## Year 5 and 6 Maths Home Learning Activities

## Geometry

This topic is a recap of knowledge that they have covered previously. So if you feel like you may have seen these problems before, you may have.
There are also additional activities through BBC Bitesize: https://www.bbc.co.uk/bitesize/topics/zvmxsbk this video and activity link really well to Step 2.

## Step 1: Remind yourself of 2D shapes.

Look at the sheet attached with all of the 2D shapes displayed on it and remind yourself of them.
Complete the PowerPoint Quiz attached in activities
Alternatively you could complete an online lesson on classifying (grouping) triangles:
https://www.thenational.academy/year-6/maths/compare-and-classify-triangles-year-6-wk3-2

## Step 2:

To sort regular and irregular polygons.
Polygon: A two-dimensional shape with straight sides. Examples: triangles, rectangles and pentagons. (Note: a circle is not a polygon because it has a curved side)
Regular: means all the sides and angles in a shape are equal e.g. an equilateral triangle and a square are regular
Irregular: means that not all sides and angles are equal - like a rectangle (it has equal angles but not equal sides therefore it is irregular)
Sort the shapes in to irregular and regular polygons.


What's the same? What's different?

Draw a regular polygon and an irregular polygon on the grids.


Look at the 2D shapes. Decide whether the shape is a regular or irregular polygon


## EXTENSION PROBLEM:

## Always, sometimes or never true?

- A regular polygon has equal sides but not equal angles.
- A triangle is a regular polygon.
- A rhombus is a regular polygon.
- The number of angles is the same as the number of sides in any polygon.

Alternatively, complete this online lesson: https://www.thenational.academy/year-6/maths/compare-and-classify-quadrilaterals-year-6-wk3-3 - although it is labelled a Year 6 lesson, it is suitable for a Year 5.

Step 3: Create a properties of shape poster.
Choose 2 which you may have forgotten or find interesting and create a fact page/mini poster about them. Consider the number of sides, size and number of angles (use last week's vocabulary), lines of symmetry and parallel lines.
If you need a reminder of these terms (words) then watch the video in the lesson above

## Step 4:

Use the names of 2D shapes page below to help you organise the shapes into groups. You could draw the shapes, cut out the shapes or just write the names.

You could present it by drawing a Venn diagram - here is a simple and then pretty complex one:


OR drawing a Carroll diagram like this:

|  | Regular <br> polygon | Irregular <br> polygon |
| :---: | :---: | :---: |
| Has at least one <br> right angle |  |  |
| Has no right <br> angles |  |  |

## Additional areas to work on:

Play on Hit the Button - focus multiplication tables.
Work through the areas of last week's arithmetic paper and then on an area you are unsure of. (Look at the Calculation Policy on the school website under 'Curriculum' and then 'Maths' for help in how to support + - x and $\div$ ) https://www.sampford-peverell-primary.devon.sch.uk/website/maths/459621
Also in the maths section of the website is a link to a fantastic maths revision interactive resource which gives the children extra questions in whichever area of maths they would like to work on a little more - with YouTube links to explain the process!

Simple shapes:


Triangles:

a


Quadrilaterals: (4 straight sided shapes)


Equilateral Triangle
Three equal sides. a
Three equal angles, always $60^{\circ}$.

Isosceles Triangle
Two equal sides. a
Two equal angles. $\boldsymbol{\theta}$

Scalene Triangle
No equal sides.
No equal angles.

