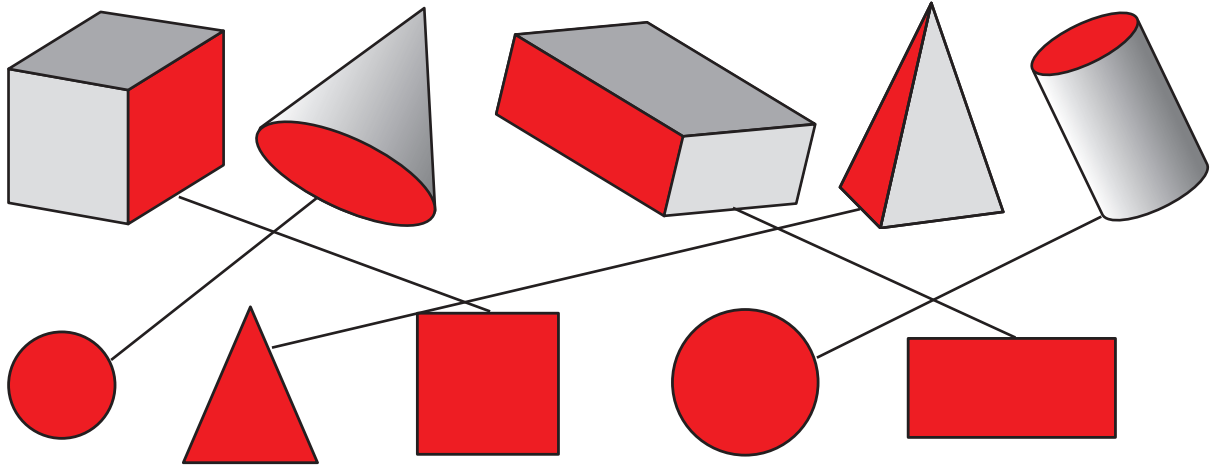


Faces of 3D objects

1 Each 3D object has a face covered in red ink. Draw a line to match each object with the shape the face will print.

A face is a flat surface.




2 Look at the faces of these 3D objects. Colour the shapes of the faces on each object.

| | |
|----------|--|
| <p>a</p> | |
| <p>b</p> | |
| <p>c</p> | |
| <p>d</p> | |


Views of 3D objects

1 Colour the 2D shape that can be seen from the top view of these 3D objects.


a



b

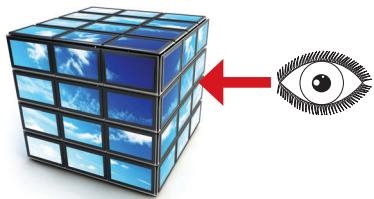
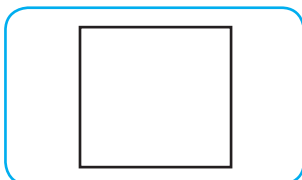


c




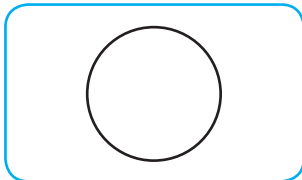
2 Draw and name the shape you would see.

a Looking at the side view


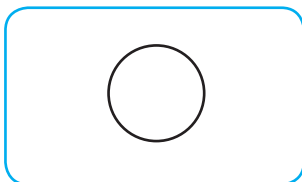
_____ *square*

b Looking at the bottom view

_____ *circle*

c Looking at the top view

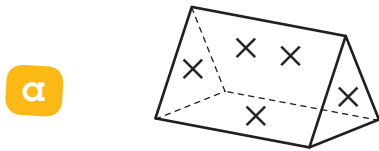



_____ *circle*

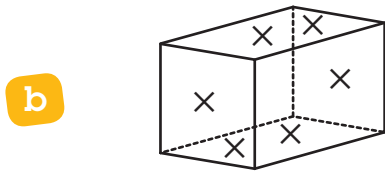
MiB 1
Cards
149, 151,
153, 154

Corners, edges and faces

1 Place a cross on each face.



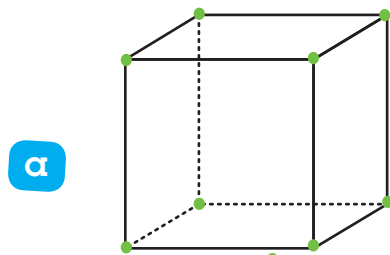
A triangular prism has faces.



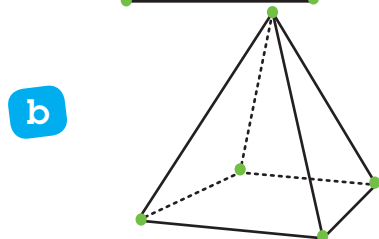
A rectangular prism has faces.

2 Place coloured dots on the corners of each 3D object.

A corner is the point where two or more edges meet.



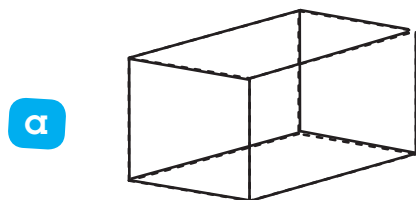
A cube has corners.



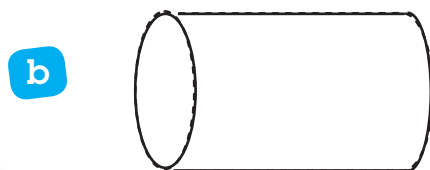
A pyramid has corners.

3 Trace over the edges of each 3D object.

An edge is where two faces meet.



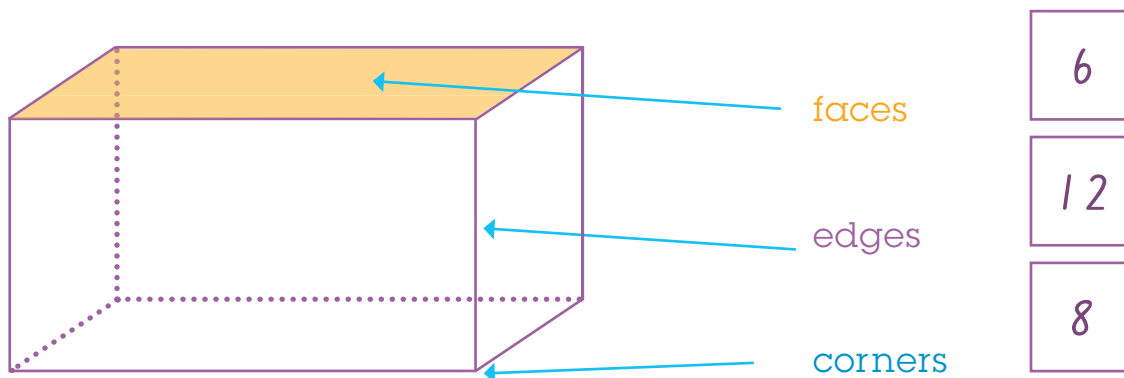
A rectangular prism has edges.



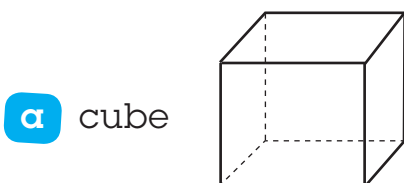
A cylinder has edges.

MiB 1
Cards 144
146, 148

Describe me



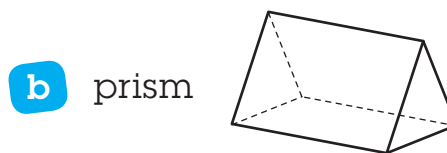
1 Write the number of faces, edges and corners for each 3D object.



6 faces

12 edges

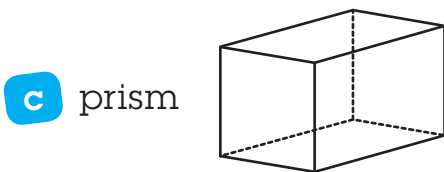
8 corners



5 faces

9 edges

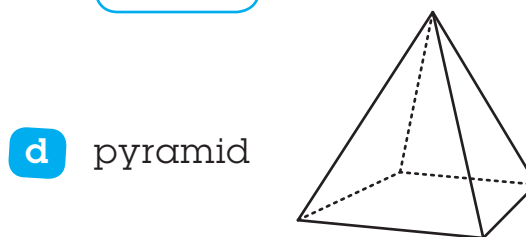
6 corners



6 faces

12 edges

8 corners

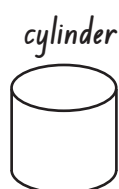
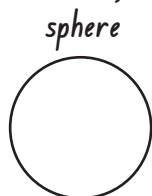


5 faces

8 edges

5 corners

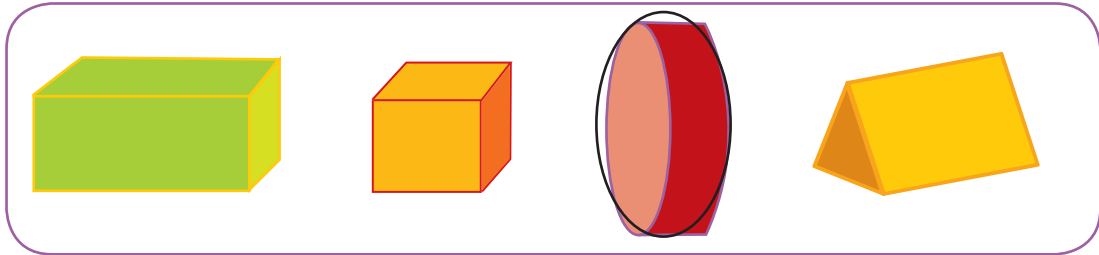
2 Draw two 3D objects that have no corners.



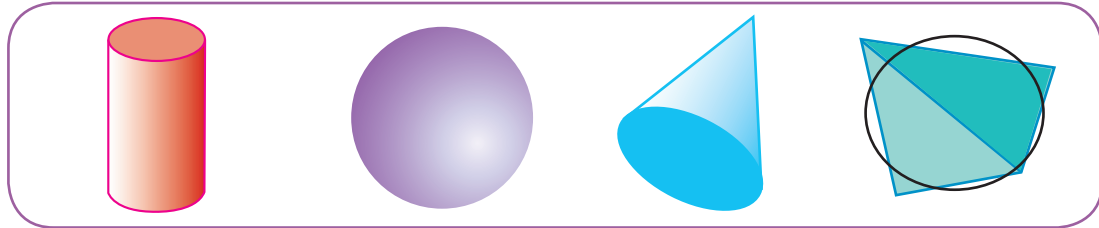
Features of 3D objects

1 Circle the 3D object that does not belong in each set.

a



b



2 Use the word bank to name a 3D object that has:

a 6 faces cube

b 3 faces cylinder

c a curved surface sphere

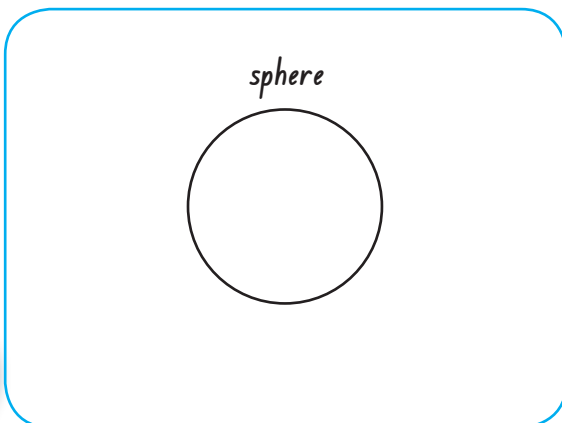
Explain to a partner why each of your circled objects is the odd one out.

Word bank

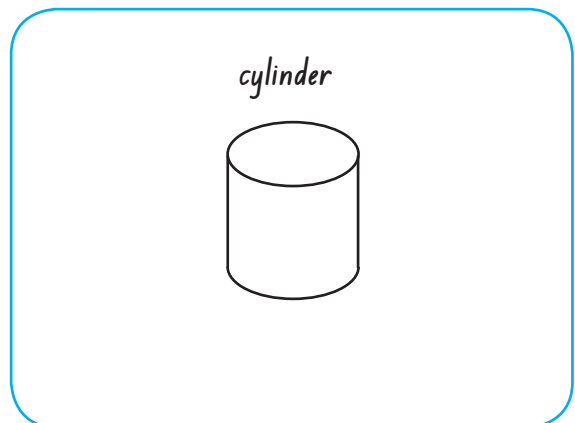
prism sphere cube
cone cylinder pyramid

3 Draw and label an object that has:

a no corners.



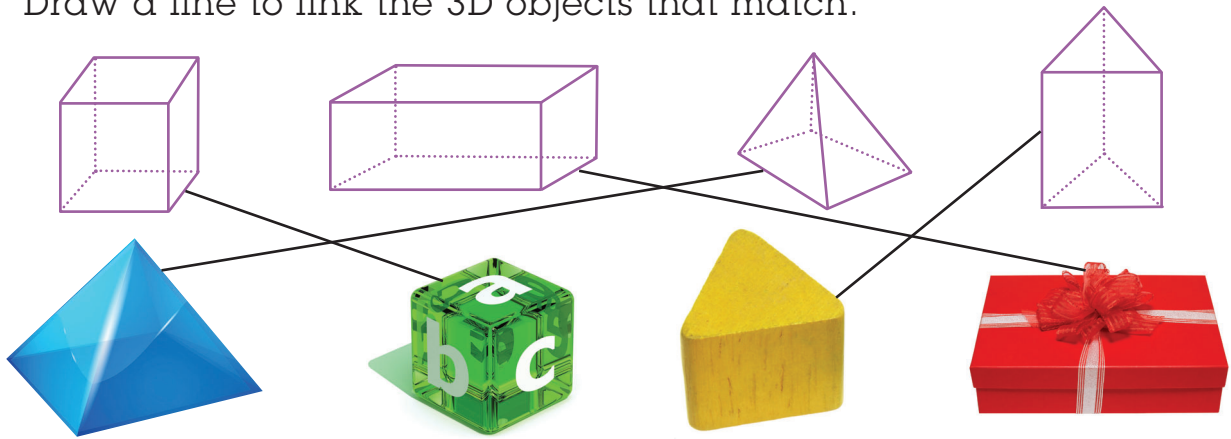
b two flat surfaces and one curved surface.



MiB 1
Card
150

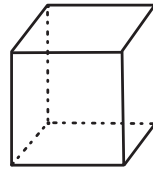
Making 3D objects

1 Draw a line to link the 3D objects that match.

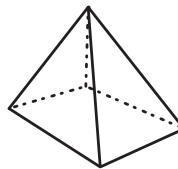


2 Use straws and plasticine to make these 3D models.

a Make a 3D model with 6 faces that are all the same. Draw your model.



b Make a 3D model with 4 triangular faces and a square as the base. Draw your model.



3 Name the 3D objects that you made.

cube, pyramid

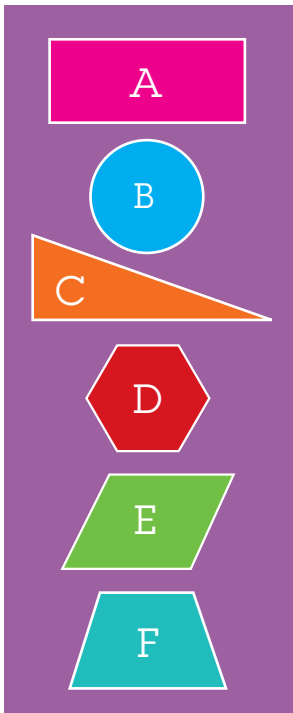
MiB 1
Cards
147, 152

Features of shapes

1 Complete the table for each shape.

Word bank

rhombus circle trapezium triangle
hexagon rectangle

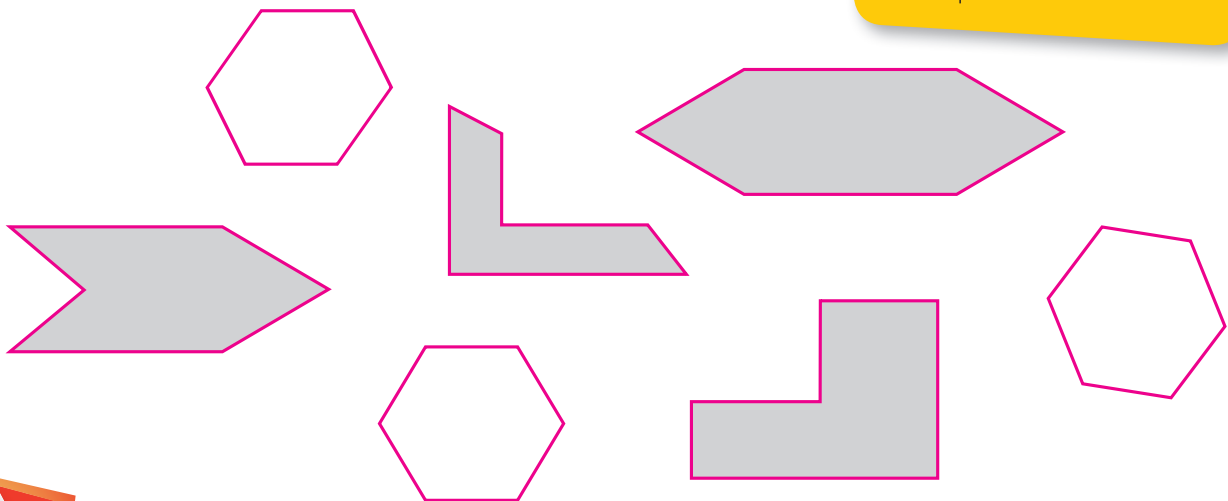


| | Name of shape | Number of sides | Number of corners |
|---|------------------|-----------------|-------------------|
| A | <i>rectangle</i> | 4 | 4 |
| B | <i>circle</i> | 1 | 0 |
| C | <i>triangle</i> | 3 | 3 |
| D | <i>hexagon</i> | 6 | 6 |
| E | <i>rhombus</i> | 4 | 4 |
| F | <i>trapezium</i> | 4 | 4 |

2 Make the four-sided shapes on a geoboard.

3 Colour the hexagons that are irregular.

A hexagon has 6 sides. A **regular** hexagon has 6 equal sides and angles. An **irregular** hexagon has 6 sides that are not all equal.



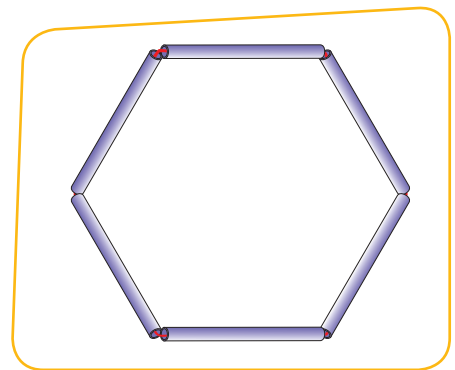
MiB 1
Card
130

Make some regular and irregular hexagons on a geoboard.

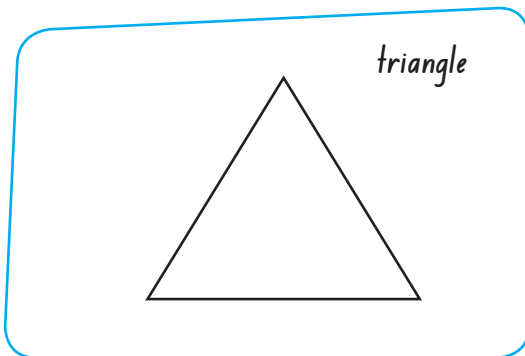
Constructing shapes

- 1** Make the following shapes by cutting straws and threading pipe cleaners through them.

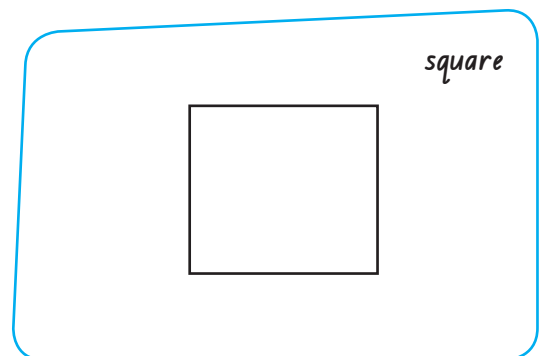
Draw and name the shapes.



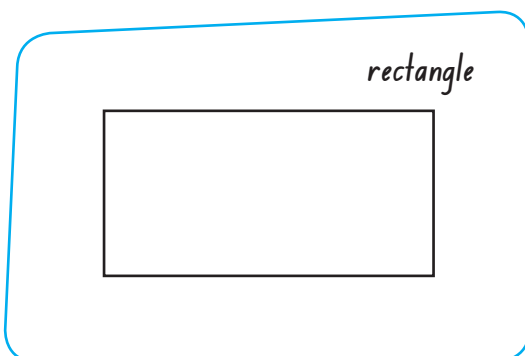
- a** Make a shape using 3 straws that are the same length.



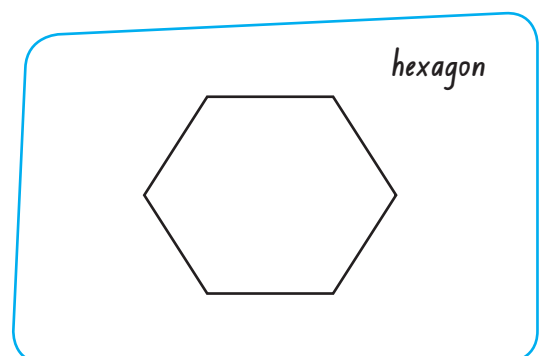
- b** Make a shape using 4 straws that are the same length.



- c** Make a shape using 2 long straws and 2 short straws.



- d** Make a shape using 6 straws that are the same length.



- 2** Use pipe cleaners and straws to make an irregular shape. Draw your shape.

Answers will vary.

MiB 1
Card
127

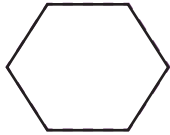
Shapes in the environment

Word bank

trapezium hexagon rhombus

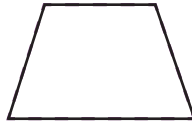
1 Trace and name the shapes.

a



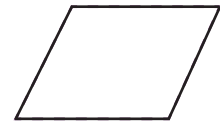
hexagon

b



trapezium

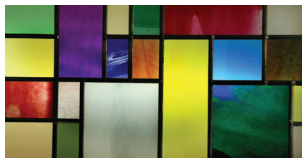
c



rhombus

2 Name two shapes used in each window design.

a



square

rectangle

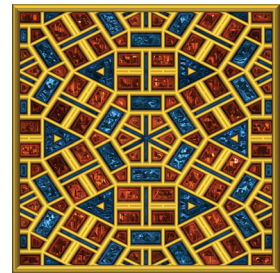
b



trapezium

square

c



triangle

hexagon

3 What am I? Match each description with its name and picture.

a

I have 3 sides and 3 corners.

trapezium

b

I have 6 sides and 6 corners.

triangle

c

I have 4 sides. Two of them are parallel and two of them are not.

square

d

I have 4 equal sides and 4 equal corners.

hexagon



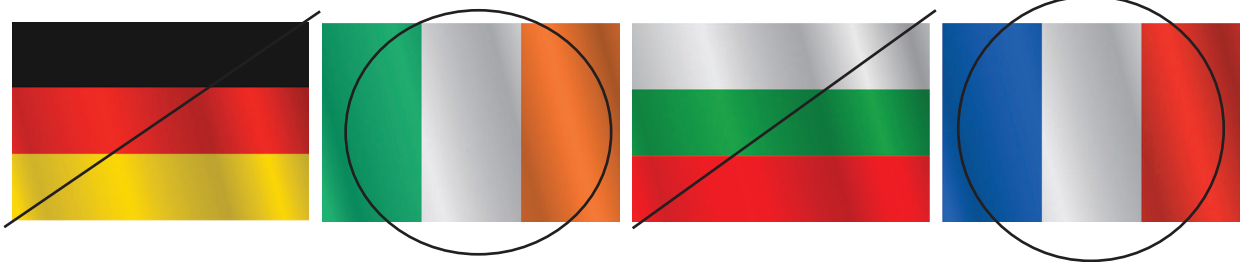
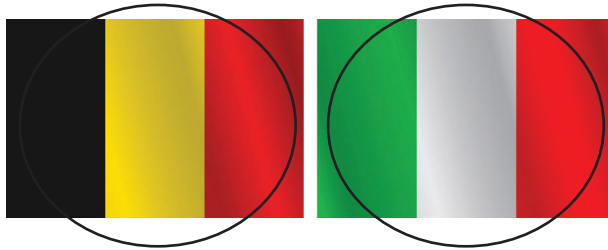
MiB 1 Cards
126, 129,
133, 134



Make your own 'What am I?' cards for other 2D shapes.

Horizontal and vertical lines

1 Circle the flags that have vertical lines.
Cross the flags that have horizontal lines.



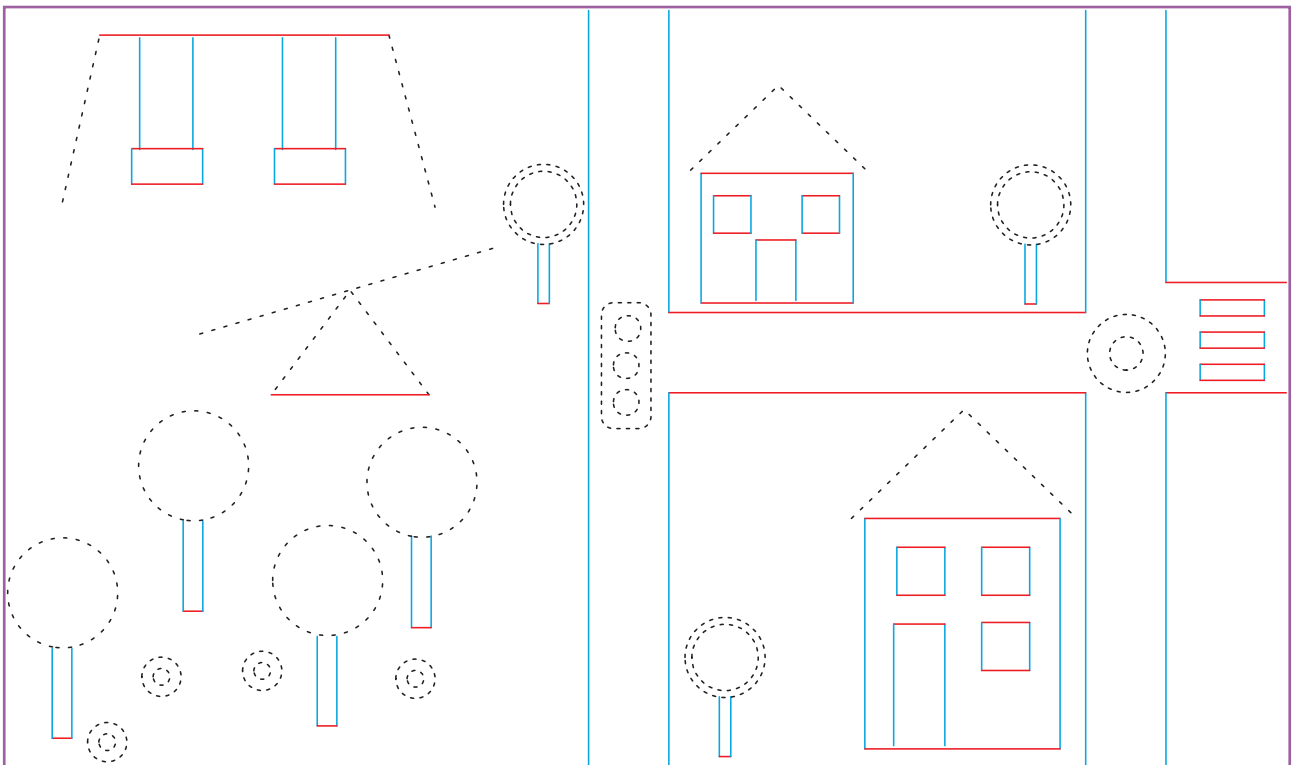
The stripes on this flag are **horizontal**. They go across.



The stripes on this flag are **vertical**. They go up and down.

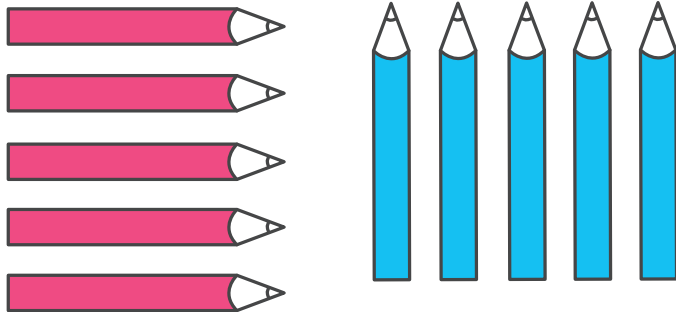


2 Trace the horizontal lines in the picture **red** and the vertical lines **blue**.




Parallel lines

1 Colour the vertical pencils **blue** and the horizontal pencils **red**.



These pencils are also described as being **parallel**.

Parallel lines never meet or cross over because they are an equal distance apart for their entire length. 

2 Colour the sets of chopsticks that are parallel.

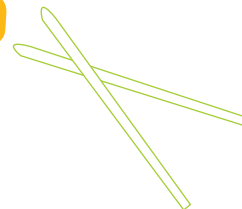
a



b



c



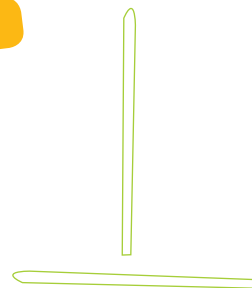
d



e



f



3 Look at the types of lines in this photo.

a Are the yellow poles parallel? Yes

b Is the ground vertical or horizontal?

Horizontal

c Is the ladder parallel to the shortest slippery slide?

No

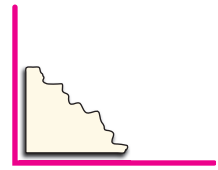


MiB 1
Card
161

Comparing angles

- 1 Tear a corner off a piece of paper. Find angles in your classroom that are the **same**, **smaller** or **larger** than the corner.

Record where you found them.
Answers will vary.



| Same | Smaller | Larger |
|---------|---------|--------|
| doorway | | |

- 2 Compare your paper corner with the angles highlighted on the photo.



Angles that are the same as my paper corner: C and D

Angles that are smaller than my paper corner: A and E

Angles that are larger than my paper corner: B

MiB 1
Card
162