Matching 3D objects

1 Draw lines from each picture to the words that best describe it.

curved surface

straight

has no corners

can roll

pointed
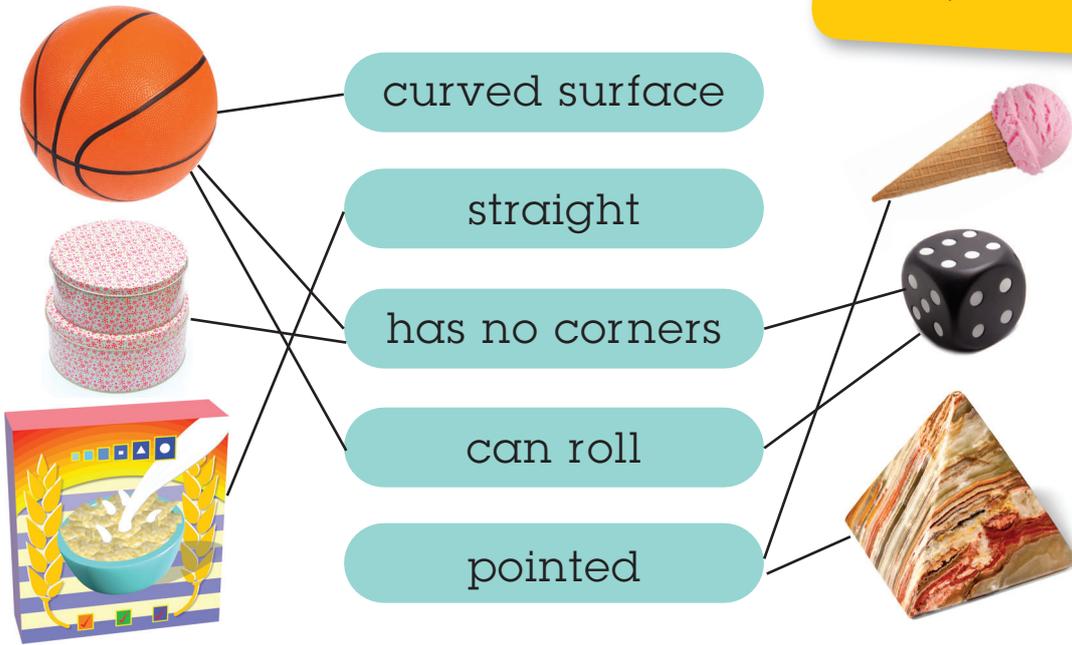
2 Colour the picture and its matching 3D object the same colour.

FLAKEY CORNS

FULL OF SUNSHINE
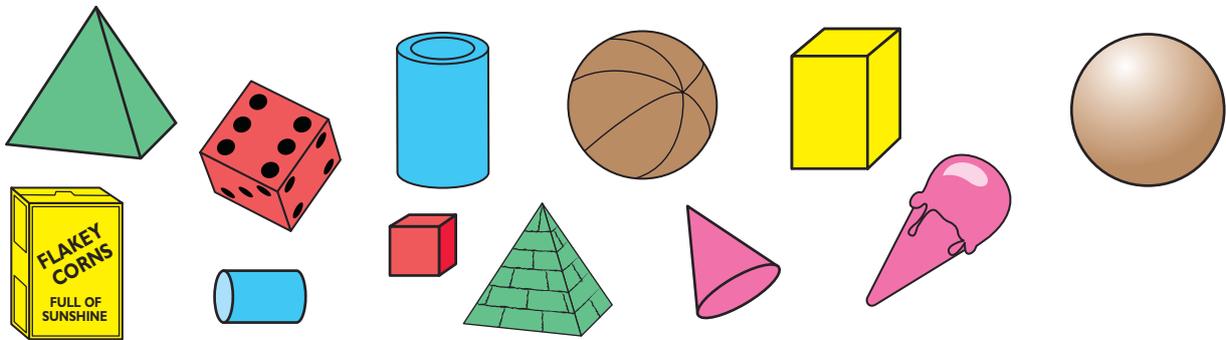
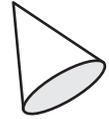**3** How could you sort these objects into two groups?
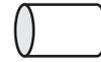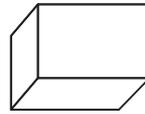
Answers will vary.

Tell your partner why you sorted them this way. Is there a different way to sort them?

MiB 1 Card 141

1 Colour: **green** **red** **blue** **yellow** **orange**
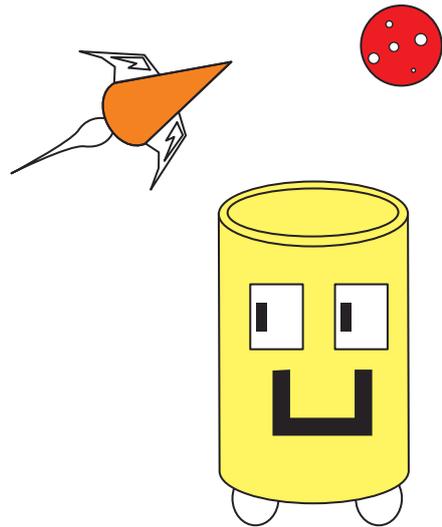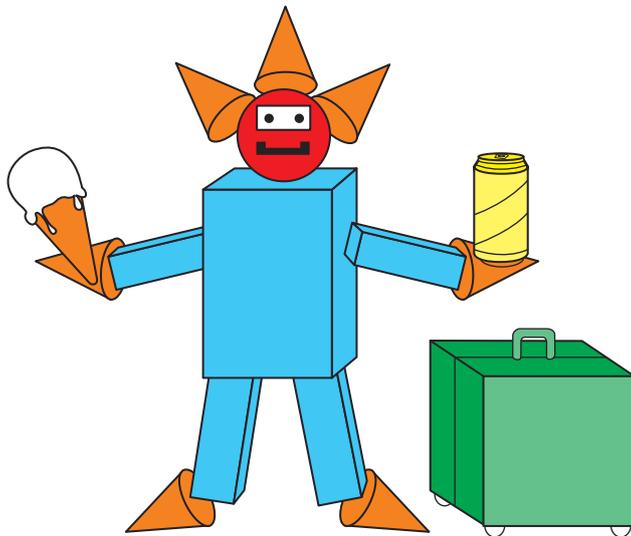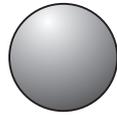
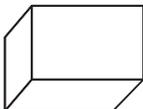**2** Use the word bank to help the robot name each 3D picture.

_____cylinder_____

_____cube_____

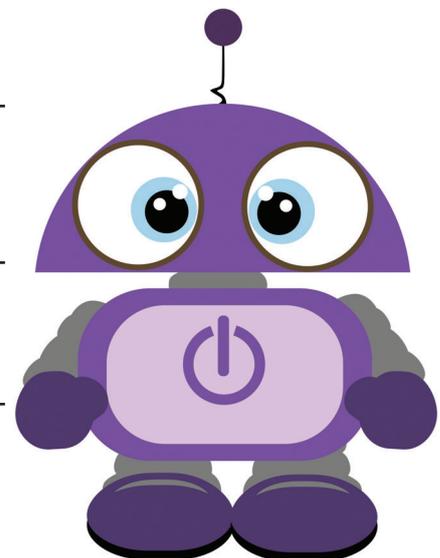____rectangular prism____

_____cone_____

_____sphere_____

Word bank

sphere
cube
cone
rectangular prism
cylinder

Backyard 3D

1 Draw lines from the 3D objects in this picture to their names under it.
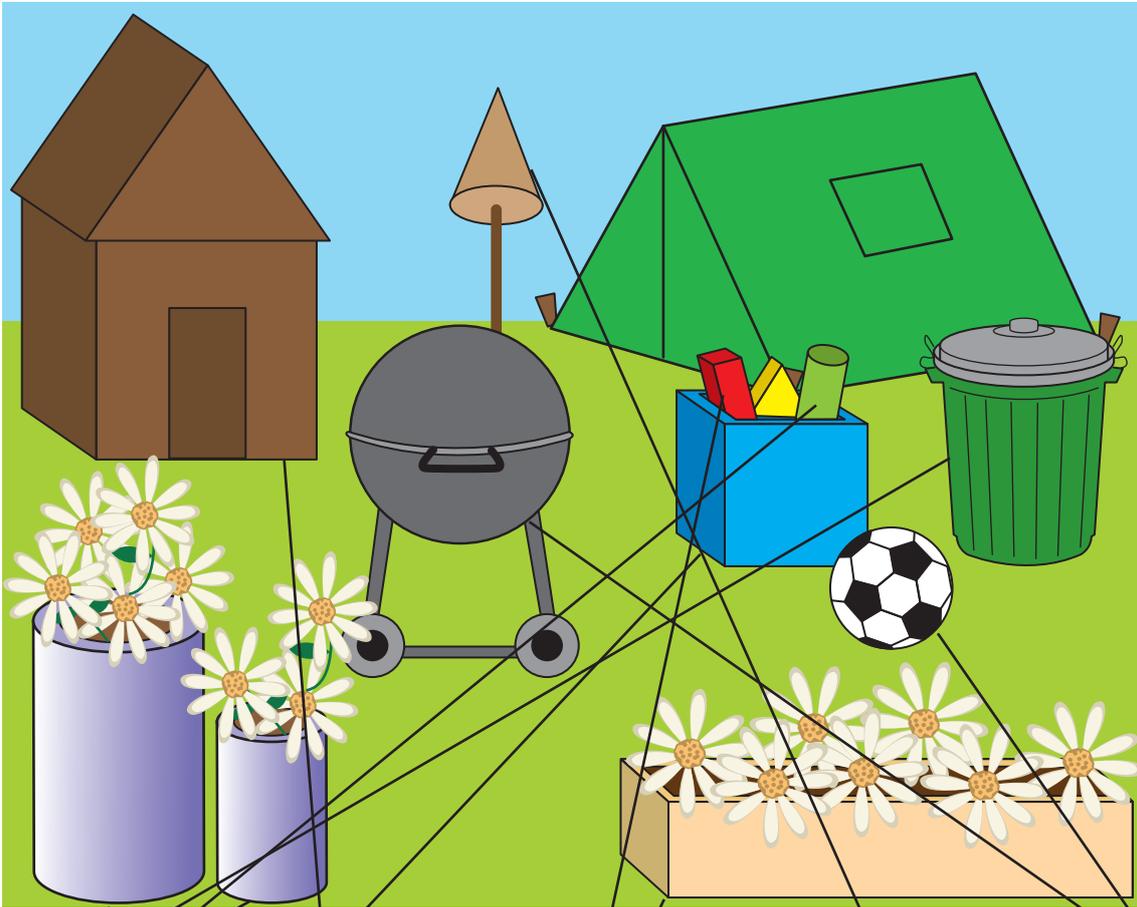
cylinder   cube   rectangular prism   cone   sphere

2 Think about your own backyard or a room in your home. Write an object for each shape. *Answers will vary.*

is a

is a

is a

1 Match the 3D object and its picture with their name.

rectangular prism

sphere

cone

cube

cylinder

2 Label the 3D objects used to make the robot.

cube

rectangular prism

cone

cylinder

Describing 3D objects

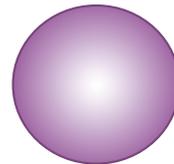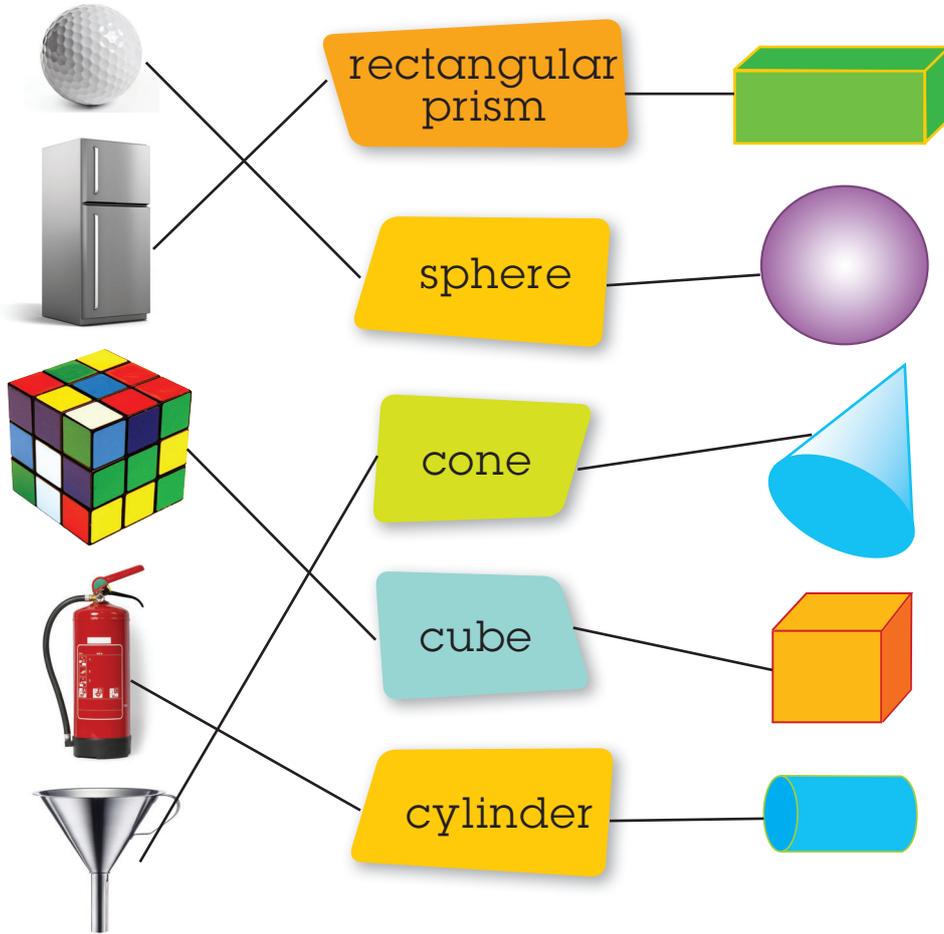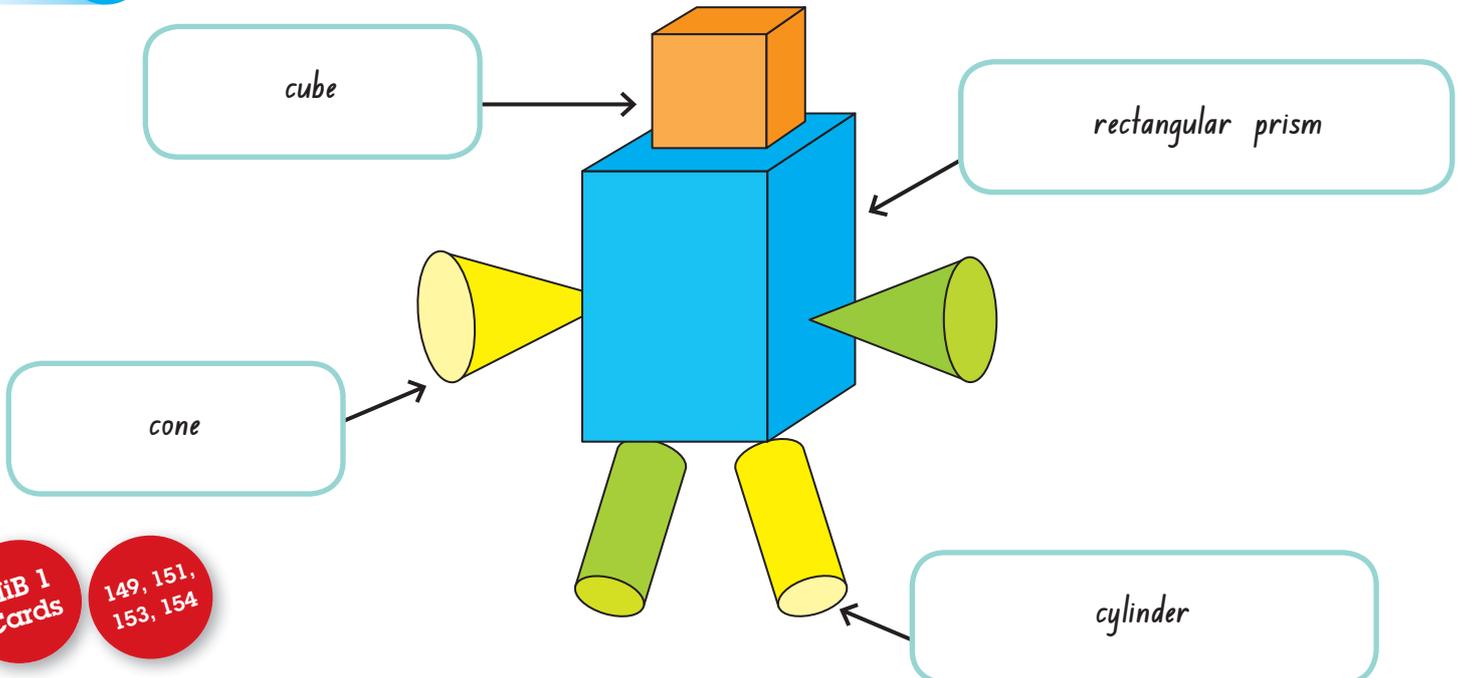**1** Match the objects with their best description.

I have **6** faces that are all the same shape.

I have **6** faces. Some of them are rectangles.

I have **2** circles at my ends and **1** curved surface.

I have **1** circle as my base and I have a pointy end.

I have **1** curved surface. I have no edges.

2 What is the difference between a cube and a sphere?

A sphere has no edges or corners.

A sphere has only one face.

A sphere has a curved surface.

MiB 1 Cards

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Shape **91**
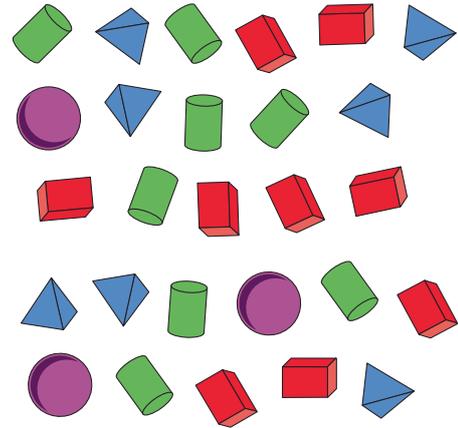
1 Colour the ⬭ **green**.
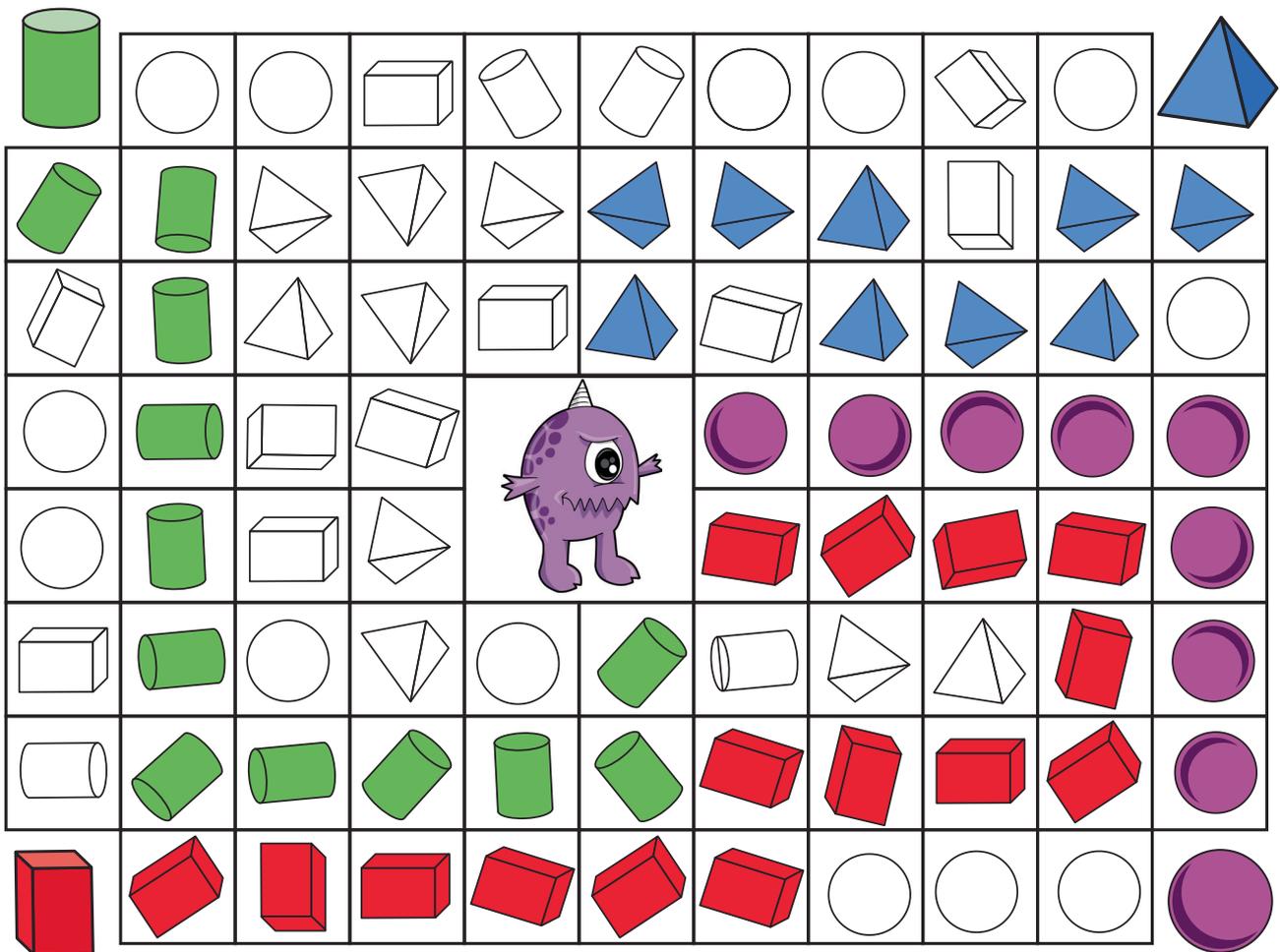
Colour the △ **blue**.

Colour the ▱ **red**.

Colour the ◯ **purple**.

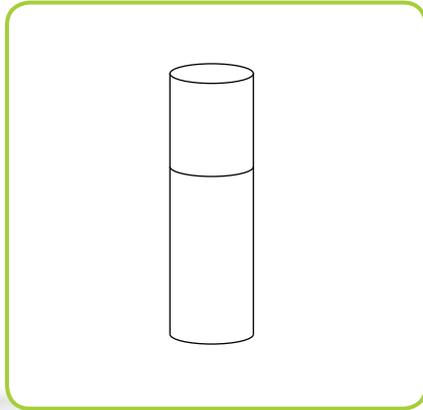**2** The shape monster can eat only one type of 3D object at a time. Colour a path to each of the four large 3D objects.
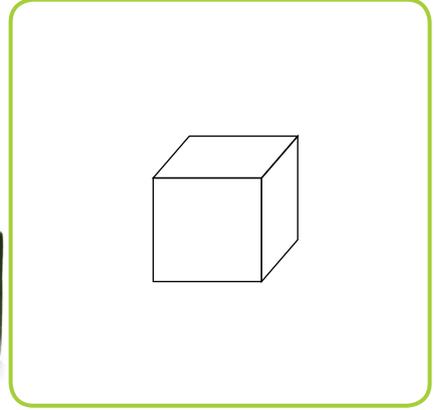
1 Sketch the 3D object shown in each picture.

a

b

c
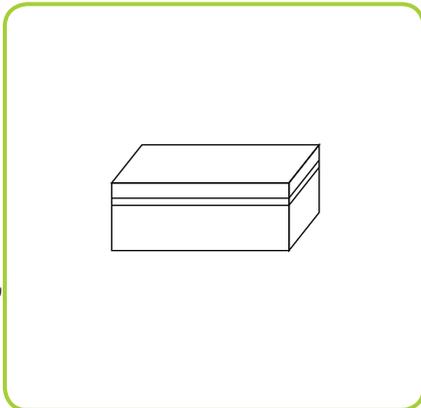
d
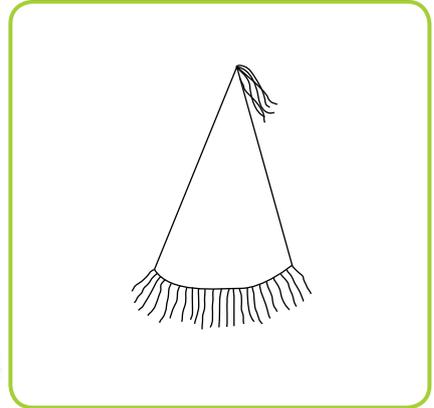
2 Use building blocks to make a model. Draw your model showing the blocks you used.

Answers will vary.

1 Use a line to match each shape with its name.

| oval | square | rectangle | circle | triangle |
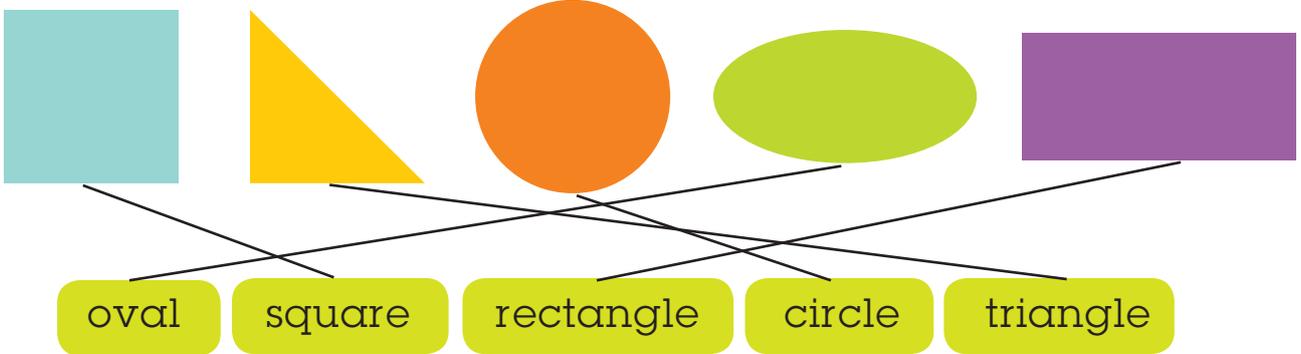
2 Colour the rhombuses. Circle the hexagons.
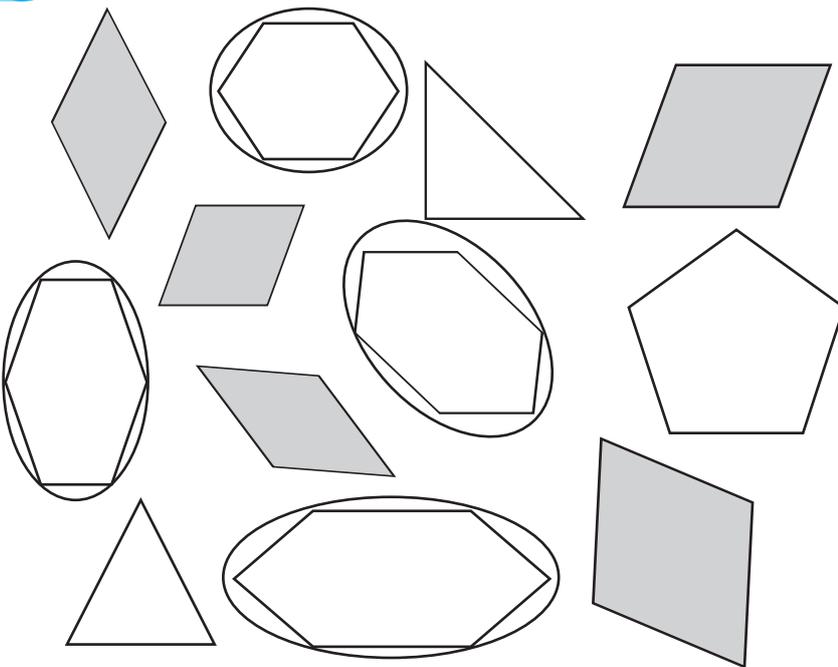
A rhombus has 4 equal sides. Its opposite angles are equal.

A hexagon has 6 straight sides and 6 corners.

3 What are some differences between a rhombus and a hexagon?

A rhombus has four sides, a hexagon has six sides.

The opposite angles are equal in a rhombus.

A rhombus has four corners, a hexagon has six corners.

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Card
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Looking at shapes

1 Colour the shapes with: *1* side – **yellow**; *3* sides – **blue**;
4 sides – **red**; *6* sides – **green**.
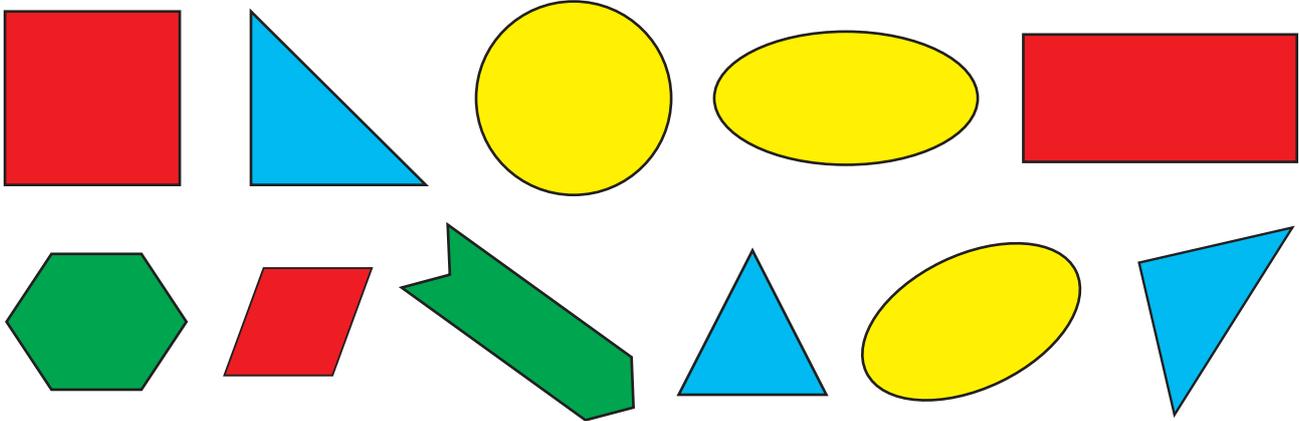
A shape with *3* sides is called a _____ *triangle* _____.

A shape with *6* sides is called a _____ *hexagon* _____.

2 Label the shapes in this picture
using the word bank below.

hexagon   circle   triangle   rectangle   square

square

hexagon

circle

rectangles

triangle

MiB 1
Card
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Shape | **95**
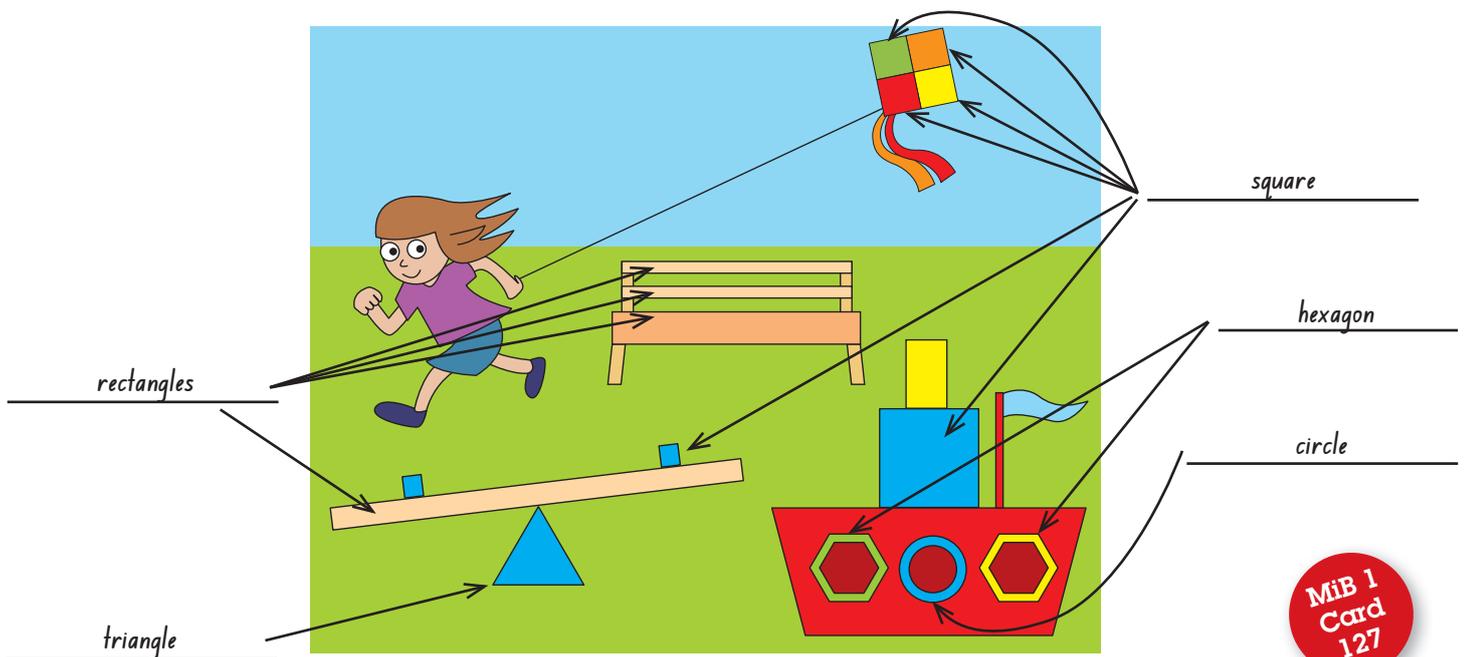
Features of shapes

1 Circle the corners on these shapes as shown. Write how many corners and how many sides for each.

> Corners are also known as angles.
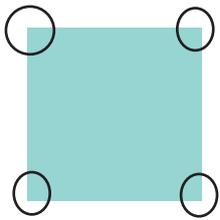
4 corners
4 sides
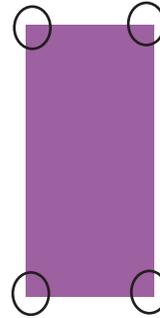
4 corners
4 sides
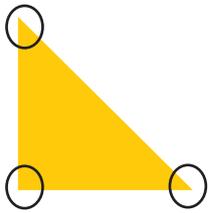
3 corners
3 sides
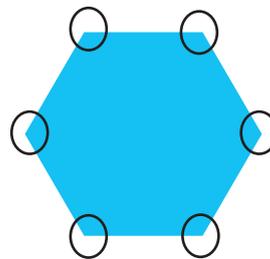
6 corners
6 sides
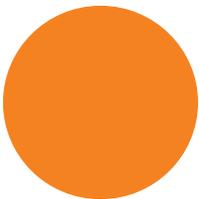
0 corners
1 sides
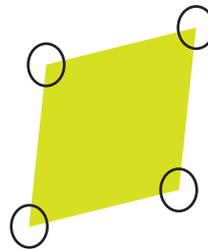
4 corners
4 sides

2 Write the names of the above shapes that have:

a 4 sides ____square____, ____rectangle____ and ____rhombus____

b 3 corners _____triangle_____

c no corners _____circle_____

d 6 sides _____hexagon_____

> Look for some of these shapes around the classroom. Tell a friend where you have found shapes and name them.

1 Trace the shapes that are trapeziums. Cross the shapes that are not.
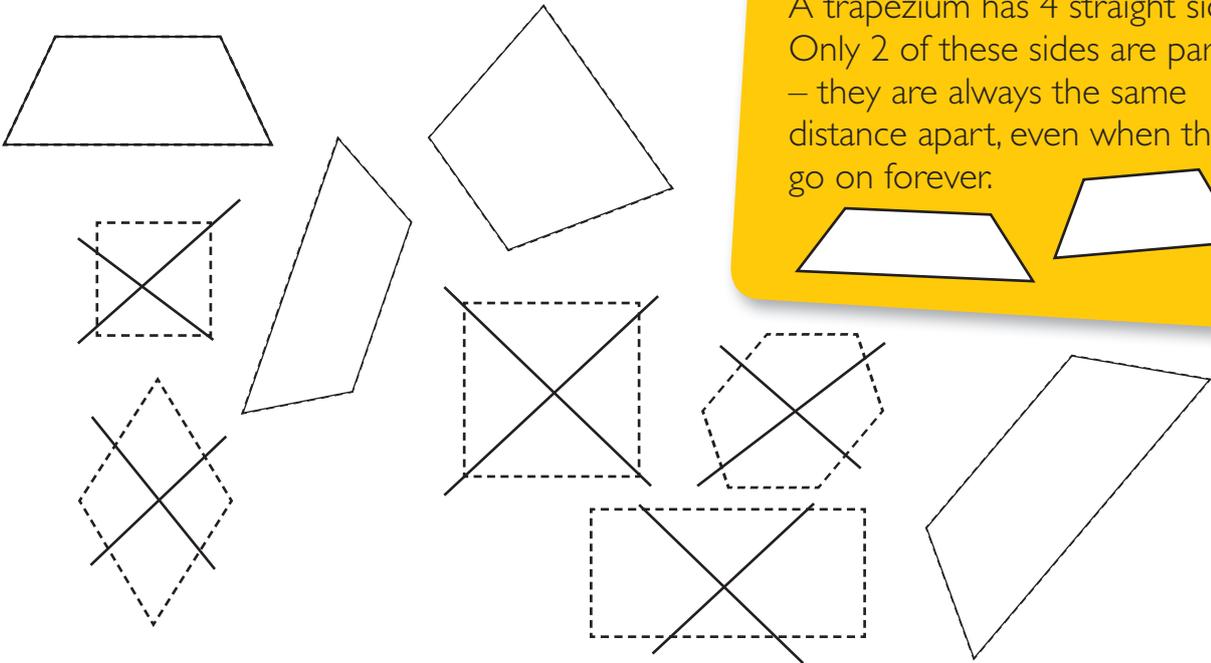
A trapezium has 4 straight sides. Only 2 of these sides are parallel – they are always the same distance apart, even when they go on forever.

2 Trace and colour each shape.

Circles – **yellow**; hexagons – **brown**; trapeziums – **blue**; rectangles – black; rhombuses – **green**; squares – **red**
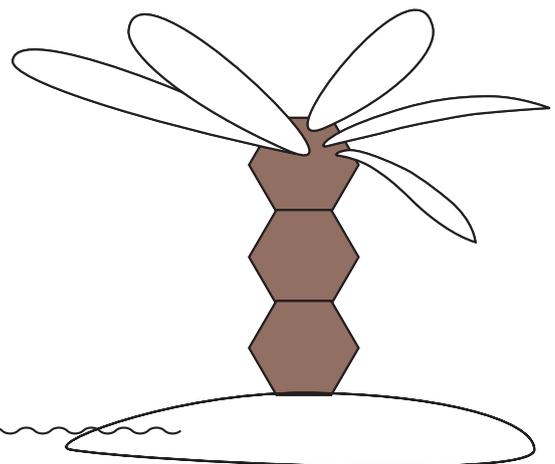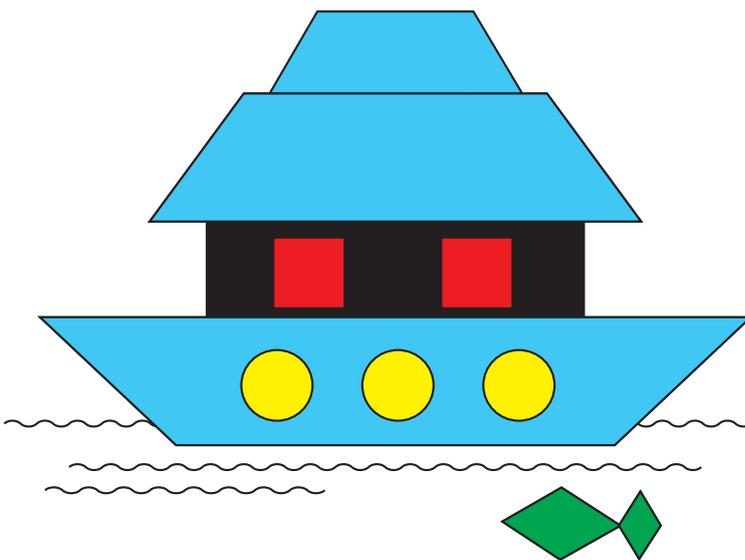
How are circles and hexagons different from the other four shapes?

1 Draw flags using these shapes.

A red circle inside a yellow square
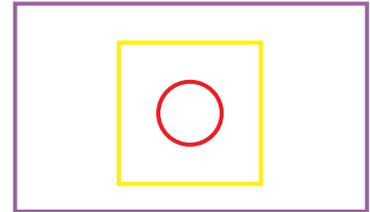
Two blue triangles above a red trapezium
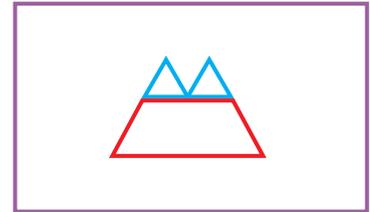
A green hexagon next to a black rhombus
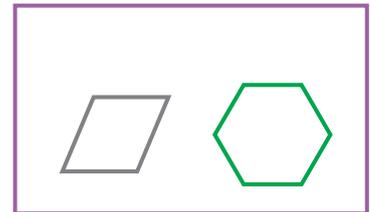
2 Write the shapes you can see in each flag.

rectangle, rhombus, circle

_____

3 Make a pattern using each shape on a geoboard. Record what it looks like on the grids below.

triangle
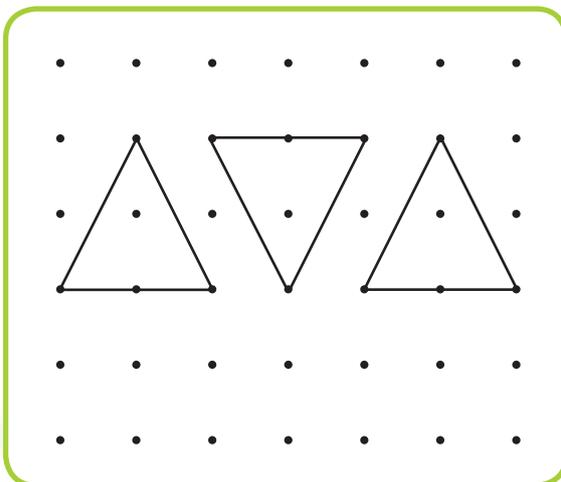
trapezium
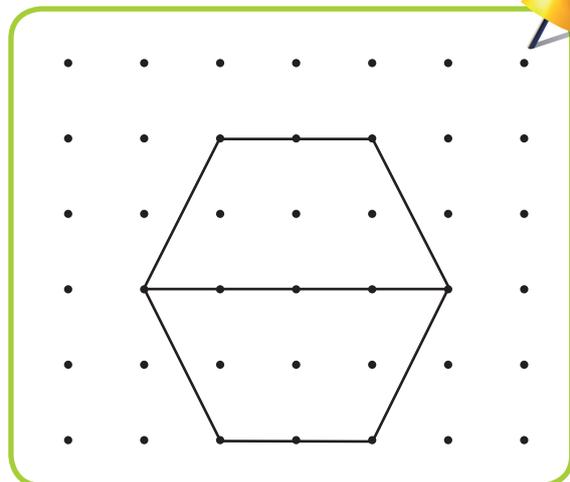
Shape

Naming shapes

1 Circle the shape name that best matches the picture.

square
circle
triangle
rhombus

rectangle
circle
hexagon
trapezium

triangle
rectangle
trapezium
rhombus

square
triangle
hexagon
rectangle

circle
square
trapezium
hexagon

trapezium
hexagon
triangle
rectangle

2 Draw a trapezium and a rhombus.
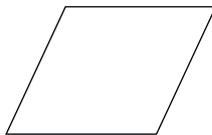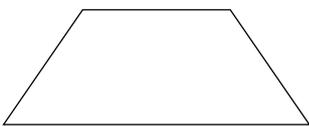
Explain to a friend how these two shapes are different and similar.

Shape **99**

1 Trace the square twice onto a piece of paper and cut around it. Fold each piece in half to make different shapes. Unfold and glue onto your page. What shapes are made with the folds?
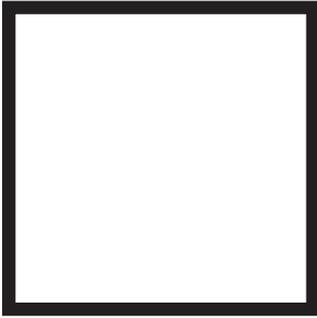
This has *1*

_____ *square* _____
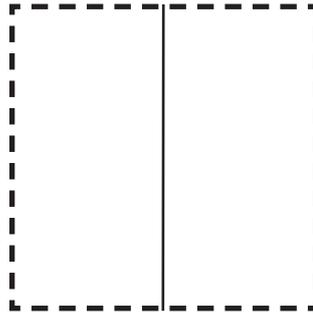
This has *2*

_____ *rectangles* _____
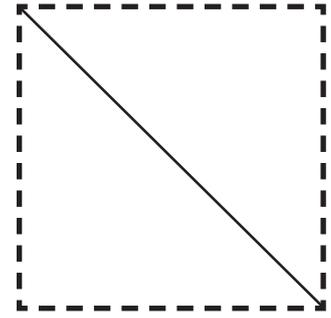
This has *2*

_____ *triangles* _____

2 Use pattern blocks to help you fill out the table.
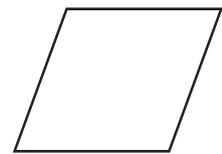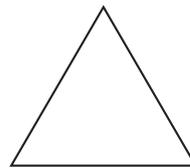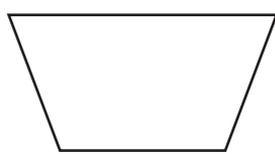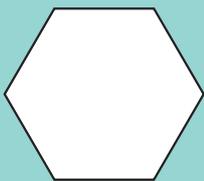
Make	Using		
	How many? *2*	How many? *6*	How many? *3*

3 Draw lines to show what shapes might make these pictures.
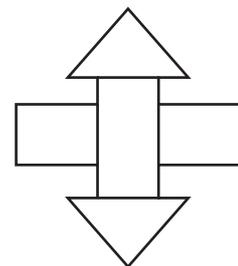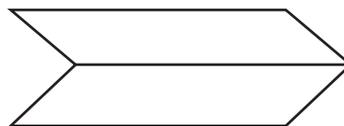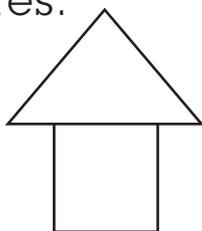
Symmetry

1 Do these pictures have a line of symmetry showing? Answer yes or no. **M**

yes

no

yes
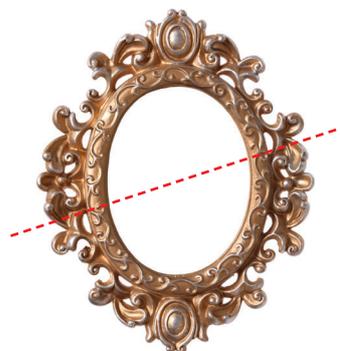
no

2 Draw a line of symmetry on these shapes and pictures.
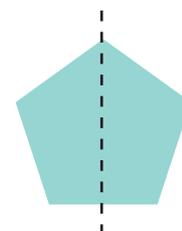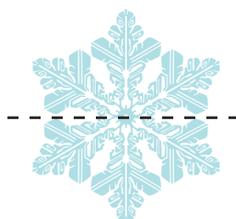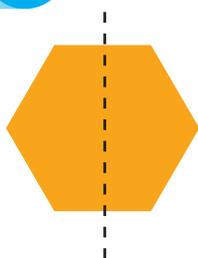
Hint: Use a square piece of paper to help you.

3 How many different lines of symmetry does a square have? 4

Can a clockface with numbers have a line of symmetry?

Discuss why or why not with a friend.

MiB 1 Cards 159, 160

Shape 101

1 Place a tick in the box if the pattern is symmetrical. Place a cross if it is not.

◆ ■ ● │ ● ■ ◆	✓
▲ ◣ ⬡ │ ⬡ ◢ ▲	✓
■ ▲ ⬗ │ ■ ▲ ⬗	✗
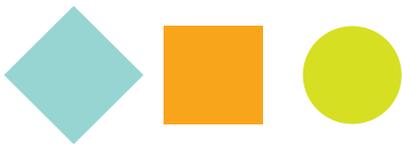
2 Complete the symmetrical patterns.
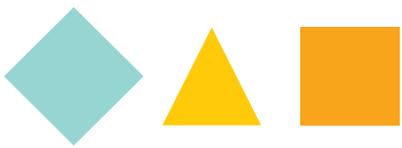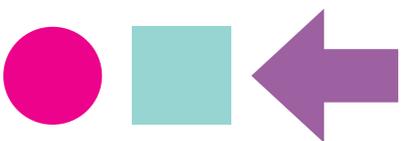
> If a pattern is symmetrical it looks like it has been flipped and is a mirror image of itself.

◆ ▲ ■ │ ■ ▲ ◆

● ● ■ │ ■ ● ●

➡ ■ ● │ ● ■ ⬅

3 Make two of your own symmetrical patterns using pattern blocks. Draw them. *Answers will vary.*

1 Use words from the word bank to make the sentences true.

Word bank

below
above
between
next to
behind
on top of
in front of

a The vet is _____*above*_____ the hairdresser.

b The musician is _____*below*_____ the firefighter.

c The office worker is _____*between*_____ the vet and the firefighter.

d The hairdresser is _____*next to*_____ the pilot.

2 Complete these sentences to match the picture.

The baby is

_____*in front of*_____

the woman.

The boy is

_____*on top of*_____

the books.

The man is

_____*behind*_____

the computer.

MiB 1
Card
165

Building a town

Work with a group of students. Draw two houses, a fire station, a supermarket, a school, a church and a park on this map. Make a model of your town using materials from your classroom.

Answers will vary.
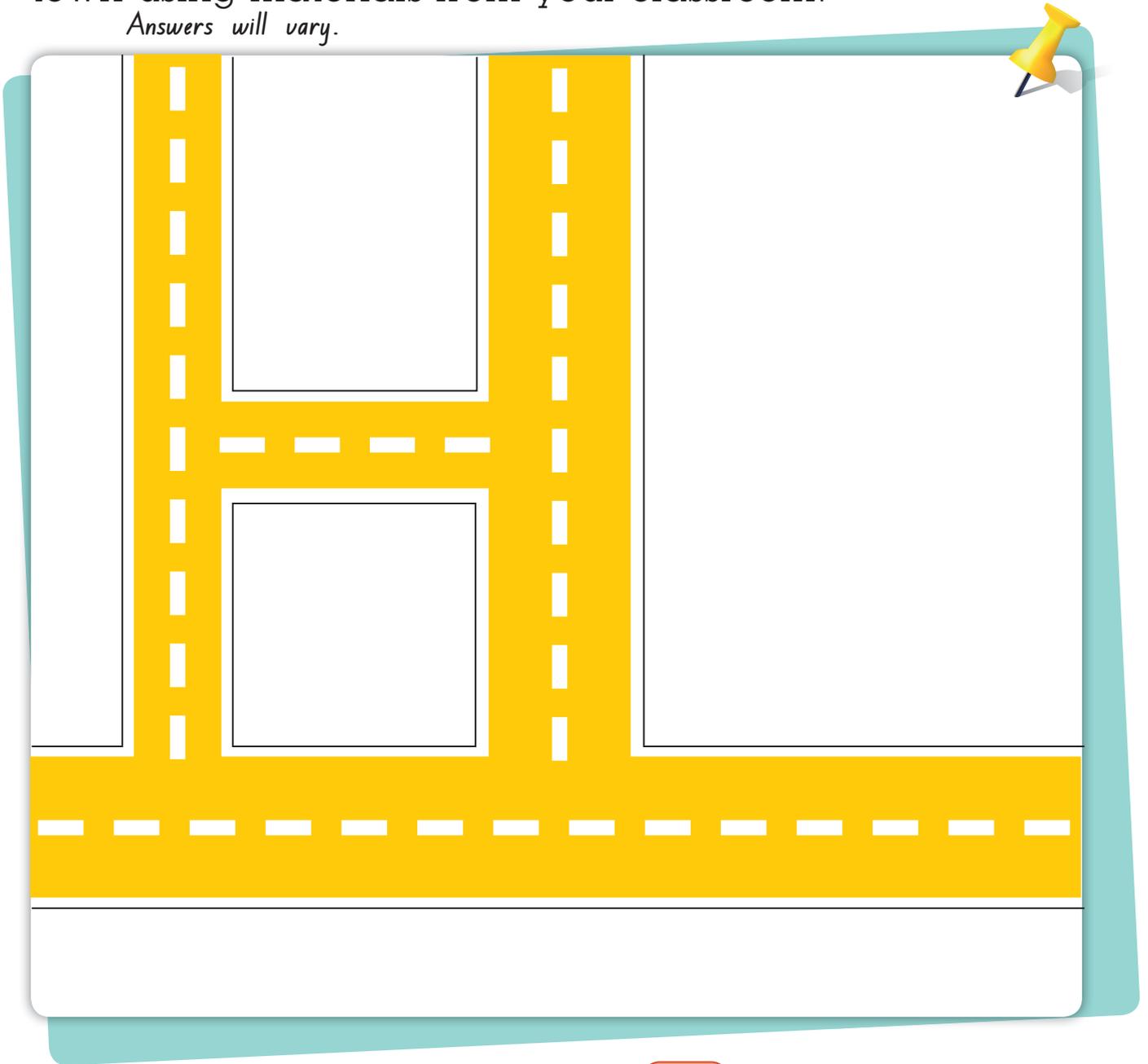
Write a set of instructions to get from the fire station to the church.

Explain how to get from one place to another.

1 Pirate Dani has to collect these three objects before boarding her pirate ship.

Draw a **red** path to Pirate Dani's ship by joining the dots. She can move up, down or sideways but not diagonally.

2 Compare your path to the path a friend has drawn.

What is the distance along your path? Count the

number of dots.   *Answers will vary.*

Is your path longer or shorter than your friend's path?

_____

MiB 1
Cards
171, 172

Location and Transformation | **105**

Look at this school of fish. Read the clues to find the name of each fish. Label them.

Greg	Connor	Harry	
Mary	Rehan	Nara	
Jinu	Chelsea	Josie	
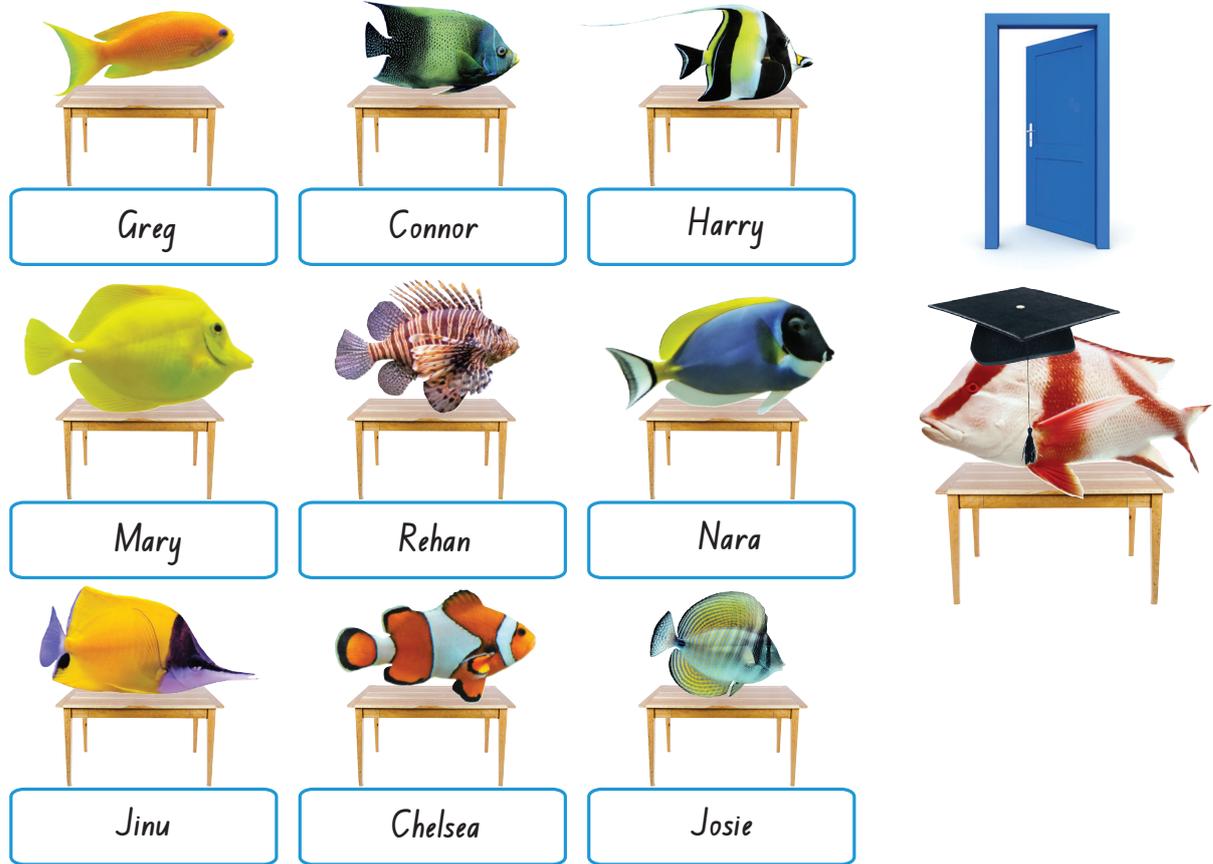
Harry is closest to the door.

Connor is sitting behind Harry and behind Connor is Greg.

Rehan is sitting next to Connor.

Nara is sitting in the middle desk in the front row.

Mary is sitting behind Rehan and next to her on her right is Jinu.

When the teacher looks at the class, she sees Josie to her left in the front row.

Chelsea is sitting between Jinu and Josie.

1 Circle the animal on the **right** in each pair.
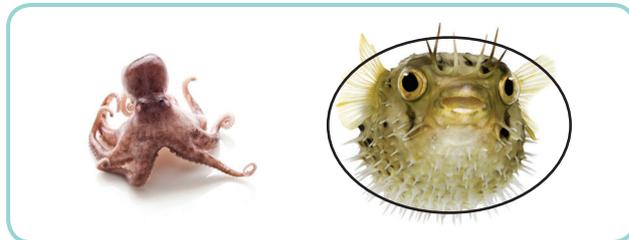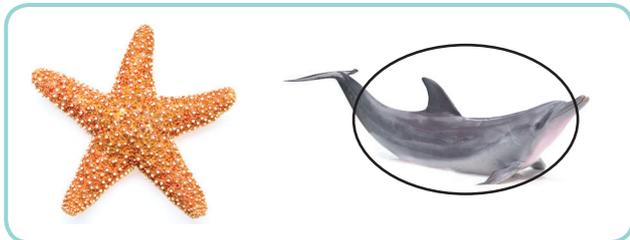
2 Circle the animal on the **left** in each pair.
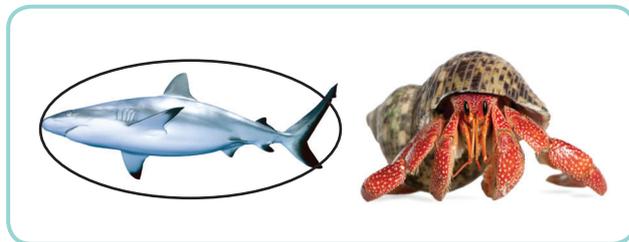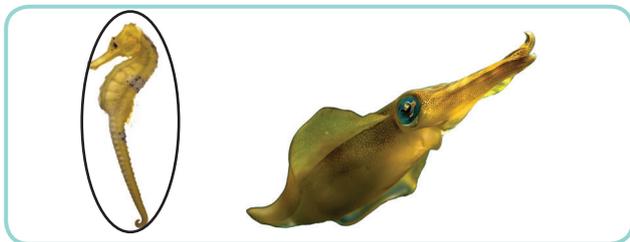
3 Colour the correct word.

The fish is on the (left) (right) of the mermaid.

The dolphin is on the (left) (right) of the mermaid.

The octopus is on the (left) (right) of the mermaid.

Draw a starfish on the right of the mermaid.

Location and Transformation   **107**

Position in the sea
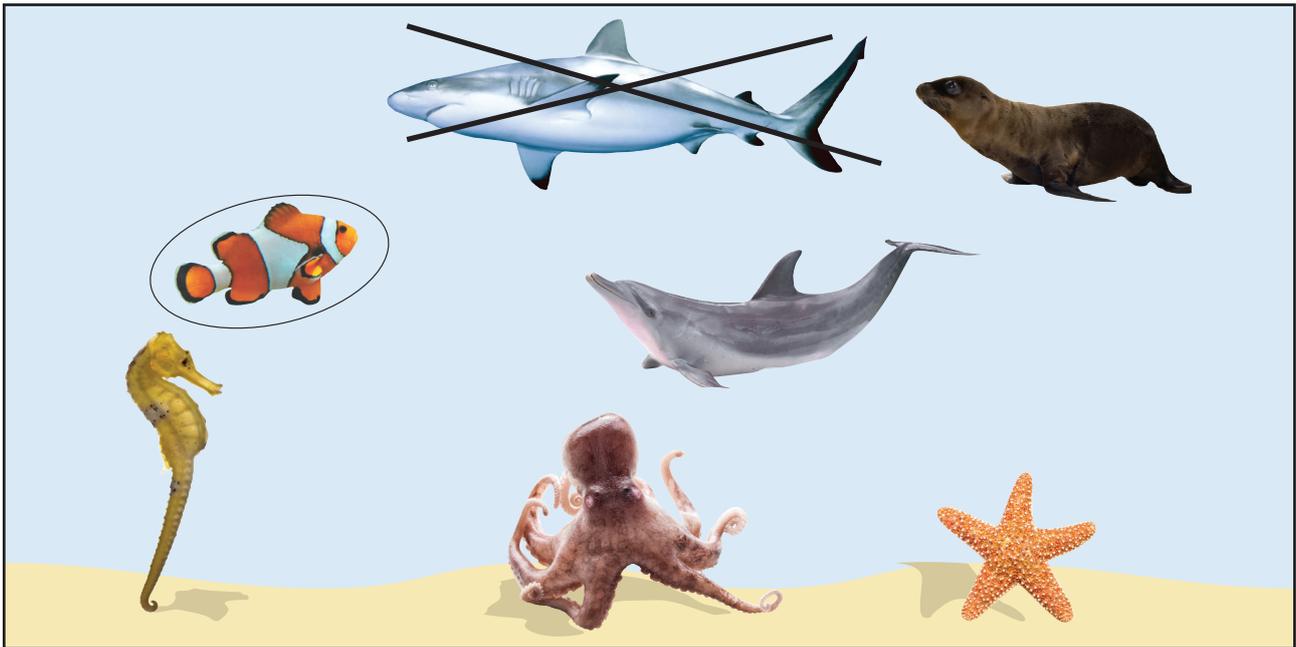
1 What is **above** the seahorse?

fish

What is in the **bottom right-hand corner**?

starfish

What colour is the animal in the **bottom left-hand corner**?

yellow

2 Circle the second animal from the **left**.

Cross out the highest animal.

Draw a dolphin **above** the octopus but **below** the shark.

3 Who am I?

I am on the right-hand side of the picture.

I am close to the top right-hand corner.

I am next to the shark.

I am the _____ seal. _____

MiB 1 Cards 163,164

Location and Transformation

Find the treasure

1 Look at the picture.

What is the thing on the right?

> *parrot*

What is the thing on the pirate's right?

> *treasure box*

Which thing is closer to the pirate?

(The one on her right) (The one on her left)

How do you know? *The treasure box is only five coins away from the pirate.*

2 Follow the pirate's path to the treasure.
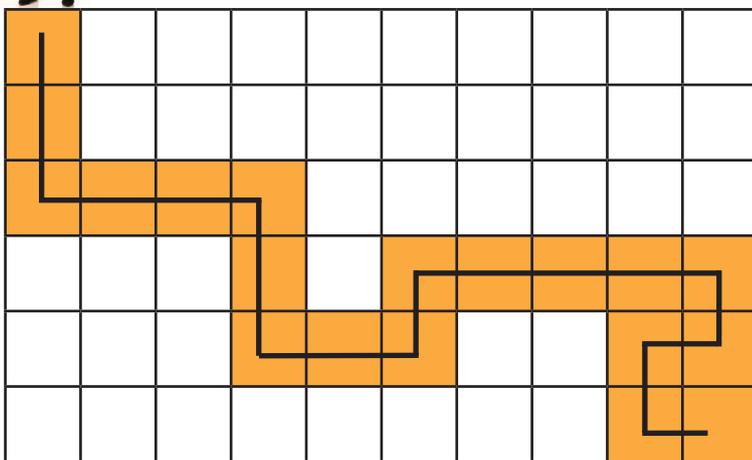
Move 3 down.
Move 3 to your right.
Move 2 down.
Move 2 to your right.
Move 1 up.
Move 4 to your right.
Move 1 down.
Move 1 to your left.
Move 1 down.
Move 1 to your right.

1 Shade an interesting path from the pirate to his ship.

Answers will vary.
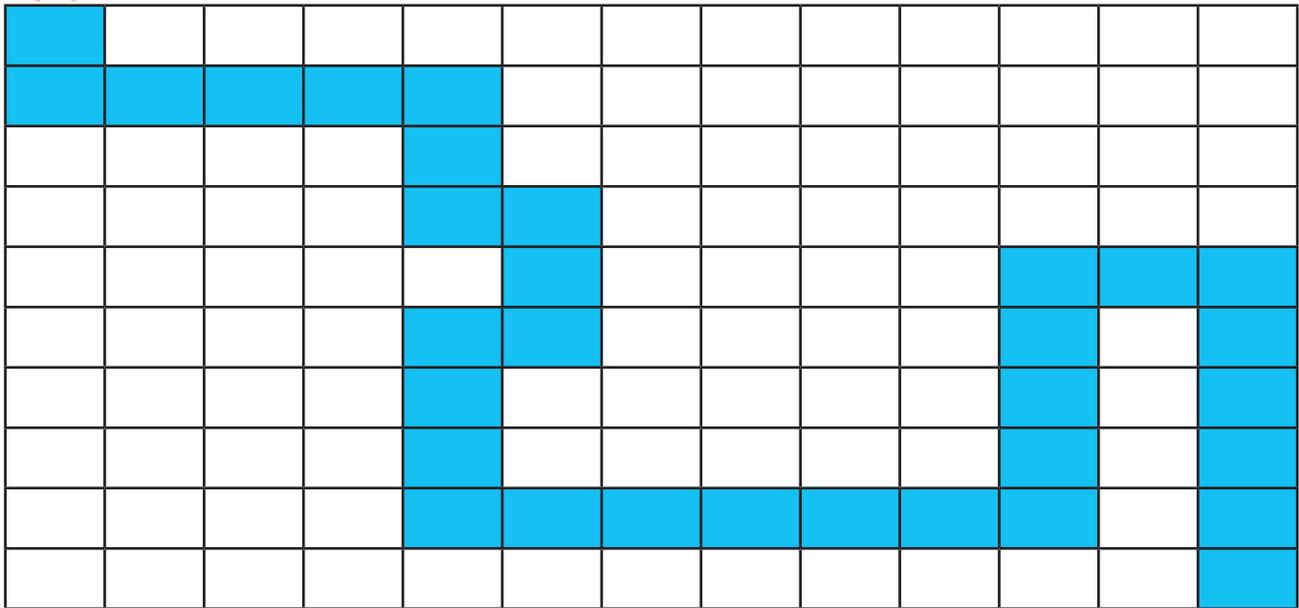
2 Describe your path. It has been started for you.

Go down two spaces.

Go right four spaces.	Go right six spaces.
Go down two spaces.	Go up four spaces, then right two spaces.
Go right one space.	Go down five spaces and you
Go down two spaces.	have reached the pirate ship!
Go left one space, then down three spaces.	

Complete this picture of a front yard.
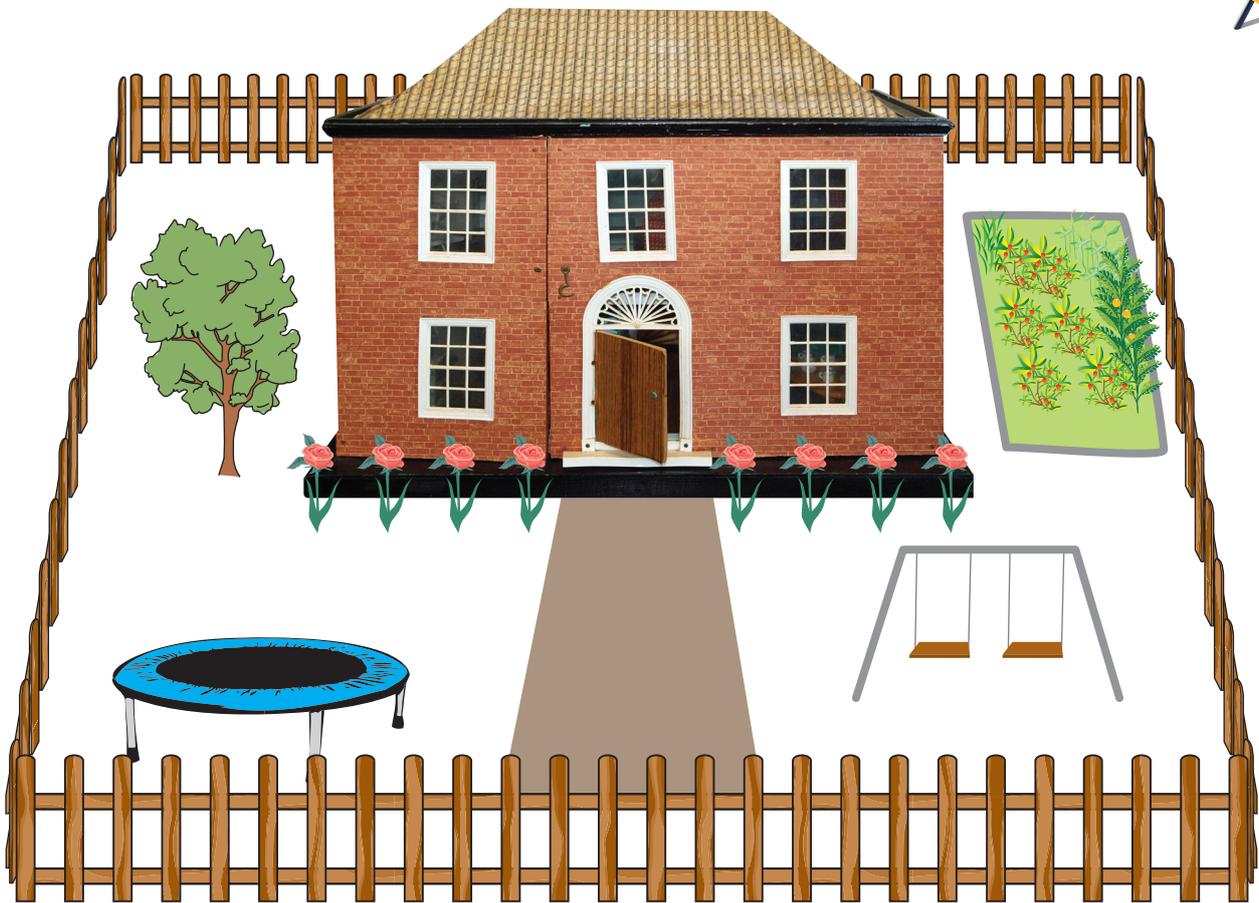
Draw:

a tree to the left of the house

a straight path leading from the front door to the front
    fence

a swing set on the right-hand side of the path

a trampoline in the bottom left-hand corner of the yard

a vegetable garden to the right of the house

a garden of red flowers in front of the house.

Draw an aerial view of your backyard or bedroom and explain
to a friend where everything is positioned.

Location and Transformation   **111**

Possible and impossible

1 Colour the correct word to describe each picture.

possible	possible	possible	possible
impossible	impossible	impossible	impossible

2 Describe the chance of these things happening at your house.

(will happen)   (might happen)   (won't happen)

A hot-air balloon will land in your backyard.

> *might happen*

You will find money in the sofa.

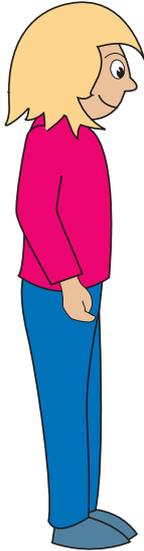> *might happen*

You will eat dinner this week.

> *will happen*

There will be a rock concert in your kitchen.
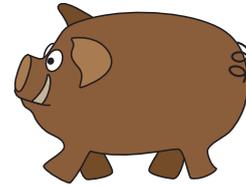
> *won't happen*

How likely?

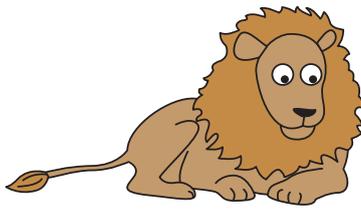**1** Is Nina likely to keep any of these animals as a pet?
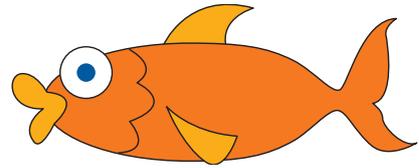
likely · unlikely

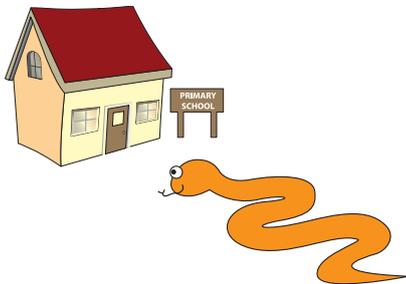likely · unlikely

likely · unlikely

likely · unlikely

2 Colour the correct word to match each picture.

A snake visits your classroom.

certain
likely
unlikely
impossible

You read a book in class.

certain
likely
unlikely
impossible

Your principal turns into an ape.

certain
likely
unlikely
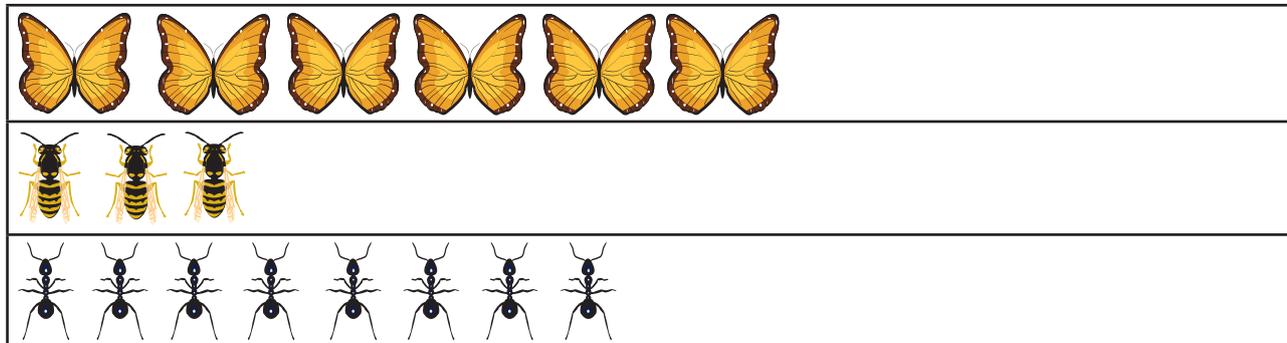impossible

You get a lunch break at school.

certain
likely
unlikely
impossible

Chance | **113**

Insect problems

Ming made a graph of the creatures he caught in his garden.

1 Use the graph to fill in the boxes.

a There were ⟨6⟩ butterflies.

b There were ⟨3⟩ bees.

c There were ⟨8⟩ ants.

2 Use a number sentence to answer these questions.

a How many more ants were there than bees?

$$8 - 3 = 5$$

b 2 butterflies flew away. How many were left?

$$6 - 2 = 4$$

c How many creatures did Ming catch in total? ⟨17⟩

3 Write your own addition or subtraction question using the graph. *Answers will vary.*

MiB 1
Card
32

114 Data

Organising animals

1 Some families on a trip to the zoo saw these animals. Record each animal they saw by using tally marks.

Giraffes | |||
Monkeys | ||||| ||||
Tigers | ||||

Elephants | ||
Zebras | ||||

2 Colour the circles to represent the tally marks you made.

Colour in one circle for each tally mark.

Giraffe
Monkey
Tiger
Elephant
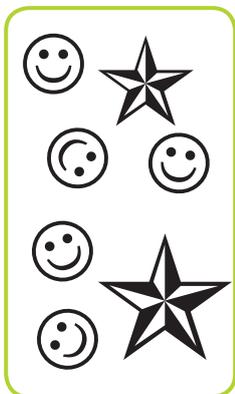Zebra

3 Which animal is greater in number? | Monkeys
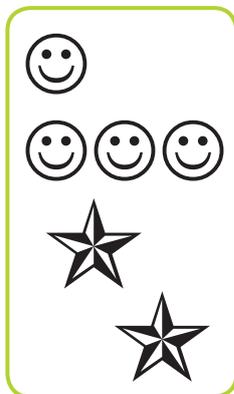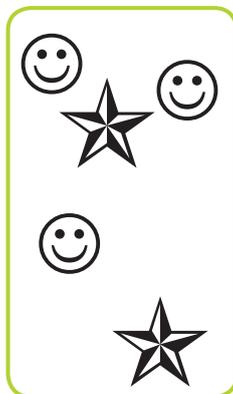
How many more tigers than giraffes? | 2

MiB 1
Card 81

Data : 115

Simple graphs

1 Each student used a stamp to represent their favourite animal at the zoo.

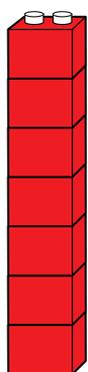| Giraffe | Elephant | Monkey | Tiger | Zebra |

Are all the stamps the same size? (Yes) (No)

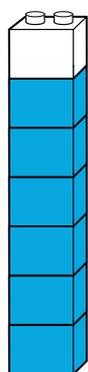Are the spaces between the stamps the same? (Yes) (No)

Is this the best way to show the number of animals? (Yes) (No)

2 Colour the blocks to show more clearly the same information the students showed with their stamps.
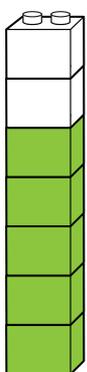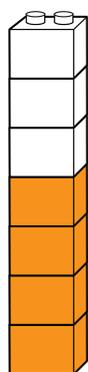
### Favourite zoo animals
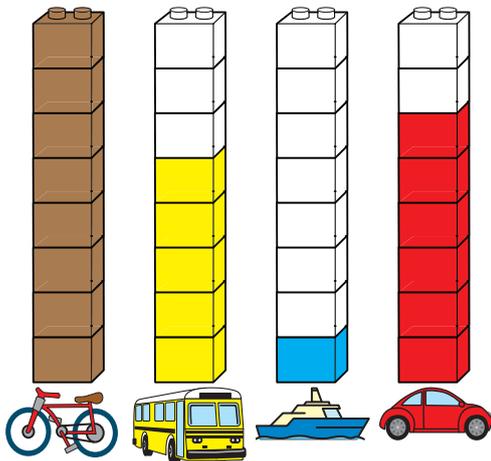
Giraffe   Elephant   Monkey   Tiger   Zebra

Compare the two graphs. Discuss why this graph is easier to read.

MiB 1 Card 83

116 Data

Graphing transport

1 Look at the pictures on the right. Each picture shows how a family travelled to the zoo. Count the pictures and colour the columns below to show how the families travelled to the zoo.

How families travelled to the zoo
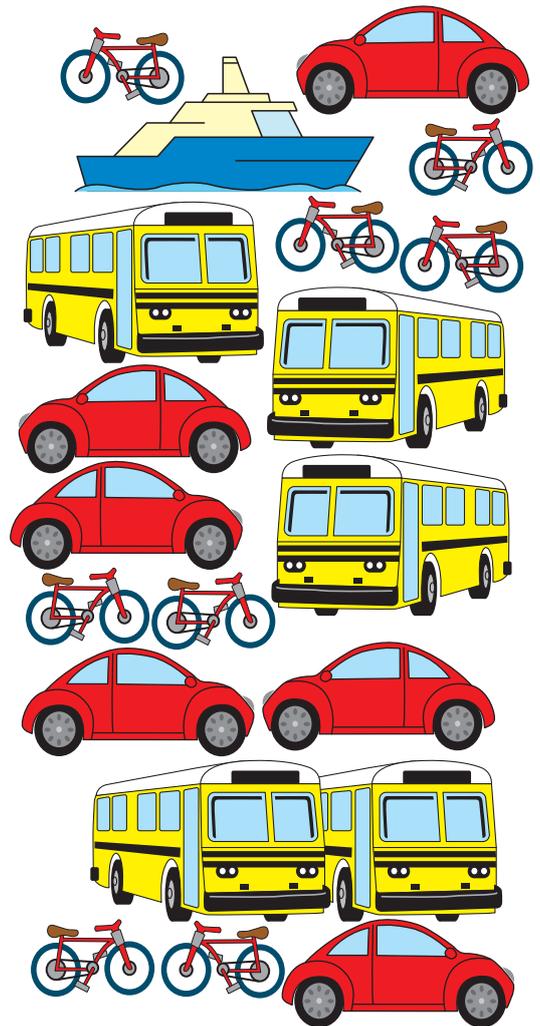
2 Which type of transport was used the most?

bicycle

Which transport was used least?

boat

How many families travelled by car?

6

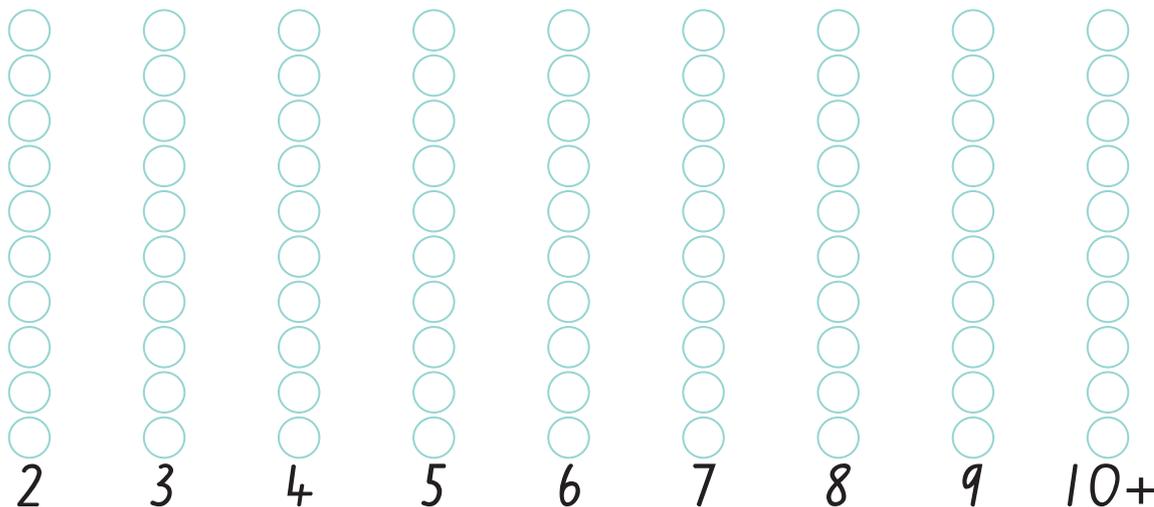How many more families travelled by car than by bus?

1

3 If there were two children in each car, how many children travelled to the zoo by car?

12

MiB 1
Cards
82, 84

Data **117**

1 Choose ten students from your class. Ask them how many letters they have in their first name. Colour in a circle to show each person's answer. *Answers will vary.*

2   3   4   5   6   7   8   9   10+

2 Answer these questions about the graph.

a How many people had **3** letters in their name?

_____

b How many students had more than **7** letters in

their name? _____

3 Make up two questions about the data you collected, and give their answers.

Word bank

most
least
popular
how many
more
less
what
which
difference

_____

_____

_____

_____