YEAR 8 • MEASUREMENT

Circumference and Area of Circles

Use the radius or diameter to calculate measurements of circles.

Name _____ **Date** _____

CIRCUMFERENCE $C = 2\pi r = \pi d$

AREA $A = \pi r^2$

r = radius **d** = diameter
The diameter is twice the radius.

A · CALCULATE

For each circle, find both the circumference and the area. Use π ≈ 3.14, round to 1 decimal place, and include units. Show your working in the spaces.

1 RADIUS **r = 4 cm**

Circumference, C _____ **Area, A** _____

2 DIAMETER **d = 18 mm**

Circumference, C _____ **Area, A** _____

3 RADIUS **r = 6.5 m**

Circumference, C _____ **Area, A** _____

4 DIAMETER **d = 7.2 cm**

Circumference, C _____ **Area, A** _____

5 RADIUS **r = 12 mm**

Circumference, C _____ **Area, A** _____

6 DIAMETER **d = 2.5 m**

Circumference, C _____ **Area, A** _____

B · PUT IT INTO PRACTICE

A circular flower bed has a radius of 2.8 m. Calculate the length of its edge and the area it covers. Round your answers to 1 decimal place.

Circumference _____ **Area** _____

Check that your answers have the correct units.