



# Year 2

## Isolation Pack

### Maths Week 2

#### Message

Welcome to your Maths learning pack week 2.

There is a Maths lesson to complete for each day you are isolating. This week's lessons are all about 2D shapes. By the end of the week we want you to know the names of all the 2D shapes and what their properties are: how many **sides** and **vertices (corners)** they have.

Please keep any work you have done and bring it in to show your teacher once you can come back to school.

Good luck and we are really looking forward to seeing you back in school!

Mr Ibbotson, Ms Creamer, Mr Heidensohn and Ms Ibbotson.

#### Website Links

Here are some good games and videos to do with **shapes**:

##### Shape monsters:

<https://www.topmarks.co.uk/early-years/shape-monsters>

##### Pattern shapes:

<https://apps.mathlearningcenter.org/pattern-shapes/>

##### Finding symmetry:

<http://www.scootle.edu.au/ec/viewing/L7798/index.html>

##### 2D shapes – sides and vertices:

<https://www.youtube.com/watch?v=24Uv8Cl5hvl>

##### 2D shapes video:

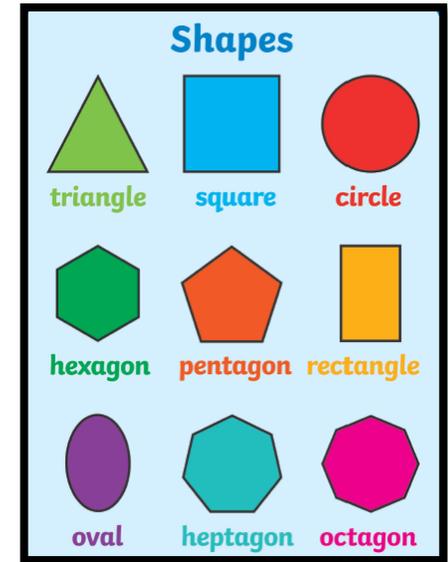
<https://www.bbc.co.uk/bitesize/topics/zjv39j6/articles/ztpwdmn>

## Lesson One – 2D shape poster

Create a 2D shape poster. Draw these different 2D shapes: **circle, triangle, square, rectangle, pentagon, hexagon, heptagon, and octagon**. You could use the attached 2D shape poster to help you.

Drawing some of these shapes could be quite tricky, but try your best (a ruler might help!). Alternatively, you could print the shape poster and cut and stick the shapes.

Write the name of each shape on your poster, making sure you spell them correctly. Leave some space under each shape so you can add to your poster in the next lesson.



## Lesson Two – 2D shapes

Watch this clip: <https://www.youtube.com/watch?v=24Uv8Cl5hvl>

### Activity 1

2D shapes have the following properties: **Sides** and **Vertices (corners)**.

Get your poster that you made yesterday. Under each shape write down how many sides and vertices it has. See if you notice a link between the amount of sides and vertices each shape has?

### Activity 2

Create a table that looks like this:

	Number of vertices
2 squares	
4 triangles	
2 pentagons	

In one column write down a shape and how many of that shape you have (e.g. '2 triangles'). In the next column write down the number of vertices (e.g. '6 vertices').

## Lesson Three – Drawing shapes

### Activity 1

As long as a shape has 3 straight sides and 3 vertices then it is a **triangle**. Using a ruler, draw different triangles on a piece of paper. Some should have sides that are a similar length and some should have sides where the lengths are very different. This is a good chance to practise using a ruler.

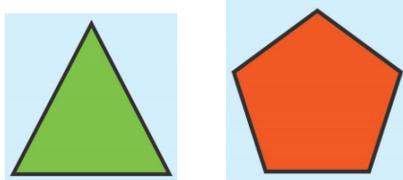
### Activity 2

As long as a shape has 5 straight sides and 5 vertices then it is a **pentagon**. Using a ruler, draw different pentagons on a piece of paper. Some should have sides that are a similar length and some should have sides where the lengths are very different. We hope you notice that pentagons can look very different.

### Extension activity (if you have time):

<https://nrich.maths.org/7009>

Follow this link and do the activity on paper.



## Lesson Four – Shape hunt

You should now know the names of lots of different 2D shapes. Go on a shape hunt around your home and see what shapes you can see. You could draw the objects and write what shape you see (Eg. A book = rectangle); take pictures of the different objects; or keep a tally chart and find out which shape you see the most in your home.

## Lesson Five – Shape jumper

Christmas jumpers often have lots of different 2D shapes on them. Design your own Christmas jumper using lots of different 2D shapes. Either draw the jumper or use the jumper template we've provided, then draw, cut and stick lots of 2D shapes on to your jumper. The more colourful your jumper is, the better! When you've finished, make a tally chart of all the different shapes you've used.



