

## Maths Assessment Year 2 Term 3: Geometry – Properties of Shapes

- 1. Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.
- 2. Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.
- 3. Identify 2-D shapes on the surface of 3-D shapes.
- 4. Compare and sort common 2-D and 3-D shapes and everyday objects.

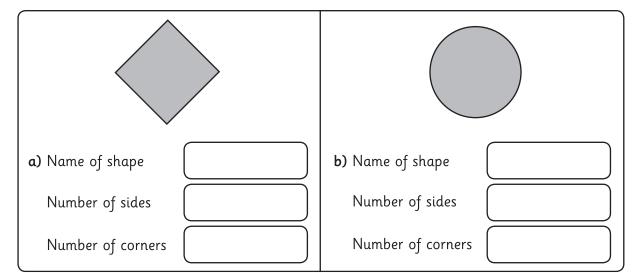


## Maths Assessment Year 2 Term 3: Geometry – Properties of Shapes



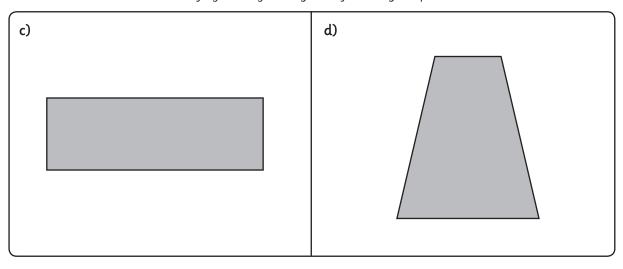
1. Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.

Name these shapes and describe their properties.





Use a ruler to draw one line of symmetry through the following shapes.





e) Draw a triangle. Use a ruler.

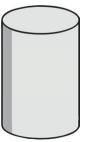




2. Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.

Name these shapes and fill in the properties.

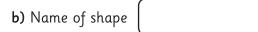


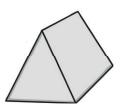


Number of faces

Number of edges

Number of vertices





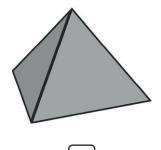
Number of faces

Number of edges

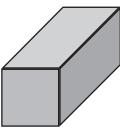
Number of vertices



c) I am thinking of a 3-D shape. It has 6 faces: 2 squares and 4 rectangles. It has 8 vertices. Tick the shape I am describing.



Can you tell me what it is called?

















3. Identify 2-D shapes on the surface of 3-D shapes.

Match the 3-D shape to the 2-D shapes which form its faces.

cube

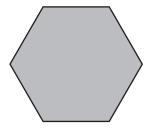
cuboid triangles

tetrahedron squares

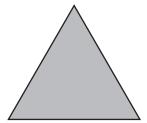


- 4. Compare and sort common 2-D and 3-D shapes and everyday objects.
- a) Tell me one thing that is the same and one thing that is different about these 2 shapes.

rectangles







Equilateral triangle

Same

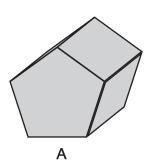
Different

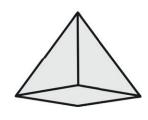




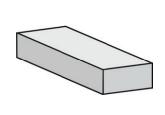
**b)** Write the letter for each shape in the Carroll Diagram.

|                          | Has rectangle faces | Has no rectangle faces |
|--------------------------|---------------------|------------------------|
| Has less than 9 vertices |                     |                        |
| Has 10 vertices or more  |                     |                        |





В



С







## Answer Sheet: Maths Assessment Year 2 Term 3: Geometry -





| question   | answer                                       | marks | notes   |  |  |
|--|--|-------|---|--|--|
| 1. Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. |  |       |   |  |  |
| а  | Square<br>4 sides<br>4 corners               | 2     | One mark for naming the shape and 1 for all properties correct.   |  |  |
| b  | Circle<br>1 side<br>0 corners                | 2     | One mark for naming the shape and 1 for all properties correct.   |  |  |
| C  |  | 1     | One mark for drawing any line of symmetry.  |  |  |
| d  |  | 1     | One mark for drawing any line of symmetry.  |  |  |
| е  | Any shape with 3 straight sides              | 1     |   |  |  |
| 2. Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.                  |  |       |   |  |  |
| a  | Cylinder<br>3 faces<br>2 edges<br>0 vertices | 2     | 1 mark for the name and 1 for all the correct properties.   |  |  |
| b  | Triangular prism 5 faces 9 edges 6 vertices  | 2     | 1 mark for the name and 1 for all the correct properties.   |  |  |
| C  | Cuboid                                       | 1     | 1 mark for correctly identifying and naming the shape.      Square prism and rectangular prism also acceptable. |  |  |



| question  | answer   | marks    | notes  |  |  |
|---|--|----------|--|--|--|
| 3. Identify 2-D shapes on the surface of 3-D shapes.                |  |          |  |  |  |
|   | cube rectangles cuboid triangles tetrahedron squares   | 2        | 2 marks for all correct.  1 mark for 1 correct.  (There is a chance that children may answer this differently as squares are also rectangles, and a cuboid can have both square and rectangle faces. If a child draws a line from both the cube and cuboid to rectangles and squares or from the cube and cuboid to rectangles, they would still be technically correct. However, if a child draws a line from the cuboid to squares only, they would be incorrect.) |  |  |
| 4. Compare and sort common 2-D and 3-D shapes and everyday objects. |  |          |  |  |  |
| а   | Same - They both have sides / angles of equal length / size. (i.e. they are regular)  Different - One has a 6 sides and the other 3. | 2        | Accept any similarity and difference.  Accept any words to a similar effect.   |  |  |
| b   | Has rectangle faces Has no rectangle faces Has less than 9 vertices C, B could be here B, D Has 10 vertices or more A                | 4        | 1 mark for each correct, 4 for all correct.  *Because a square is a special case of a rectangle.   |  |  |
|   |  | Total 20 |  |  |  |