## These shapes are 2D (flat) and 3D (solid).

1) Inside each shape, write its name.
2) If it is $2 D$ write $2 D$ inside the shape too. If it's $3 D$, write $3 D$ inside the shape.
3) How many 2D shapes are there?
4) How many 3D shapes are there?

|  | Use these words to help you |  |  |
| :--- | :--- | :--- | :--- |
| Sphere | Circle | Cone | Triangle | Pyramid



## Remember vertices just mean corners!

## Properties of 2D Shapes

Write down the properties of the shapes.


A triangle has $\qquad$ sides.

A triangle has $\qquad$ vertices.


A rectangle has $\qquad$ sides.

A rectangle has $\qquad$ vertices.


A square has $\qquad$ sides.

A square has $\qquad$ vertices.


A quadrilateral has $\qquad$ sides.

A quadrilateral has $\qquad$ vertices.

Watch these short video clips to refresh your memory about 2D and 3D shapes https://www.bbc.co.uk/bitesize/topics/zjv39j6


A hexagon has $\qquad$ sides.

A hexagon has $\qquad$ vertices.


An octagon has $\qquad$ sides.

A octagon has $\qquad$ vertices.


A pentagon has $\qquad$ sides.

A pentagon has $\qquad$ vertices.


A circle has $\qquad$ side.

A circle has $\qquad$ vertices.

Go on a $2 D$ and $3 D$ shape hunt!

How many can you find?

Eg) windows= rectangles
Clock face $=$ circle
Cereal box = cuboid
Tin of beans $=$ cylinder

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Here are some reasoning and problem solving questions for you to solve.


Here are 18 lollipop sticks.
How many hexagons can you make?


How many octagons can you make?
What other shapes can you make with
18 lollipop sticks?
If I put these shapes into order from the smallest number of sides to the largest, which shape would come third?


Where would a hexagon come in the list? Why?

Draw the vertical lines of symmetry on these shapes.


Circle the shape with an incorrect line of symmetry. Can folding help you prove your answers.


## Whitney says,



I have a 3-D shape with 2 square faces and 4 rectangular faces.

What shape does Whitney have?
Play this game with a friend. Describe th faces of a 3-D shape and they need to guess what it is.

Teddy says my 3-D shape has 6 faces.
Mo says he must have a cube.
Is Mo correct?
Explain your answer.

Annie has sorted these 3-D shapes.
Can you spot her mistake?
Can you add another shape to each set?


