

My goal is to learn about lines of symmetry.



TOPIC 22

# Symmetry

**A Warm-up. Listen to your teacher. Symmetry Art!**



**Line of symmetry**

A line of symmetry is the line where a shape can be folded so that both sides are identical.



**B Colour the shapes that are symmetrical.**

1.

2.

3.

4.

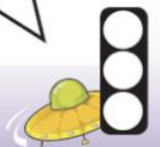
5.

6.

7.

8.

**C Draw a line of symmetry on the following shapes.**



**A** Have a look around your classroom. How many symmetrical shapes can you find?

window				

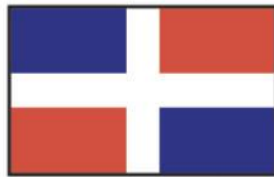
**B** Flags.

1. Which of the following flags have symmetry? (Make sure you look at the colour too!)

(a) Finland



(b) Dominican Republic



(c) Japan



(d) Nepal



(e) Australia



(f) United Kingdom



(g) Hong Kong



(h) Israel



(i) Olympic Games



(j) Jamaica



(k) Ireland



(l) Kenya



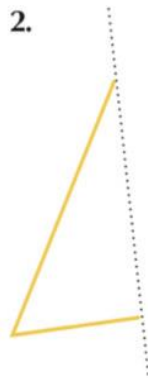
2. How many of the flags have more than one line of symmetry?

**C** Complete the following symmetrical shapes.

1.



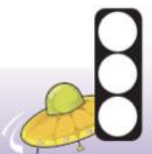
2.



3.



4.






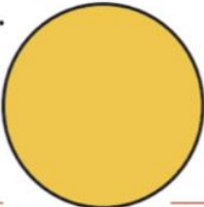
**Lines of symmetry**

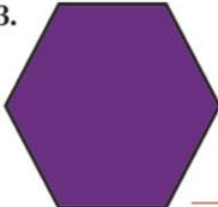
Some shapes have more than one line of symmetry.  
An oval has 2 lines of symmetry.

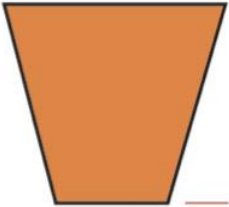


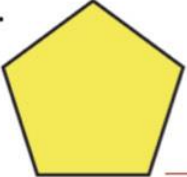
**A** How many lines of symmetry have the following shapes?


1.  \_\_\_\_\_

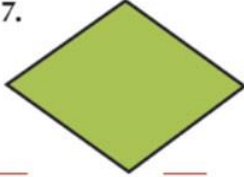
2.  \_\_\_\_\_

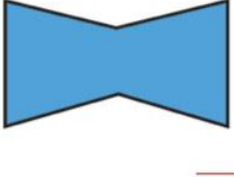
3.  \_\_\_\_\_

4.  \_\_\_\_\_

5.  \_\_\_\_\_

6.  \_\_\_\_\_

7.  \_\_\_\_\_

8.  \_\_\_\_\_

**B** Real life symmetry.

1. Draw lines of symmetry for each of the following.



2. Make a list of other symmetrical things in nature.


**C** Symmetry picture.

Use the cubes to create a symmetrical picture.



**D** Mirror image game.

Sit beside your partner.  
You will each need a pencil and paper. Pretend that there is a mirror between you. Take it in turns to draw a simple picture, while the other follows symmetrically.



**E** Investigate the lines of symmetry in the letters of the alphabet and even the numbers one to ten.

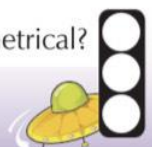


- How many letters are symmetrical?
- How many numbers are symmetrical?

Objectives

- 343 Identify and draw lines of symmetry in 2D shapes.
- 342 Identify line symmetry in the environment.

Strand Shape and Space  
Strand Unit Symmetry



**A** Complete these symmetrical pictures.

1.

2.

3.

4.

**B** Create your own symmetrical picture.



**A Explain it!**

Pretend you have just met an alien who has never been to Earth before. Explain to him what symmetry is. Use and draw some examples.



**B Do it!**

1. Draw four symmetrical 2D shapes.
2. Name four symmetrical objects.
3. Name four symmetrical things in nature.
4. How many lines of symmetry do the following have? Draw the lines of symmetry.



**C Solve it!**

1. What am I?
  - (a) I have two lines of symmetry, four straight sides and my opposite sides are the same length.
  - (b) I have one curved side and one straight side. I have one line of symmetry.
  - (c) I have four straight equal sides. I have four lines of symmetry.
2. Draw the three shapes and show their lines of symmetry.

**D Say it!**

Pretend you are writing a maths dictionary. Write a definition for each of the following.

**symmetry**

**symmetrical**

**line of symmetry**

**identical**

**E share it!**

1. Here are seven pins. Make a 2D shape by joining the pins together using straight lines. Use as many pins as you want.
2. Is it symmetrical?
3. How many lines of symmetry does it have?

