Year 2 Maths

By the end of Year 2, children need to have a good handle on the **Properties of 2D and 3D shapes**. They must be able to name different shapes, regardless of their size or orientation, by making reference to the number of **sides** and **vertices** (2D shapes), and **edges**, **faces** and **vertices** (3D shapes). They will be expected to draw 2D shapes on dotted or squared paper, and should be able to visualise 3D shapes from 2D representations. They should also be able to identify symmetry within 2D shapes. Children will need to sort shapes according to their properties, using Venn and Carroll diagrams, and make repeated patterns with them, such as:  and  answering questions like 'What will the 7th shape be?'

Activities & Games!

⭐ **I Spy a Shape:** Take it in turns to spy, and then describe, a shape. For example, *'I spy a shape with 4 sides. You look through it when you look outside'.* Other clues could include information about the relative lengths, such as *'two sides are the same length'.*

⭐ **Shape Picture:** Cut out various 2D shapes; you could use coloured paper or simply colour the shapes in. Then stick them together on a piece of paper to create a picture. Include the names of the shapes and how many of each shape you have used.

⭐⭐ **Play-Dough Shapes:** Use play dough (easy and cheap to make at home!) and roll/bend/squish it into various 3D shapes. Alternatively, you could use straws and small bits of play-dough to fix them together. See how many 3D shapes you can make in two minutes!

⭐⭐⭐ **3D Faces:** Ask a grown up to think of a 3D shape and then get them to draw all of the 2D faces that are found on it. Your job is to try and work out which 3D shape they are thinking of!

⭐⭐ **Symmetry:** The concept of symmetry appears frequently in nature. See how many examples you can find in your local area. Take photos of them if you can!

Going deeper...

School Fair Necklaces!

Rob and Jennie were making necklaces to sell at the school fair. They decided to make them very mathematical.

Each necklace was to have eight beads, four of one colour and four of another. And each had to be symmetrical, like this:

How many different necklaces could they make? Can you find them all? How do you know there aren't any others?

What if they had 9 beads, five of one colour and four of another? What if they had 10 beads, five of each?

My Maths

Use our school log in (Username: **coleridge1,** Password: **success74**) and then your own log in details to access activities related to this topic on the MyMaths website.

You can also have a look to see if there are some other fun games you would like to play!

Wonderful websites

Shape patterns

Symmetry

Carroll Diagram

2D shape adventure game