Prior Learning Assessment
## Shape Year 6 Answers

Shape

1) Draw an equilateral triangle. The length of the sides must be 6. 5 cm. Use a protractor to measure the angles accurately.

Here measure each side to ensure that each length is 6.5 cm. The children should demonstrate that all angles in a triangle total to 180°. Therefore, an equilateral triangle has angles and sides of the same size. So, each angle should measure 60 °. Assess whether the children have lack of knowledge of using a protractor accurately or lack of knowledge of angles in a triangle.
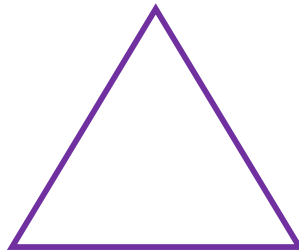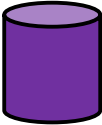
2) Complete the parallelogram with 2 angles of 65 °and the other 2 angles of 115°.

The children have been given the 4 angles needed so should be able to apply knowledge of parallelograms to create an accurately drawn shape.   Ensure that 2 opposite angles are 65° when measured with a protractor. You can allow 64 to 66 °. And that the other 2 angles measure between 114 and 116°.
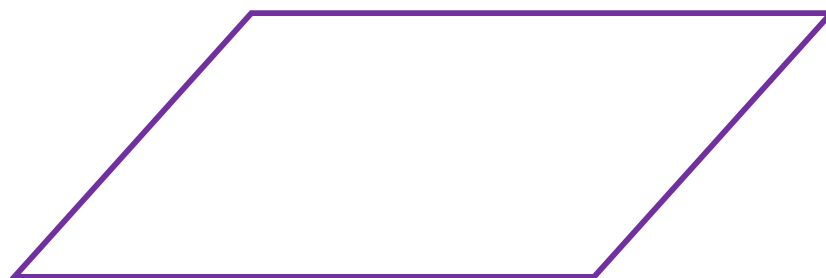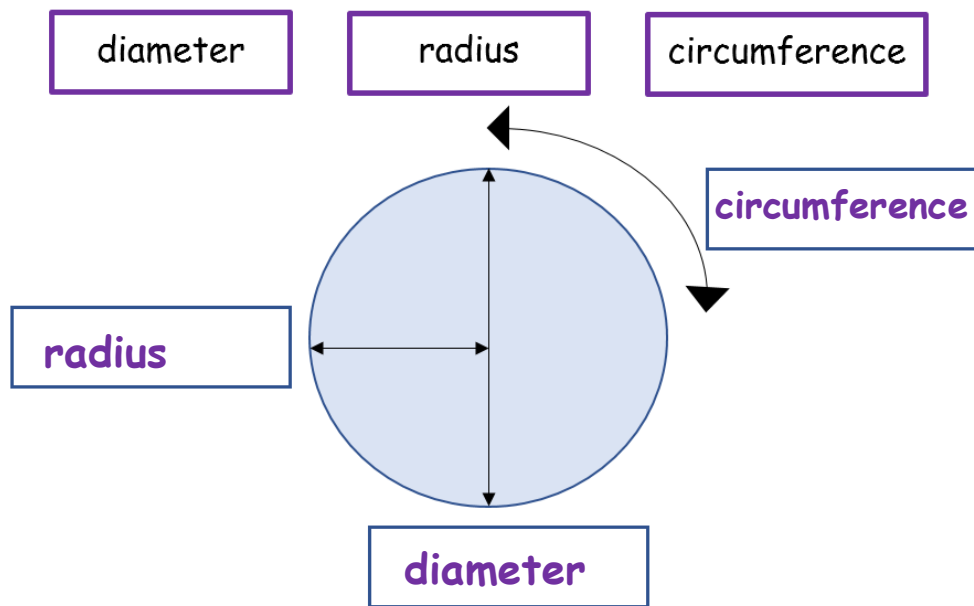
3) Complete the table:

| Shape	Name	Numbers of Faces	Number of vertices
	Triangular prism	5	6
	Cuboid	6	8
	Squared based pyramid	5	5
	Cylinder	3	0

4) Tick the nets that could be used to make a cube.
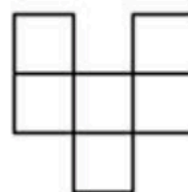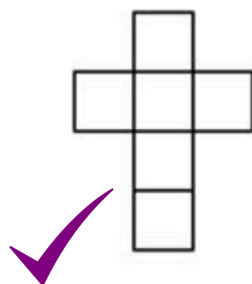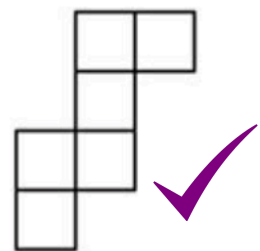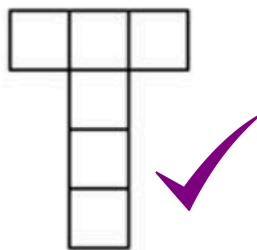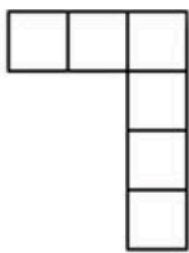
5) Place each label in the correct place to complete the diagram below.

diameter	radius	circumference

circumference

radius

diameter

6) Sophie wants to make a circle based holder for her coasters. She knows that the radius of one coaster is 4.5 cm. Sophie wants to make the base of the holder 1cm bigger in diameter than a coaster. What will the diameter need to be for the base of her coaster?
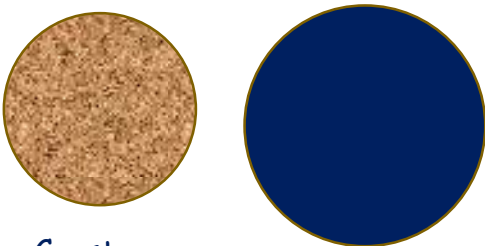
Coaster

coaster holder= coaster diameter + 1cm

The children should know that the radius is half of the diameter, therefore to work out the diameter of the holder they must double 4.5.
4.5 x 2 = 9.
The holder needs to be 1 cm larger in diameter, therefore 9 + 1 = 10cm.
Assess whether the error is with understanding the problem or understanding the relationship between diameter and radius.
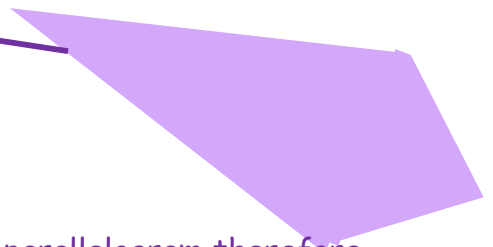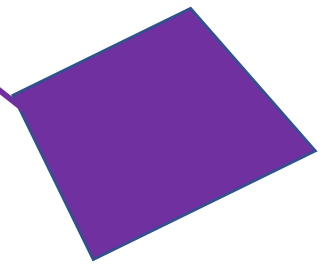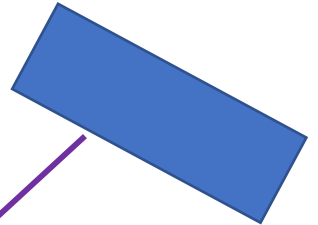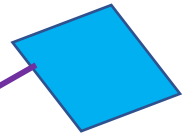
10cm

BRICKWORK
Mathematics

Q7) Match each shape to the correct label.
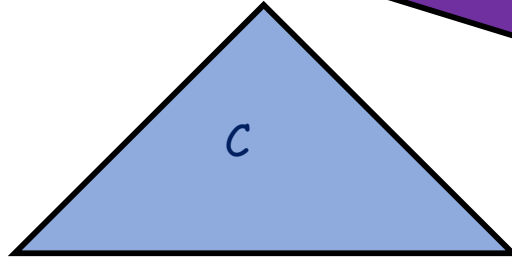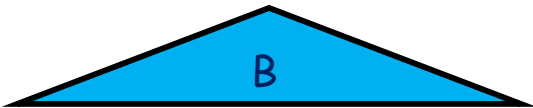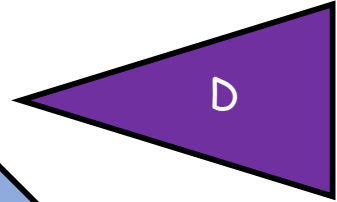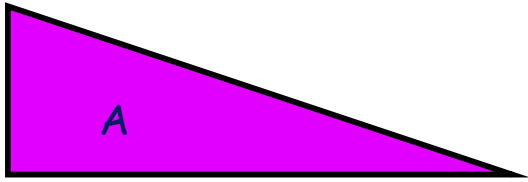
trapezium

parallelogram

rhombus

kite

rectangle

Some children may know that a rhombus is an equilateral parallelogram therefore may have matched the shape **with both labels**, rhombus and parallelogram.
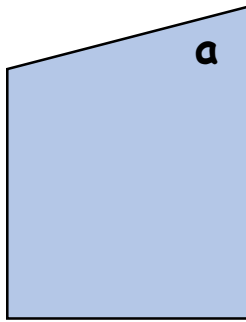
BRICKWORK
Mathematics

Shape

8) Place the label of each shape in the correct box.

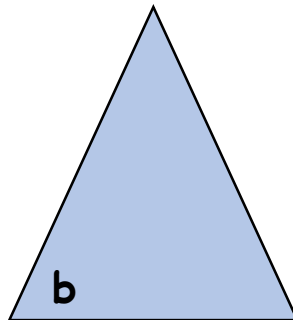|	Scalene triangle	Isosceles triangle
1 right angle	A	C D
No right angles	E	B

9) Measure the angles in each image.

a

b

c
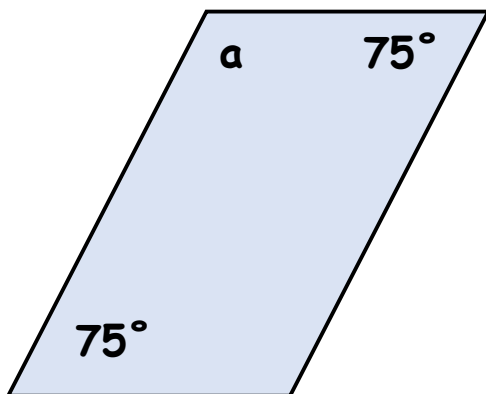
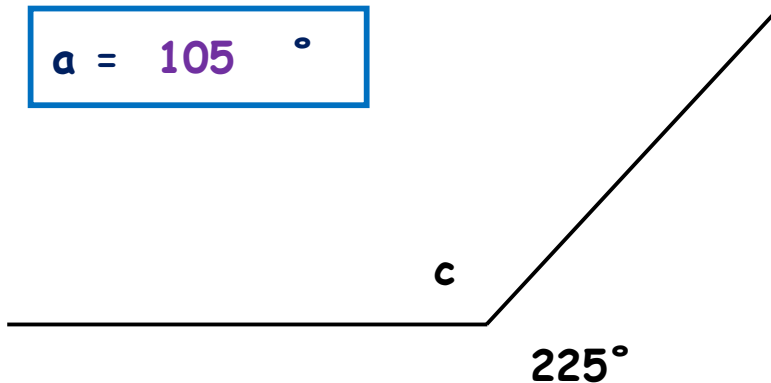a = 76°
accept 75 to 77

b = 65°
accept 64 to 66
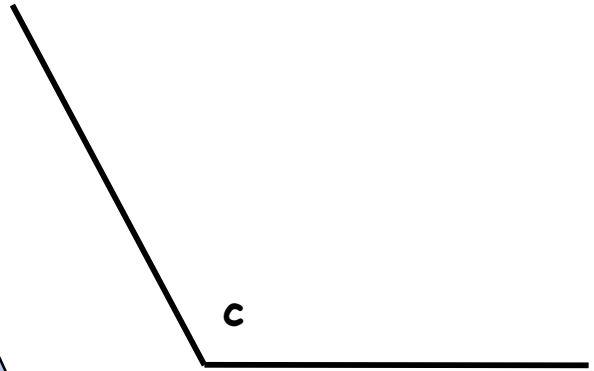
c = 118°
accept 117 to119

10) Calculate the missing angles in each image.

a   75°

75°

b

38°   38°

b =   104   °
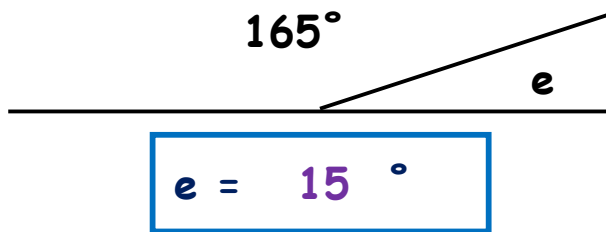
a =   105   °

c

225°

98 °

d   d

98 °

c =   135   °

d =   82   °

165°

e

e = **15** °

f

f   f

f   f

f = **108** °

Shape