

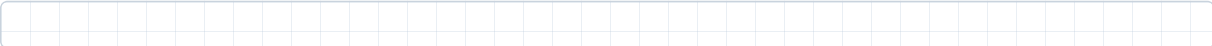
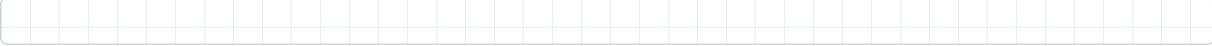
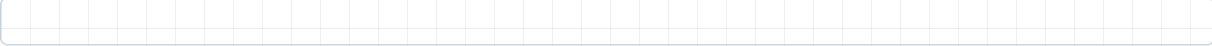
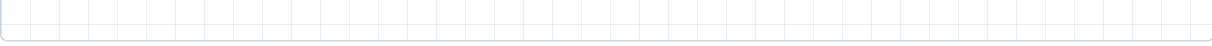
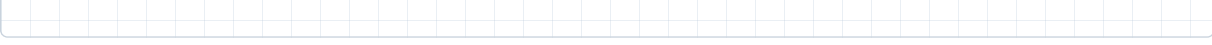
Constructing circles and exploring their parts

MODULE 7 · 2D SHAPE, 3D SHAPE AND ANGLES SHAPE & SPACE

HOW TO ANSWER TODAY

- **Compass drawing.** Set the compass opening to the radius. Hold the point still; sweep the pencil all the way round.
- **Radius ↔ diameter.** Diameter = $2 \times$ radius. Radius = diameter $\div 2$.
Radius 5 cm → diameter 10 cm Diameter 12 cm → radius 6 cm
- **Parts of a circle.** Centre = middle point. Radius = centre to edge. Diameter = edge through centre to edge. Circumference = the distance round.
Line from centre to edge → radius All the way round → circumference

★ STRETCH PROBLEMS

- 1 Aoife is constructing a den in the school orchard. She wants a target to hang on the den door. Draw three concentric circles with radii **1 cm**, **3 cm** and **5 cm** that share a centre. Mark the centre with a small cross first, then re-set the compass between each circle.

- 2 Cian is cutting card circles for a bubble pattern on the corridor display. Each circle has a diameter of **2.5 cm**. What is its radius?

- 3 Róisín is designing a bullseye pattern for her square of the class quilt. She needs three concentric circles with radii **2 cm**, **3 cm** and **4 cm** that share a centre. Mark the centre with a small cross first, then re-set the compass between each circle. Can you draw the three circles?

- 4 Cian is sketching a plan of the giant chess board for the school yard. On his plan one circle has a radius of **4 cm**. What do we call the line across the circle through its centre, and how long is it?

- 5 Fionn is drawing a scale plan of the classroom on grid paper. He marks a circular table with a radius of **1 cm**. What is the diameter of the table on his plan?




SHAPE & SPACE