



#### Topic: Shape

#### Describing lines

##### Lesson concepts

-  **Shapes** — Language (describing, naming, comparing)
-  **Shapes** — Sorting (appearance, function)

Today students will:

- ▶ copy and describe lines
- ▶ compare lines and two-dimensional shapes.

#### Resources

##### Digital

Learning object — Different lines  
Slideshow — Open and closed shapes  
Drawing software (optional)

##### Find and prepare

Chalk  
Whiteboard or large sheet of paper  
Student paper or whiteboards  
Range of drawing materials (for example: pencils, crayons, felt pens)  
Newspaper  
Scrap/coloured paper  
Length of rope  
Sandpit (optional)

#### Key terms

closed shape, similar  
For definitions and explanations of terms, please see the [Glossary](#).

## Lesson

### Introduce the lesson

#### Note

The following language is important to highlight and develop throughout this lesson:

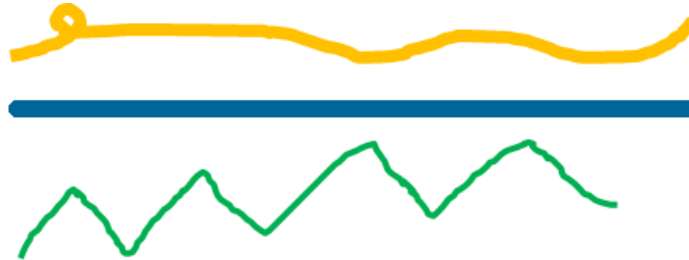
lines, thick, thin, long, short, straight, curved, shapes, same, different, open shape, inside the shape, outside the shape

Explain to students that they will explore different lines.

### Describe lines

Ask students to use chalk to draw lines that are different:

- lengths (long, short, longer, shorter)
- thicknesses (thick, thin, wide, narrow)
- colours
- shapes (wavy, straight, curved)
- directions (left, right).



Ask students to explain how the lines are different and how they drew them (for example: 'I used the chalk stick on its side to get a thick line').

#### Note

List describing words as they are used and explain their meaning, for example: 'This line is thick like your finger and this is thin like your hair'.

## Focus questions

Q: *How would you describe this line?*

A: For example: straight, zigzag, wavy

Q: *How are these lines the same?*

A: For example: Some have straight parts.

Q: *How are they different?*

A: For example: Some are straight, some are straight and wavy, one has a curl, one is zigzags.

Q: *How could you change this line to make it the same as that line?*

A: For example: I could put some waves in it.

Q: *What can you think of that is long/short/thick/curved like this line?*

A: For example: a snake, a rope, a dinosaur's back.

## Straight and curved lines

Open the **Learning object** — **Different lines**.

In this learning object, students select an orange pencil to draw over the straight lines in a dinosaur picture. A green pencil is used to draw over lines that are not straight. Well-developed fine motor skills are required to click and drag the pencils.

Help students to complete the learning object.



## Copy and make lines that match a description

Draw a range of different lines on a sheet of paper.

Ask students to copy the lines.

## Focus questions

Q: *How would you describe this line?*

A: For example: a thick, wavy line

Q: *How is this line different from that line?*

A: Personal response required.

Demonstrate how lines can be drawn to match descriptions (for example: a thick black line).

Describe lines for students to draw (for example: Draw a short line. Draw a wavy line.)

Ask students to draw the described lines.

### Note

Start with one or two features and extend, for example: draw a line that is yellow and thick, draw a thin wavy red line.

## Draw my line

Ask students to:

- fold a piece of paper in half
- draw a line on one side
- describe the line to another person who draws the line on the other side
- unfold the paper and compare the features of the two lines.

### Focus questions

Q: *How did the lines match?*

A: For example: They both have a curl at the start.

Q: *What was different?*

A: For example: The straight part goes for longer than in my drawing.

Q: *What describing words could you have used so that the lines matched better?*

A: For example: I could have explained that the straight part is only very short.

### Note

Students may practise copying and describing lines in a variety of contexts such as in the sandpit, with strings, streamers, paint or in the environment.

## Describing language

### Wide and thin strips

Explain to students that they can describe paper strips similarly to how they describe lines.

Provide students with newspaper and a range of scrap/coloured paper.

Ask students to:

- rip the paper into a range of strips (that are long, short, thick, thin, wide, narrow)
- compare and discuss the strips.

## Focus questions

Q: *Which strip is the longest? How could you find out?*

A: For example: Line them up with one end matching.

Q: *Which strips are straight/curved?*

A: Personal response required.

Q: *How could you sort these strips?*

A: For example: Into zigzag strips, curly strips, wide strips

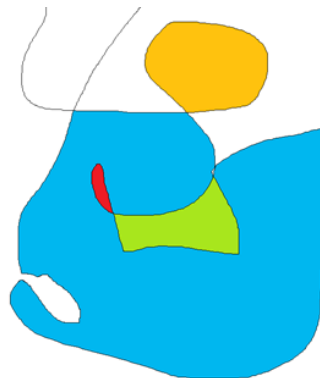
Q: *How could you describe your sorts?*

A: For example: The short and fat strips are together.

## Identify irregular shapes

Demonstrate how shapes are formed when lines cross. This could be done by:

- trailing a rope around to show loops and open areas
- drawing a continuous line with loops and overlaps (or drawing several overlapping lines) and shading the closed areas. This can be done using digital drawing software because only the closed areas can be shaded a different colour to the background. For example:



Explain to students the difference between a line, an open shape and a closed shape.

### Note

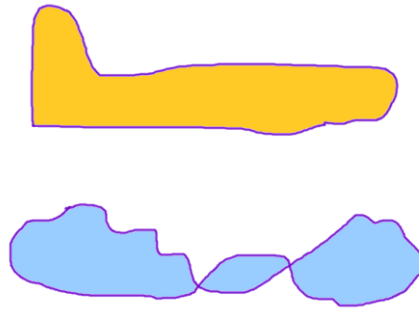
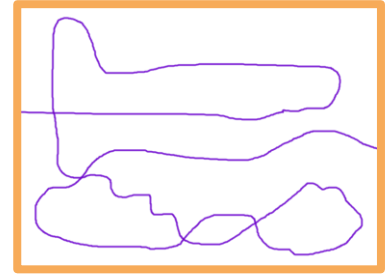
One idea to explain the concept of open and closed shapes could be to explain that the line is a 'fence'. Ask students to identify which places would be best to place animals to ensure they could not wander away. Any spaces that enclose the animals securely are closed shapes, and any that do not are open shapes. For example:



## What is the shape?

Ask students to:

- draw their own set of looped/overlapping lines on paper, a whiteboard or in the sand
- describe the lines they have drawn, for example: it is a long, thin, loopy, purple line
- identify the open and closed shapes in their drawing
- erase the open line segments
- use their imagination to suggest what the remaining shape/s could be, for example: I can see a plane flying over three lakes.



### Focus questions

Q: *Is this a shape or a line? How do you know?*

A: Personal response required.

Q: *Is it a closed or open shape? How do you know?*

A: Personal response required.

Q: *What could that shape be? Why do you think that?*

A: Personal response required.

Q: *What do you notice about the space outside the shape?*

A: Personal response required.

Explore the **Slideshow — Open and closed shapes** to identify and discuss classification of open and closed shapes.

