

## Summer term week 6

### Maths:

(NB continual work to practise multiplication tables (2, 3, 5 and 10) and learning to tell the time: o'clock, quarter past, half past, quarter to the hour; challenge - to five minutes)

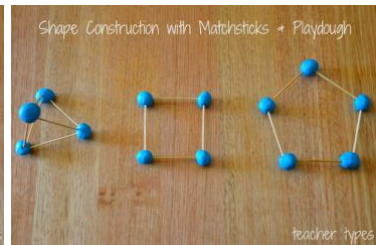
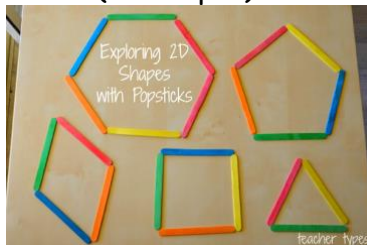
All these strategies can be found on Brookside TV.

<https://brooksideleics.primarysite.media/playlist/year-2>

This week we are going to be doing working with shapes!

### Practical activities:

Have a look around your home and see what you can find to make different 2d or 3d shapes. Remember to talk about sides and corners (2d shapes) and faces, edges and vertices (3d shapes). There are some ideas below:



Make some shape pictures:

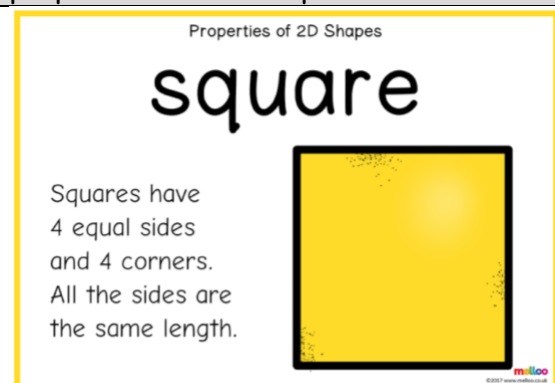


Go on a shape hunt:



## Naming and describing 2d shapes

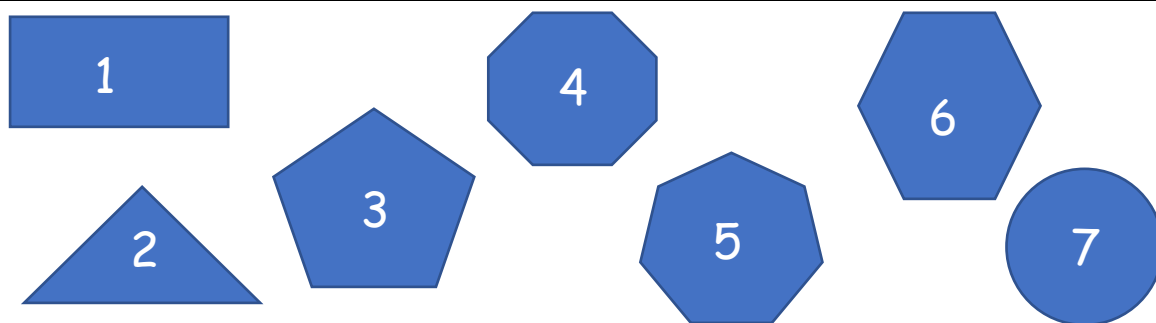
In year 2 it is really important to know, not only the names of shapes but also their properties. In 2d shapes we talk about the number of sides and the number of corners.



This is an example of explaining the properties of a 2d shape. The shape has been named. The corners and sides have also been identified and described.

It is very important that we learn to use the correct spellings for the shapes.

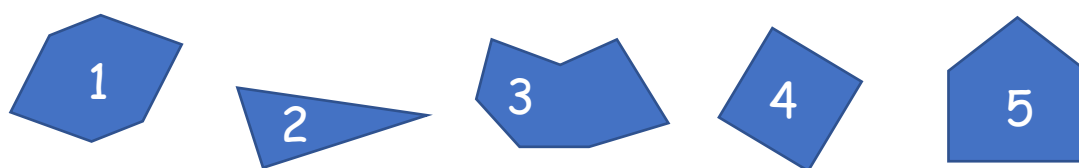
Can you identify and describe the properties of the shapes below? The names of the shapes are shown below but they are jumbled up.



pentagon	rectangle	circle	triangle	octagon	hexagon	heptagon
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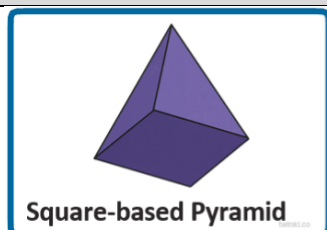
## Identifying irregular 2d shapes

Some shapes don't look exactly as we expect them to be but we can identify them by counting the sides and the corners. Can you name these shapes?



## Naming and describing 3d shapes

In year 2 it is really important to know, not only the names of shapes but also their properties. In 3d shapes we talk about the number of faces, edges and vertices (singular - vertex).



5 faces  
5 vertices  
8 edges

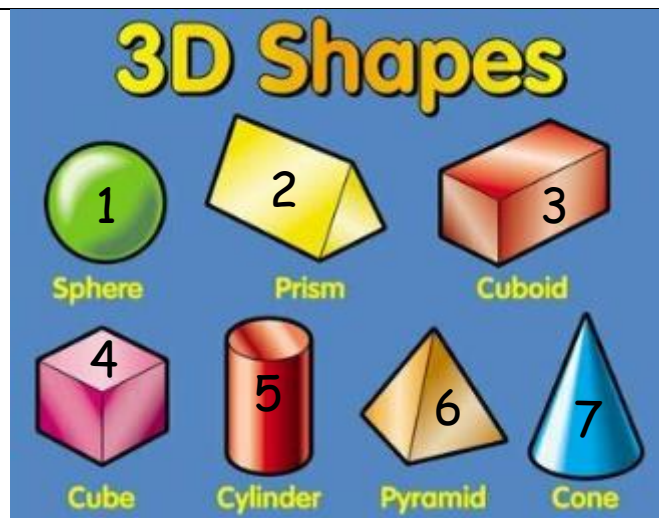
This is an example of explaining the properties of a 3d shape. The shape has been named. The faces, vertices and edges have also been identified and described. Faces are the flat shapes that are joined together to make the 3d shape. In this shape there are four triangular faces and one square face.

Vertices are sometimes called the corners on the shape. They are points.  
Edges are the straight joins where the faces are joined together.

A good way to tell the difference between vertices and edges - you can run your finger along an edge but you can't run your finger along a vertex.

It can be a bit tricky to describe the properties of 3d shapes without having one to pick up and handle. Instead you have to visualise it. If you can find an example of each shape in your house it will really help.

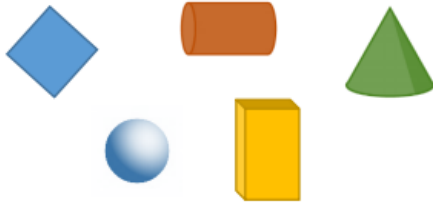
Try to find these shapes in your house and then describe their properties:



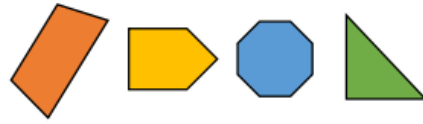
There are many different kinds of prism. The one shown here is a triangular prism. A cylinder is like a prism with two circle shaped faces and a cuboid is like a prism with two square shaped faces.

## Solving problems:

1. Which shape is the odd one out?  
Explain why.

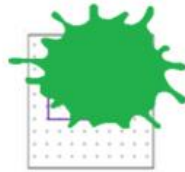


2. If I put these shapes into order from the smallest number of sides to the largest, which shape would come third?



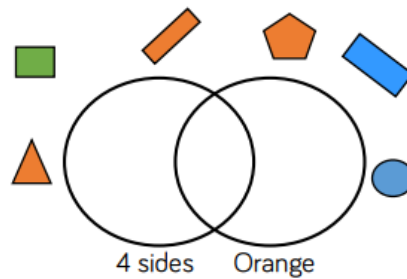
Where would a hexagon come in the list?  
Why?

3. What shape could be hiding under the spilt paint?



Prove your answer by drawing it.

4. Where should these shapes go in the Venn diagram?



Create your own labels and sort the shapes in a different way.

Answers:

## Properties of 2d shapes

### 1. Rectangle

Four corners, four sides, two sides are longer and two sides are shorter.

### 2. Triangle

Three sides, three corners.

### 3. Pentagon

Five sides, five corners.

### 4. Octagon

Eight sides, eight corners.

### 5. Heptagon

Seven sides, seven corners.

### 6. Hexagon

Six sides, six corners.

### 7. Circle

One curved side, no corners.

## Identifying irregular 2d shapes

### 1. Hexagon

### 2. Triangle

### 3. Heptagon

### 4. Square

### 5. Pentagon

## Naming and describing 3d shapes

1. Sphere - 1 curved face, 0 vertices, 0 edges.

2. Triangular prism - 5 faces, 6 vertices, 9 edges.

3. Cuboid - 6 faces, 8 vertices, 12 edges.

4. Cube - 6 faces, 8 vertices, 12 edges.

5. Cylinder - 3 faces (one of them curved), 0 vertices, 2 edges.

6. Pyramid - it depends on the kind of pyramid:


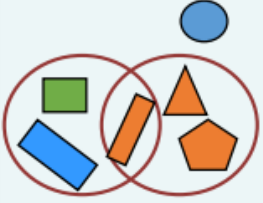
Square based pyramid - 5 faces, 5 vertices, 8 edges.

Triangular based pyramid (tetrahedron) - 4 faces, 4 vertices, 6 edges.

There are other pyramids, and if you find one, you can work out the different properties.

7. Cone - 2 faces (one curved face), 1 vertex, 1 edge.

## Solving problems

<p>1.</p> <p>The square is the odd one because it is the only 2-D shape or flat shape.</p>	<p>2.</p> <p>triangle, quadrilateral, pentagon, octagon</p>  <p>The pentagon would be third.</p> <p>A hexagon would come after the pentagon and before the octagon because it has 6 sides which is more than 5 and less than 8.</p> <p>A quadrilateral is a group name for any shape with four sides.</p>	<p>3.</p> <p>Could be any 2-D shape.</p> <p>Encourage children to think about irregular pentagons, hexagon, etc.</p> <p>Except for a circle!</p>	<p>4.</p>  <p>Possible labels: Blue Less than 4 vertices.</p>
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