Maths home learning tasks: 18/05/2020

Theme: Geometry: Property of shapes

* Monday:

Outcome: To identify the different types of lines in shapes

Task: Recap with your child their knowledge of the properties of 2D shapes (e.g. names of shapes, names of parts of shapes, types of angles, regular and irregular, etc). Explain that shapes also have different types of lines in them. One example is lines of symmetry. See if they can remember what a line of symmetry is. Ask them if they can name any more types of lines (they may say horizontal, vertical and diagonal). Explain that there are also other special lines, which are:

* + Parallel lines: a set of two lines that if you were to stretch them out for infinity, they would never intersect (meet)
  + Perpendicular lines: A set of lines that intersect (meet) at a right angle (90 degrees)
  + Curved lines: Lines that are not straight

Go through a few examples of these types of lines, and once your child feels comfortable, set them the task to look for examples of these lines (and as extension, find examples of all the types of lines). They should record these down on paper.

* Tuesday:

Outcome: To draw lines of given length and type

Task: Recap with your child their knowledge of types of lines (horizontal, vertical, diagonal, parallel, perpendicular, curved, and lines of symmetry).

As a task:

* + Write out all the letters of the alphabet as CAPITAL letters. They must then for each letter write what types of lines they can identify. I suggest that they write up these letters bigger than they normally do so that they have an easier time of it (perhaps you could write the first one or two big so that they know what “bigger” means). As an extension, you could have your child identify the types of angles that they see as well.
* Wednesday:

Outcome: To draw shapes with given properties.

Task: Recap all they know about properties of shapes (angles and their types, lines and their types, names of 2D shapes, regular and irregular shapes)

Once they show a comfortable understanding in these areas, give your child a list of properties for them to then carefully draw. This can be as easy or hard as you choose to make it by choosing how much detail to describe the shapes. For example, an easy description might be something like “a shape with 3 sides and one right angle” or a harder example might be something like “can you draw an irregular pentagon, with two perpendicular lines and 1 acute angle”.

Alternatively, have them carry out the worksheet task.

* Thursday:

Outcome: To identify the shape based on its properties.

Task: Recap with your child the properties of 2D shapes. Show them the shape cards (see resource for this task). Discuss with them what properties the shapes have. Choose which shapes you will quiz your child on. Then carry out one of the following tasks:

* + Have your child ask “yes” or “no” questions for you to answer, such as “does it have a right angle?” and see if they can guess what shape from the list you are thinking of.
  + Give them the properties of your chosen shapes for them to try and guess what shape it is.
  + Have them choose a number of the shapes and write out the properties of them.
* Friday:

Outcome: To consolidate their knowledge of the properties of shapes.

Task: Recap with child the properties of 2D shapes. Have them create a poster (or any kind of display) to help them remember what they have learned about the properties of shapes.