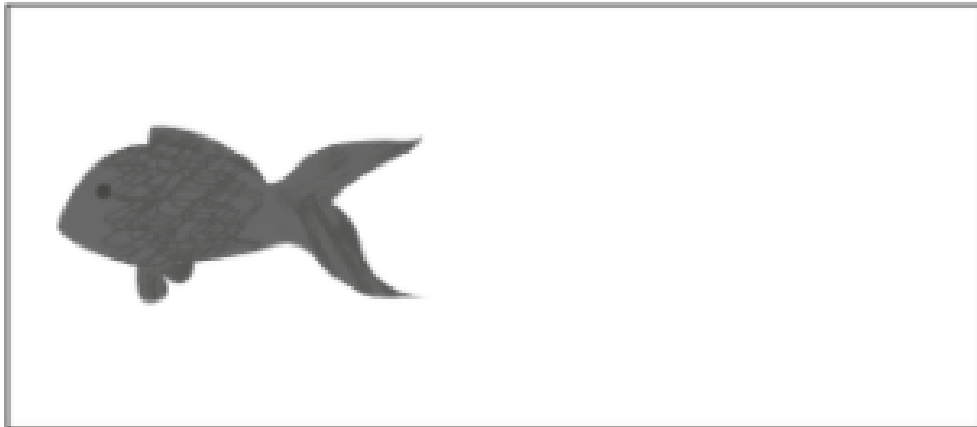
(c)



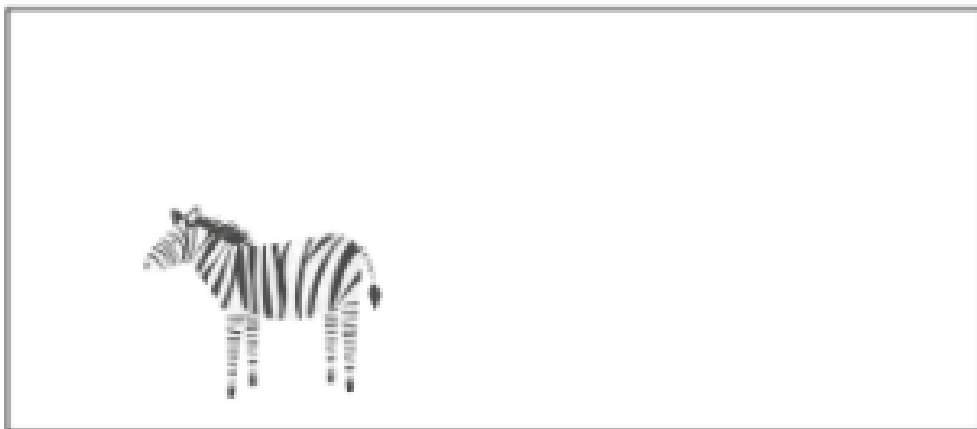
The spoon is  than the fork.

**3** Draw

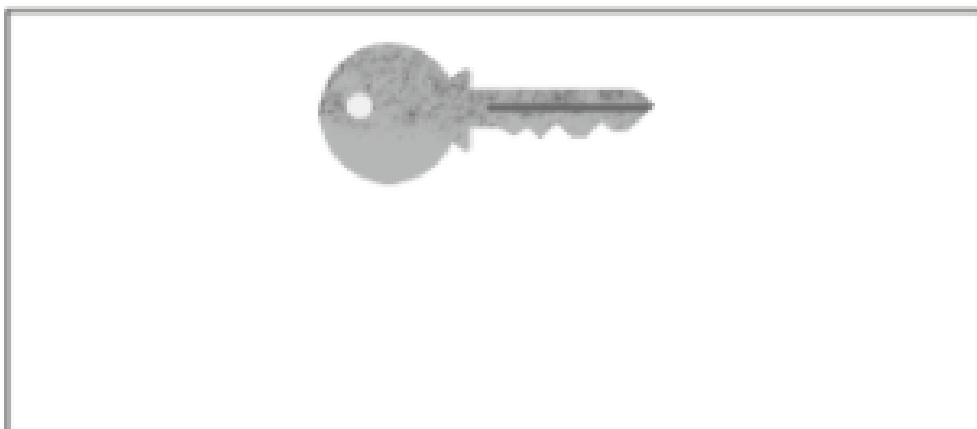
(a) a shorter fish,



(b) a taller animal,



(c) another key that is as long as the key below.



4 Arrange in order.

(a) Start with the longest.

spade



screwdriver



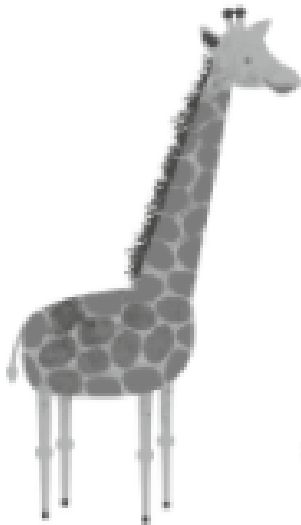
hammer



,  ,

longest  $\longrightarrow$  shortest

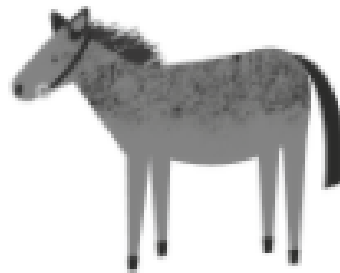
(b) Start with the shortest.



giraffe



duck



horse

,  ,

shortest  $\longrightarrow$  tallest





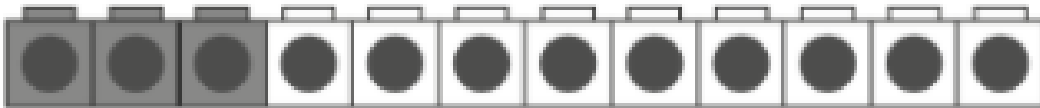
Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## Worksheet 2

### Measuring Length Using Things

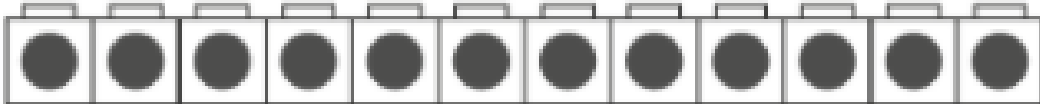
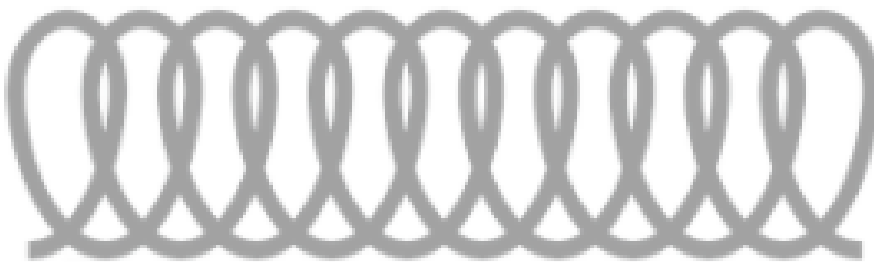
- 1 Colour the number of blocks that are about the same length as the object.  
Write the missing numbers.

Example



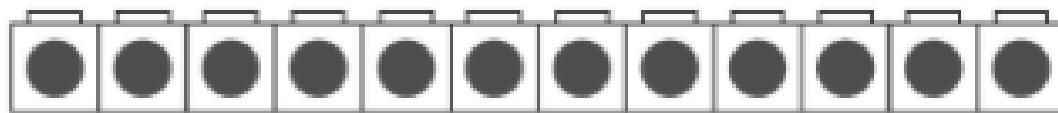
The toothpick is about 3 blocks long.

(a)



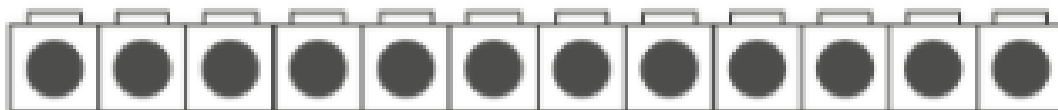
The spring is about  blocks long.

(b)



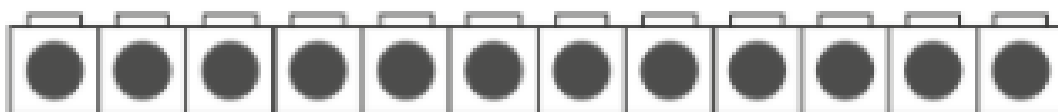
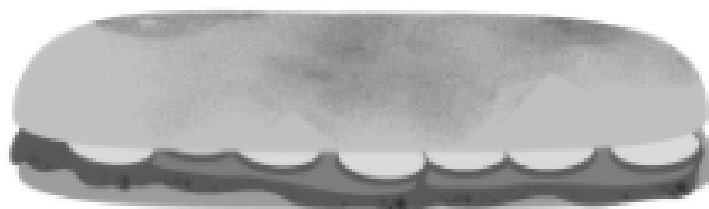
The ribbon is about  blocks long.

(c)



The stapler is about  blocks long.

(d)



The sandwich is about  blocks long.

2 Write the missing numbers.

1  shows 1 unit.

(a)



The comb is about   long.

The length of the comb is about  units.

(b)



The spoon is about   long.

The length of the spoon is about  units.

(c)



The plaster is about   long.

The length of the plaster is about  units.

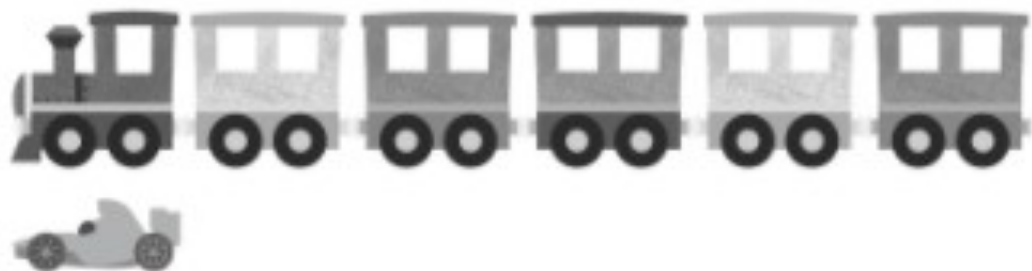
- 3 Look at the pictures.  
Write the missing numbers.

(a)



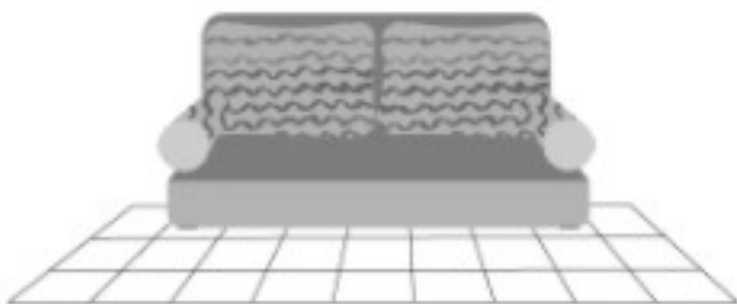
The toy dinosaur is about  toy houses tall.

(b)



The train is about  cars long.

(c)



The sofa is about  floor tiles long.



Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## Worksheet 3

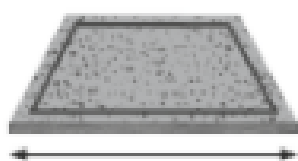
### Measuring Height and Length Using Body Parts

Holly uses parts of her body to measure objects.

Guess the length of each object.

Match it to the correct measurement.

door mat



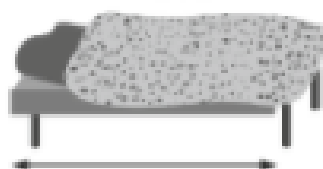
can



television



bed



It is about 1



It is about 11



It is about 1



It is about 1



Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## Worksheet 4

### Measuring Height and Length Using a Ruler

The pictures show four objects.

Use  to measure the length of the objects.

(a)



 is about  centimetres long.

(b)



 is about  centimetres long.

(c)



 is about  centimetres long.

(d)



 is about  centimetres long.

# Mind Workout

Date: \_\_\_\_\_



Read the clues.

My bracelet is longer than Hannah's bracelet.



Emma



Hannah



Ruby

My bracelet is the shortest.

Write the names in the boxes below.



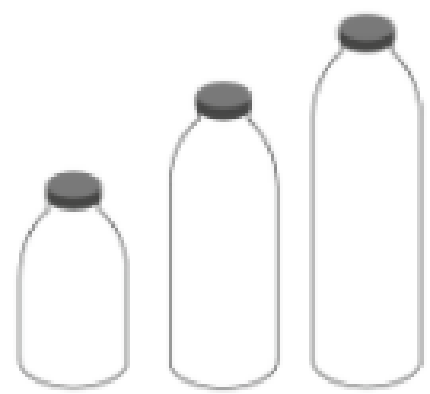


Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

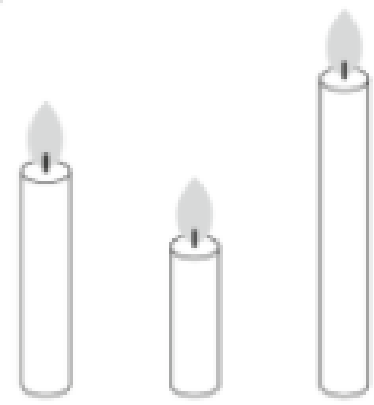
## Review 9

### 1 Colour

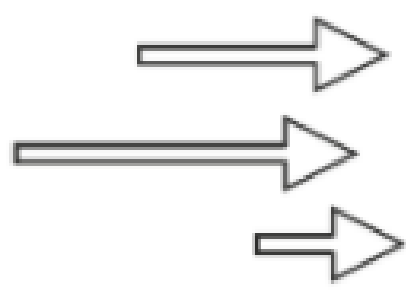
(a) the tallest bottle,



(b) the shortest candle,



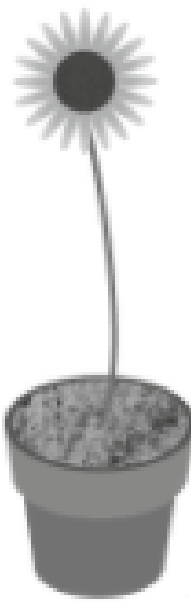
(c) the longest arrow.



2 Compare using taller, tallest, shorter, or shortest.



Plant A



Plant B



Plant C



Plant D

(a) Plant C is the  .

(b) Plant B is the  .

(c) Plant A is  than Plant C.

(d) Plant A is  than Plant D.

3 Write the missing letters.



(a) Pen  is the longest.

(b) Pen  is the shortest.

(c) Pen A is longer than Pen .

(d) Pen A is shorter than Pen .

4 Write the missing number or word.

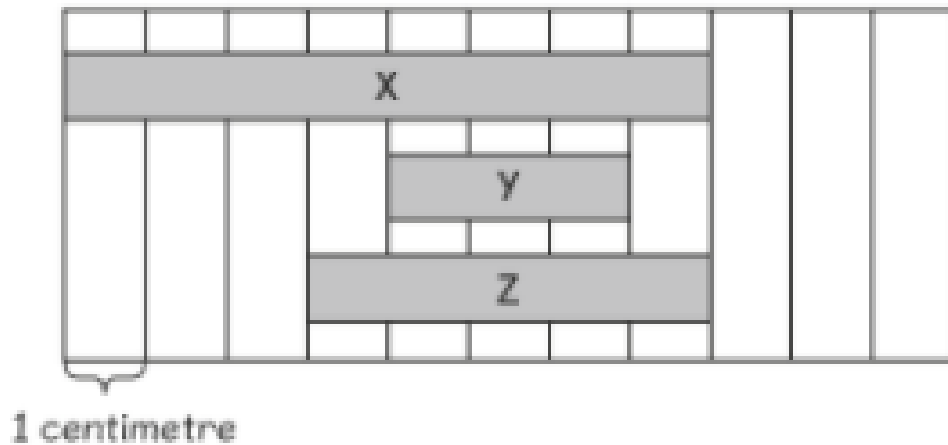


(a) The ribbon is about   long.

(b) The ribbon is about   long.

(c) The  is  (shorter/longer) than the .

5 Write the missing number or letter and then draw.



(a) Tape X is  centimetres long.

(b) Tape Y is  centimetres long.

(c) Tape Z is  centimetres long.

(d) Tape  is the shortest.

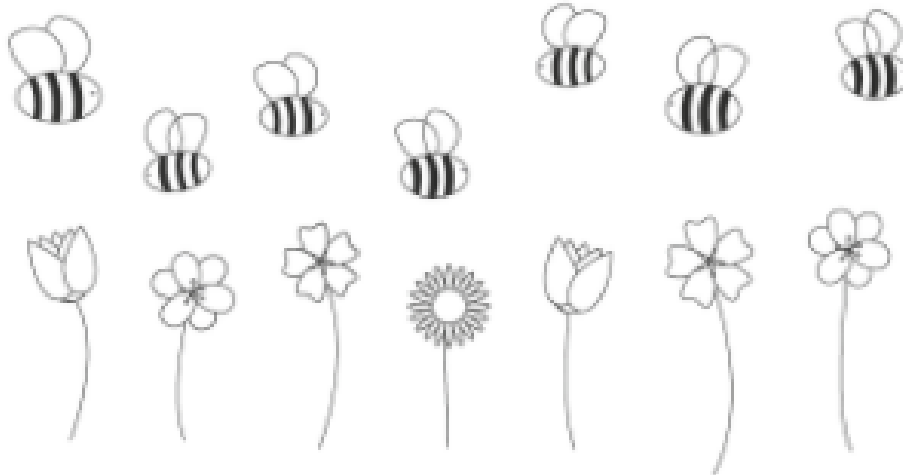
(e) Draw a tape that is as long as Tape Z.





## Revision 2

- 1 Colour.
- (a) The 4th flower from the right.
  - (b) The 7th bee from the left.



- 2 Ravi is eighth in a queue.  
How many people are there in front of him?



There are  people in front of him.



3 Match.

nineteen



twenty



thirteen



twelve



fifteen



13



15



20

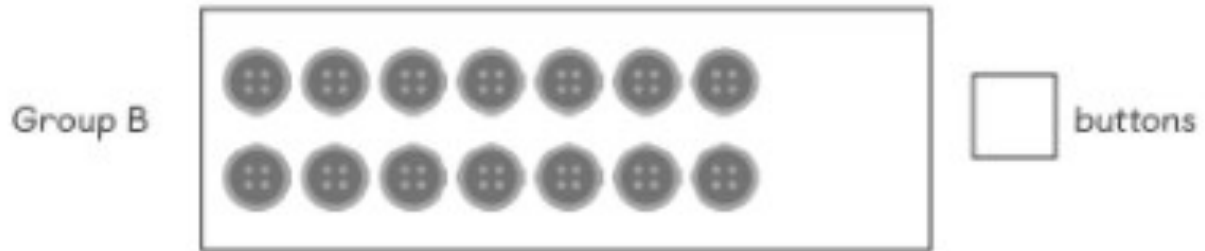
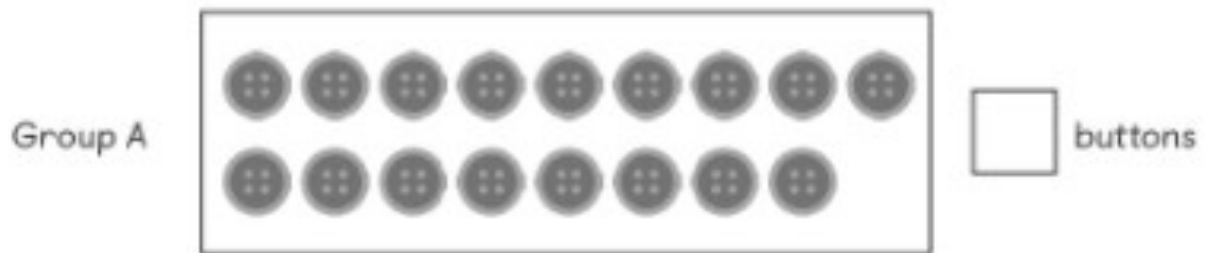


12



19

- 4 Count.  
Compare using **more** or **fewer**.



- (a) Group A has  buttons than Group B.
- (b) Group B has  buttons than Group A.

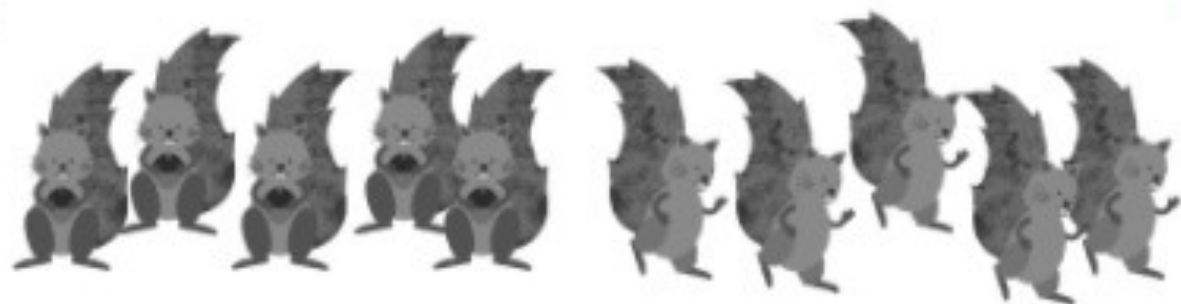
- 5 Write the missing number.

$$\text{Bow} + \text{Bow} = 10$$

$$\text{Bow} - 2 = 3$$

$$\text{Bow} = \square$$

6



There are 10 squirrels. 5 squirrels run away.  
How many squirrels are left?

$$\square \circ \square = \square$$

squirrels are left.

- 7 Colour the shapes that you see.  
Use a different colour for each shape.  
Name the shapes.



There is a  and a .



8 Colour the shape that comes next.


- 9 A, B and C are bamboo poles.  
A is longer than B.  
C is longer than B.  
C is shorter than A.

Write the missing letters.



- 10 Write the missing numbers.



- (a) The bat is about  screwdrivers long.
- (b) The screwdriver is about  keys long.
- (c) The bat is about  keys long.

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## Mid-Year Revision

### Section A

Choose the correct answer.

Write its matching number – (1), (2), (3) or (4) – in the box.

**1** \_\_\_\_\_ is more than 7.

- (1) 8
- (2) 6
- (3) 5
- (4) 4

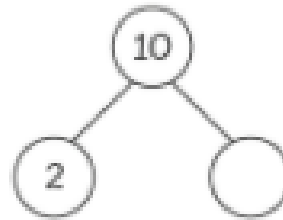
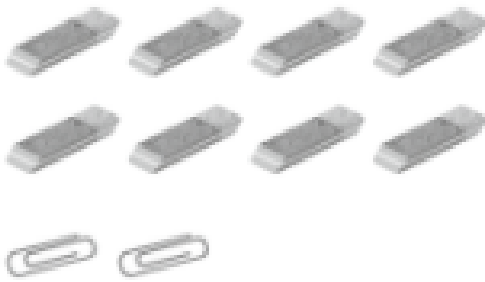
**2** Which group has the greatest number of marbles?

A	
B	
C	
D	

- (1) A
- (2) B
- (3) C
- (4) D



3 The missing number in the number bond is \_\_\_\_\_.



(1) 6

(2) 7

(3) 8

(4) 9

4



The square is the \_\_\_\_\_ from the left.

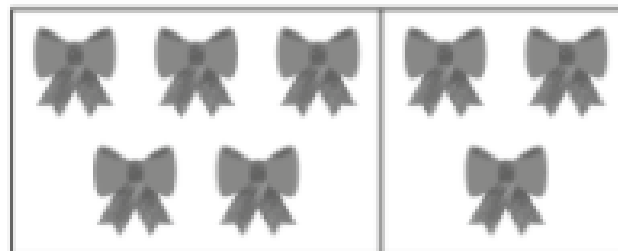
(1) first

(2) second

(3) third

(4) fourth

5 Which of the following shows the total number of ribbons?



(1)  $1 + 7 = 8$

(2)  $2 + 6 = 8$

(3)  $5 + 3 = 8$

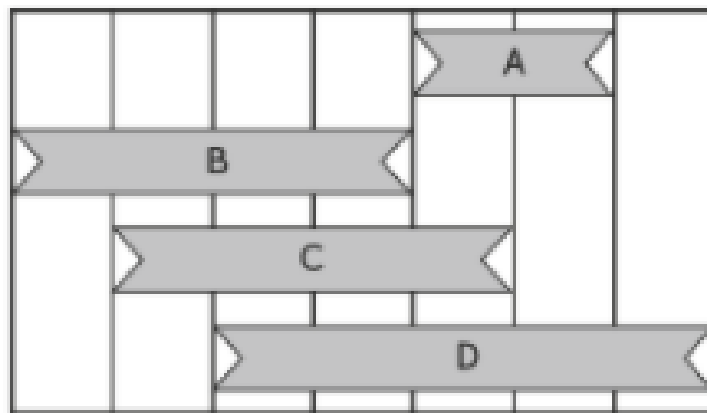
(4)  $4 + 4 = 8$

6 Which of the following shows the number of pencils that can still be used?



- (1)  $11 - 6 = 5$
- (2)  $16 - 11 = 5$
- (3)  $11 - 5 = 6$
- (4)  $16 - 5 = 11$

7 Which ribbon is the longest?



- (1) A
- (2) B
- (3) C
- (4) D

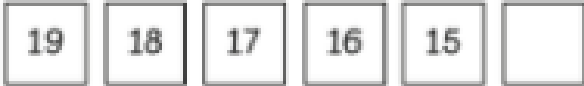
8 + = 4  
 + 3 =

What is the missing number?

- (1) 10
- (2) 6
- (3) 5
- (4) 4



9



What is the missing number?

- (1) 11
- (2) 12
- (3) 13
- (4) 14

10 Which shape comes next in the pattern below?

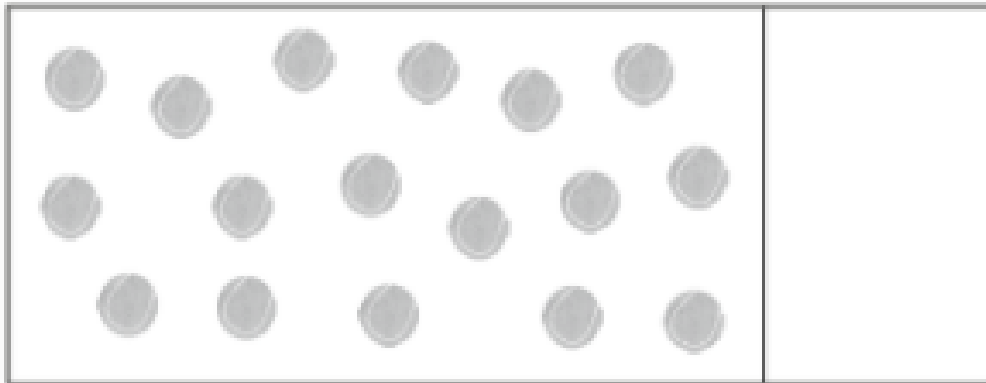


- (1) ●
- (2) ▲
- (3) ▲
- (4) ○

## Section B

Write your answers in the spaces provided.

- 11** Circle to make 10 and count.  
Then write the number.





- 12** Write the missing numbers.



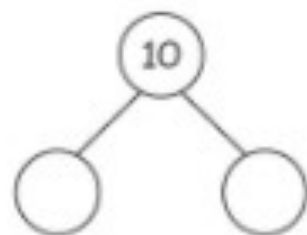
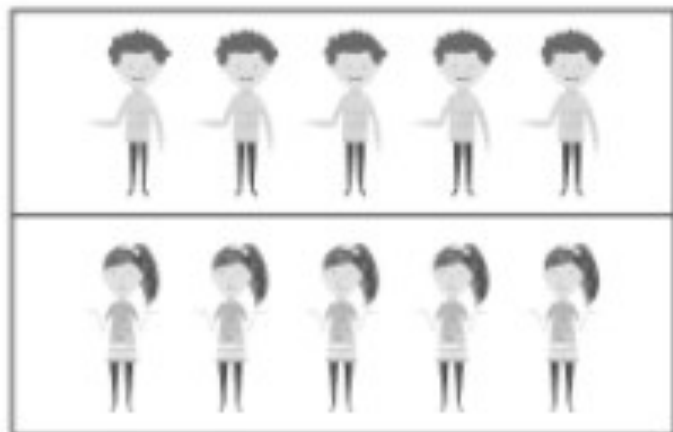
$$\square + \square = \square$$

- 13** Compare using more or fewer.

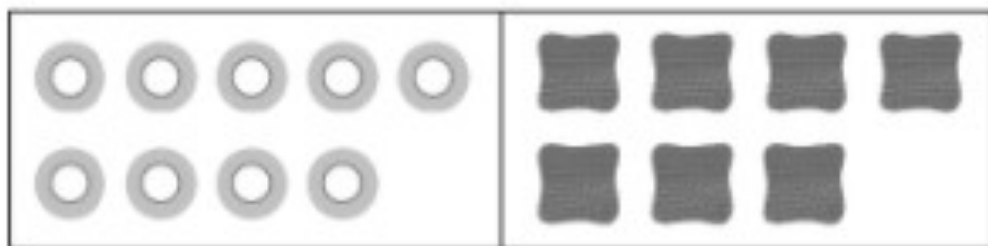
Group A	Group B
	

Group B has  bananas than Group A.

- 14 Complete the number bond to show the picture.



- 15 Look at the picture.  
Write the missing numbers.



$$\square + \square = \square$$

$$\square - \square = \square$$

- 16

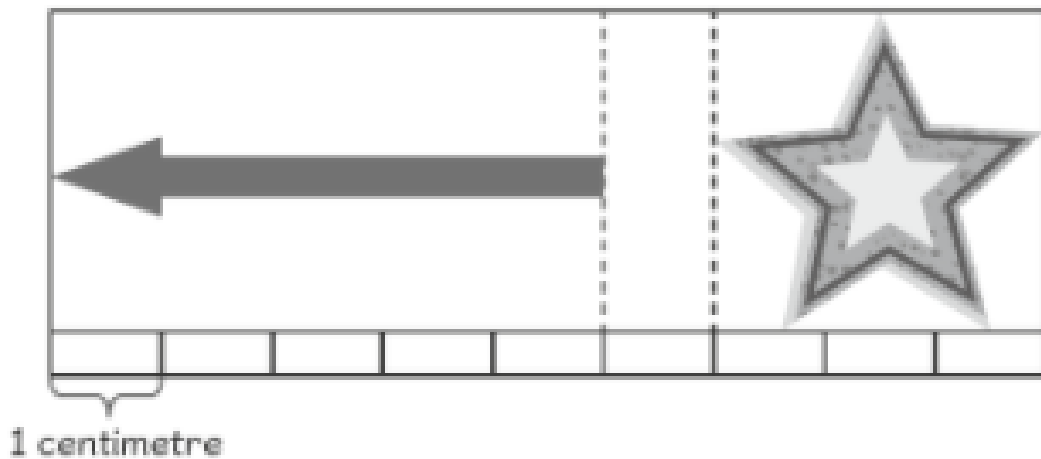


Which car is 2nd?



Look at the picture.

Answer Questions 17 and 18.



17 The arrow is  centimetres long.

18 The star is  (shorter/longer) than the arrow.

19 Write in words.

(a) 12

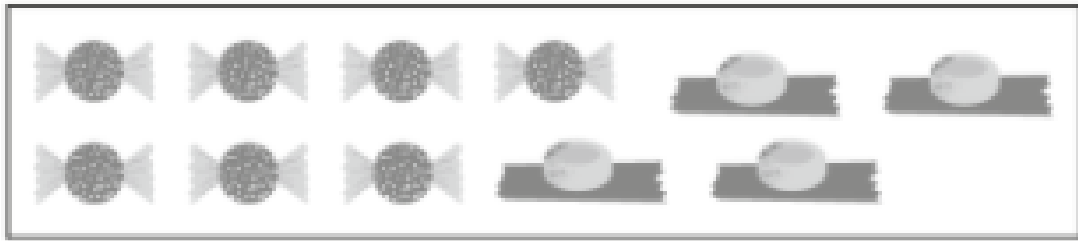
(b) 18

20 Write the numbers.

(a) eleven

(b) fifteen

21 Write the missing numbers.



$$\square - \square = \square$$

22 Match.

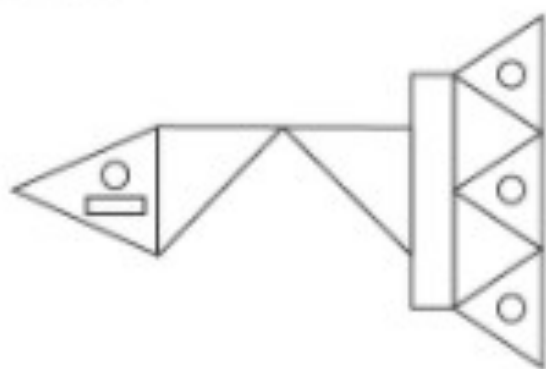
$8 + 4$  • • eleven

$20 - 9$  • • ten

$12 - 2$  • • twelve

23 Sam is sixth in a queue and Ravi is eighth in the queue.  
Emma is between Sam and Ravi.  
What is Emma's position in the queue?

Look at the picture below.  
Answer Questions 24, 25 and 26.



24 There are  circles and  triangles.

25 There are  rectangles.

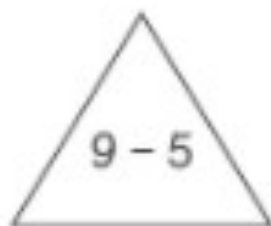
26 There are  fewer circles than triangles.

27 Compare using more or fewer.



There are  eggs than cartons of milk.

28 Colour the shape with the smallest answer.



29 Write using the given numbers.

14, 20, 11, 18

(a) 18 is less than .

(b) The greatest number is .

(c) The smallest number is .

30 Complete the number patterns.

(a) 6, 7, 8, 9, ,

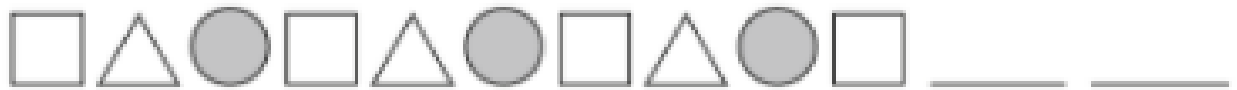
(b) 17, 16, 15, 14, ,

31 Arrange the numbers in order.  
Start with the greatest.

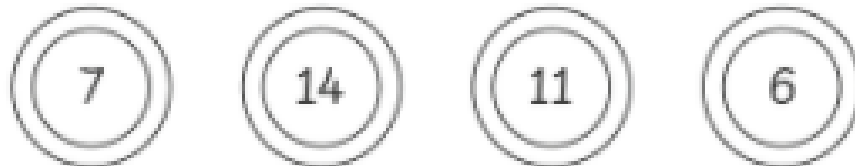


, ,

32 Complete the pattern.



33 Colour the two numbers that add up to 20.

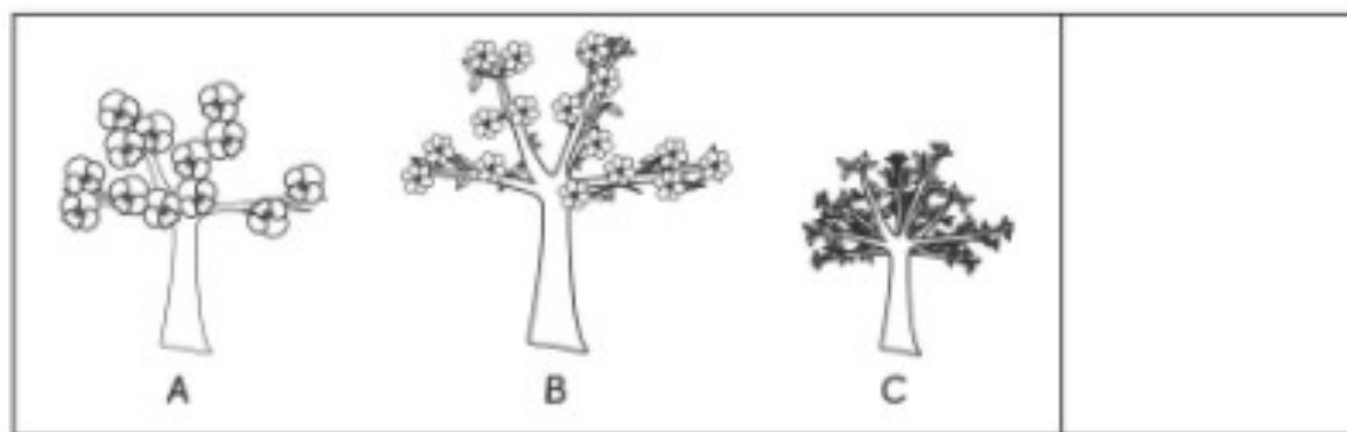


34

$$\begin{array}{l} \text{▲} - 5 = 1 \\ \text{▲} = \square \end{array}$$

What number does  stand for?

Look at the picture below.  
 Answer Questions 35, 36 and 37.



**35** Colour the shortest tree.

**36** Write the position of the shortest tree.

It is  from the left.

**37** In the space given, draw a tree taller than Tree A.  
 The tree must also be shorter than Tree B.

**38** Write the family of addition and subtraction facts.

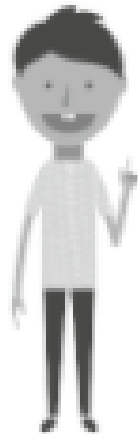


$$\square + \square = \square$$

$$\square - \square = \square$$

$$\square + \square = \square$$

$$\square - \square = \square$$



I have 7 rubbers.

The rest of the rubbers are mine.



How many rubbers does Ruby have?

$$\square \ominus \square = \square$$

Ruby has  rubbers.

40 Use each number given only once.

8	13	4
3	9	11

$$\square + \square = \square$$

$$\square - \square = \square$$

## Section C

Solve the word problems.

Show your work clearly.

41



How many stickers are there altogether?

$$\square \bigcirc \square = \square$$

There are  stickers altogether.

42



Lulu baked some cupcakes. She gave 2 cupcakes away.  
How many cupcakes are left?

$$\square \bigcirc \square = \square$$

cupcakes are left.



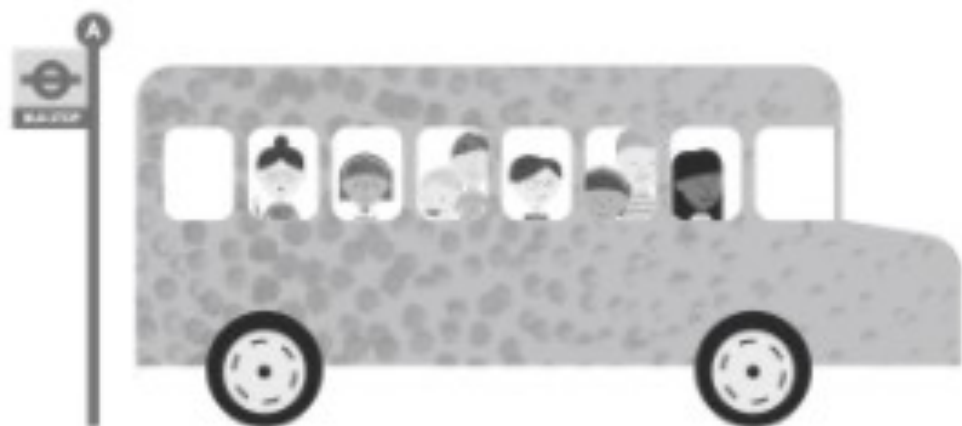
- 43 There are 4 apples in a basket.  
There are 5 oranges in the same basket.  
How many pieces of fruit are there altogether?



$$\square \bigcirc \square = \square$$

There are  pieces of fruit altogether.

- 44 There are 8 children on a school bus.  
At a stop, 4 children leave the bus.  
How many children are left on the bus?



$$\square \bigcirc \square = \square$$

There are  children left on the bus.

- 45 Sam has 10 sweets.  
He gives Amira 7 sweets.  
How many sweets does Sam have left?



$$\square \circ \square = \square$$

Sam has  sweets left.