# <u>2-D shapes</u>

# National Curriculum attainment target

• Draw 2-D shapes and describe them

### Prerequisites for learning

Pupils need to:

• recognise and name 2-D shapes, including: circle, triangle, square and rectangle

#### Vocabulary

circle, semi-circle, triangle, square, rectangle, pentagon, hexagon, heptagon, octagon, side, straight, curved, right angle

# Lesson objective

• Draw and name 2-D shapes

### Success criteria

Pupils can:

• draw and name 2-D shapes including pentagon, hexagon, heptagon and octagon



# **Getting Started**

• Choose an activity from Geometry - Properties of shape.

| Collins<br>Connect        |  |
|---------------------------|--|
| Year 3, Unit 5,<br>Week 3 |  |

## Teach Resources

box of 2-D shapes: semi-circles; triangles, squares, rectangles, pentagons, hexagons, heptagons and octagons (per class); Resource 49: 2-8 digit cards (per class)

- Arrange the children in a U-shape on the carpet. Tip the box of 2-D shapes (exclude semi-circles)
- ber



1

2

3

| on to the carpet. Say: These shapes were all mixed up in this box. I now want to sort them.   |
|---|
| • Without telling the children the chosen criteria, start to sort the shapes according to the numl of sides.  |
| <ul> <li>Say: Tell your partner how you think the shapes are being sorted.</li> </ul>   |
| <ul> <li>Ask some children to continue the sorting.</li> </ul>  |
| <ul> <li>Using the digit cards, label the sets according to the number of sides.</li> </ul>   |
| <ul> <li>Point to the card for "2 sides" that you have left over.</li> </ul>  |
| • Say: We seem to have lost the shape with two sides. Who can tell us what this shape looks like? (half circle with one curved side and one straight side) Hold up the shape and ask: Who knows the name of this shape? (semi-circle)               |
| • Explain that the term "semi" means "half" so a semi-circle is half a circle.  |
| • Display: Slide 1.   |
| • Display the square and rectangle. Join together the square and rectangle to form a composite shape.   |
| • Ask: How many sides does this shape have? (six) Can you name the shape? (hexagon)   |
| • Display: Slide 2.   |
| • Repeat for the pairings of square and triangle, rectangle and triangle and ask the children to name the composite shapes (pentagon and hexagon).  |
| <ul> <li>Say: I want to make an eight-sided shape using two other shapes. Which shapes should<br/>I choose? (square, rectangle) Who can suggest how they will fit together to make the<br/>eight-sided shape?</li> <li>Display: Slide 3.</li> </ul> |
| • Display the T-shaped octagon and together count the sides   |
| • Ask: Who can name this shape? (octagon)   |

# Individualised Learning

Refer to Activity 1 from the Learning activities on page 228.

### Pupil Book 3B - Page 12: Drawing and naming shapes

Resources: Resource 21:  $3 \times 3$  pinboards (per child), squared paper (per child), ruler (per child)

# Plenary

- Ask: Who can name the creature that lives near the bottom of the sea and begins with "octo"? (octopus) Ask: How many tentacles does it have? (eight) Who can name the shape with eight sides? (octagon) The shape with five sides? (pentagon) With six sides? (hexagon) With seven sides? (heptagon)
- Invite children to display and talk about the different pentagons, hexagons and octagons they have constructed. Ask: Which was the trickiest shape to draw?



- Ask pairs to discuss the reasons why they found a particular shape tricky to draw and then to share their reasons with the class.
- Say: In your head, join together a square and a rectangle. Ask: How many sides does the shape have? Who can come to the board to draw the shape?
- Repeat, as above, for the pairings of square and triangle, rectangle and triangle.