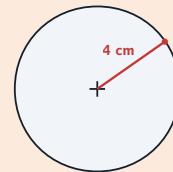


Drawing circles with a compass

WHAT THIS LESSON TEACHES

To draw a circle with a compass: **set** the compass legs to the radius you want, **plant** the sharp point on the centre, **rotate** the pencil arm all the way round — without lifting the point or changing the spread.

- For a **4 cm radius** circle: open the compass to 4 cm against a ruler before you start.
- If the sharp point slips, the curve breaks — keep firm pressure on the centre.
- **Concentric circles** share a centre — re-set the radius and draw again from the same point.



- 1 **Set**
open to the radius
- 2 **Plant**
sharp point on centre
- 3 **Rotate**
round without lifting

MODEL THIS ON THE BOARD

DRAW THREE CONCENTRIC CIRCLES (RADII 2 CM, 4 CM, 6 CM)

- 1 Mark a small **cross** on your page — this is the shared centre.
- 2 Set your compass to **2 cm** against a ruler. Plant the point on the cross. Rotate fully without lifting.
- 3 **Re-set** the compass to **4 cm**. Plant on the same cross. Rotate fully.
- 4 **Re-set** the compass to **6 cm**. Plant on the same cross. Rotate fully. You now have three rings sharing a centre.

ANSWER KEY

W1: single circle, radius 3 cm

W2: diameter

Q1: 6 cm

Q2: diameter

Q3: radius, 5 cm

Q4: 3 concentric circles, radii 3/5/7 cm

EXTENSION SHEET · STRETCH ANSWERS

S1: 4.6 cm

S2: 20 cm

S3: 10

S4: single circle, radius 6 cm

S5: single circle, radius 6.5 cm