

Circumference: measuring round things and meeting π

MODULE 6 · 2D AND 3D SHAPE, ANGLES, SYMMETRY SHAPE & SPACE

HOW TO ANSWER TODAY

- **Circumference.** Circumference = $\pi \times \text{diameter}$ (or $2 \times \pi \times \text{radius}$). Use $\pi \approx 3.14$. Round to 1 decimal place.

$$\text{Diameter } 10 \text{ cm} \rightarrow 3.14 \times 10 = 31.4 \text{ cm}$$

- **$C \div d$.** Divide circumference by diameter. The answer is always close to π (about 3.14).

$$\text{Diameter } 20 \text{ cm, circumference } 63 \text{ cm} \rightarrow 63 \div 20 = 3.15$$

STRETCH PROBLEMS

- 1 5th class are drawing names from a circular tin for the secret-Santa swap. The lid of the tin has a diameter of **7 cm**. Using $\pi \approx 3.14$, what is the circumference of the lid, rounded to **1** decimal place?
- 2 In maths class, Tadhg measures a round biscuit tin lid and finds it has a diameter of **22 cm** and a circumference of **69.2 cm**. He divides the circumference by the diameter to see what number he gets. What is **69.2** $\div$ **22**, rounded to **2** decimal places?
- 3 Saoirse spots a round sticker for sale at the school tuck shop. The sticker has a radius of **3.5 cm**. Using $\pi \approx 3.14$, what is the circumference of the sticker, rounded to **1** decimal place?
- 4 The 5th class are planning a circular herb bed inside the new school polytunnel. The bed will have a radius of **5 cm** marked out in the centre as a small starter ring. Using $\pi \approx 3.14$, what is the circumference of the starter ring in centimetres, rounded to **1** decimal place?
- 5 Cian draws a circle on the cover of his maths copy with a radius of **4 cm**. He wants to glue a piece of string around the edge of the circle. Using $\pi \approx 3.14$, what is the circumference of the circle in cm, rounded to **1** decimal place?

