Maths home learning tasks: 11/05/2020

Theme: Geometry: Property of shapes

* Monday:

Outcome: To recognise and identify 3D shapes

Task: Explain that 3D shapes are shapes that have three dimensions; they are tall, wide and deep. Give some examples of 3D shapes (cube, Square-based pyramid, etc) and ask them to do the same. Take one 3D shape as example and explain the different parts of the shape (the surfaces of the 3D shapes are called “faces”, the corners are called “vertices” and the edges are just called edges). Giving them 3D shapes, ask them to write down the number of faces and vertices of each 3D shape. If they are feeling confident, ask them to describe any 2D shapes that they see as well, and write them down.

Another task, and one a little more active, is to give them the 3D shapes poster and ask the child to find as many objects as they can find that look like the 3D shapes there, and then have them name the properties of the shapes.

* Tuesday:

Outcome: To identify and name different angles.

Task: Ask your child what do they know about angles. Explain that there are three types of angles (that they need to know of), the right angle with is exactly 90’, an acute angle with is less that 90’ and the obtuse angle with is more than 90’ but less than a perfectly straight line (180’).

Then have them complete the following:

* + If you have access to a protractor, draw some angles or have them draw them themselves, write what type it is and measure how many degrees it is.
  + If you do not have a protractor, show your child that a right angle is the same as the corner of a piece of paper. Using that, have them find angles around the house, write down where they saw the angle and the type, using the corner of the paper as a guide if they need it. (I have also allocated the “Protractor tool” on their Active Learn accounts. It’s not a replacement for actual practice, but it will help give them an idea how to use one)
* Wednesday:

Outcome: To categorise 2D shapes based on their properties.

Task: Have your child name some 2D shapes. Explain that all 2D shapes that are made of only straight lines are called polygons (so things like circles and semi-circles do not count). Explain that polygons are either regular or irregular. A regular polygon is a shape where the sides and angles are ALL the same, such as a square, a regular triangle, regular pentagon and so on. An irregular polygon is just a 2D shape that isn’t uniform, such as rectangles. Have them complete the worksheet for the day, identifying which shapes are and aren’t regular.

* Thursday:

Outcome: To categorise 2d Shapes based on the types of angles

Task: Using the same worksheet as on the previous task, quickly recap the types of angles and what they look like. Ask your child to go through the shapes and to write how many types of angles each shape has.

* Friday:

Outcome: To categorise 2D shapes based on lines of symmetry.

Task: Ask your child if they know what a line of symmetry is. Explain that a line of symmetry is an imaginary line that, if a mirror was put there, looking at the reflection the shape would not look any different. If possible, show them a couple of examples.

Using the same worksheet as on the previous task, have your child look for and find the shapes that have lines of symmetry. As an extra challenge they can look and see if they can spot a pattern regarding lines of symmetry in the regular polygons (the number of sides and angles = the number of lines of symmetry)