**Shape Unit 1**

**Problem solving and reasoning questions**

Draw a circle and label the radius and diameter.

Explain how you could find the diameter.

Use damp string to measure the circumference of a small plate. Now measure its diameter and calculate the circumference. How close was your damp string measurement?

Mystery quadrilaterals

* I have one pair of non-equal parallel sides. What am I?
* I have two pairs of equal sides, but no sides are parallel. Two opposite angles are equal but not the other two. What am I?

**Shape Unit 1**

**Problem solving and reasoning questions**

Draw a circle and label the radius and diameter.

Explain how you could find the diameter.

The radius should be clearly marked as a line from a point on the circumference to the centre of the circle; the diameter as a straight line through the centre of the circle beginning and ending at points on the circumference.

You can find the diameter by doubling the length of the radius.

Use damp string to measure the circumference of a small plate. Now measure its diameter and calculate the circumference. How close was your damp string measurement?

The circumference is equal to the diameter multiplied by pi (3.14) i.e. just over 3 times the diameter, children’s measurements should reflect that.

Mystery quadrilaterals

* I have one pair of non-equal parallel sides. What am I? A trapezium, e.g. or
* I have two pairs of equal sides, but no sides are parallel. Two opposite angles are equal but not the other two. What am I? A kite.

Children will find it helpful to sketch the shapes in questions like these.