

# Create 2-D shapes

## National Curriculum attainment target

- Draw 2-D shapes and describe them

## Lesson objective

- Create 2-D shapes using folding and cutting

### Prerequisites for learning

Pupils need to:

- draw and name 2-D shapes

### Vocabulary

predict, pattern, line of symmetry

### Success criteria

Pupils can:

- visualise half or one quarter of a 2-D shape
- make the appropriate cut(s) in the folded paper to reveal the shape.



## Getting Started

- Choose an activity from Geometry – Properties of shape.

**Collins  
Connect**

Year 3, Unit 5,  
Week 3

## Teach

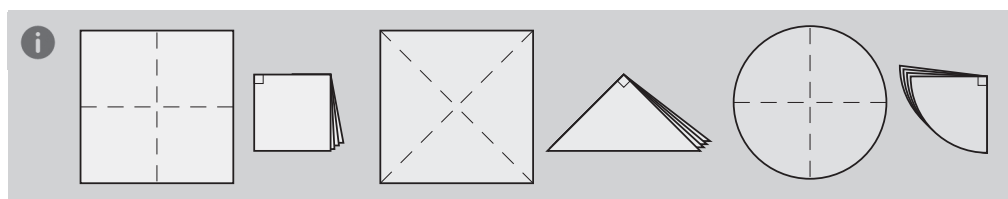
### Resources

sheet of A4 paper (per teacher), 3 × A5 sheets of paper (per child), gummed paper square or circle (per child), scissors (per child), ruler (per child), mirror (per pair)

**i** Children should focus on the four-sided shape which has been cut out and how it relates to the space in the sheet of paper left by the cut-out.



- Demonstrate making a 2-D shape with two straight cuts from the fold line of a sheet of paper. Open the cut-out shape and ask: **How many sides does this shape have?** (four)
- Say: **Tell your partner what you know about the fold line of the shape.** (vertical line of symmetry) **Mark the line of symmetry with dashed lines.**
- Distribute the resources. Ask the children to fold two paper rectangles in half. Allow several minutes in which children explore shapes that can be made with two straight cuts, for example, hexagon, four-sided shape with two curved and two straight sides.
- Choose children to display and name their cut-out shapes.
- Demonstrate the drawing and cutting of a shape where the paper rectangle is folded twice to make quarters.



- Say: **We begin and end at a folded edge when we cut out the shape.**
- Open the cut-out and ask a child to check it for symmetry with a mirror. Mark the two lines of symmetry.
- Ask the children to fold their paper rectangle twice to make quarters. Say: **On one quarter of your paper rule two lines. Each line begins at a fold and the lines meet at a point on the paper. Draw and cut out your shape.**
- Choose children to display their cut-out shapes.
- Discuss and compare the cut-out shapes. Ask: **How are all these shapes alike?** (two lines of symmetry) **How are they different?** (curved/straight lines)
- Suggest that the children draw their own design on a quartered gummed paper square or circle, to cut it out and put it aside for the Plenary. Their design can have straight and/or curved lines.

## Individualised Learning

Refer to Activity 3 from the Learning activities on page 229.

**Pupil Book 3B** – Page 14: Paper shapes

Resources: paper squares or circles (per child), scissors (per child), ruler (per child), pen (per child), glue (per child)

**Progress Guide 3** – Support, Year 3, Unit 5, Week 3, Lesson 3: Exploring shapes

Resources: scissors (per child), glue (per child)

– Extension, Year 3, Unit 5, Week 3, Lesson 3: Exploring shapes

Resources: scissors (per child), glue (per child)

## Plenary



- Invite the children to display their best design from the Teach part of the lesson. Say: **Fold your cut-out shape into quarters. Recall how you made your shape. How many cuts did you use? Were all your cuts straight lines?**
- Choose some children to show their pattern and explain to the class how they made it.
- Say: **We are going to make a wall display of our work.**
- Ask pairs to discuss how the display might be organised and to share their ideas with the class.
- Take feedback, inviting suggestions such as: by colour, number of sides, whether the sides are straight or curved.



### Homework Guide 3

Year 3, Unit 5, Week 3, Lesson 3:  
Four-way fit

Resources: scissors (per child), coloured pencils (per child), ruler (per child)

## Overcoming Barriers

- Check that children begin at a folded edge when cutting out a shape.