Mathematics
Shape, Space & Measures
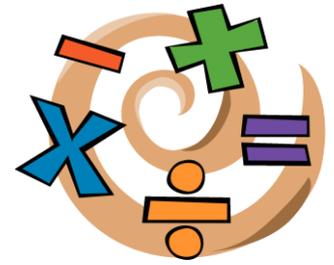
Name: _____

By the end of Year 6...

To understand the properties of shapes			I can **recognise angles** where they meet at a point, are on a straight line or are vertically opposite, and find missing angles.
			I can draw **2-D shapes** using given dimensions and angles.
			I can recognise, describe and build simple **3- D shapes**, including making nets.
			I can compare and classify **geometric shapes** based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons.
			I can classify different **types of triangles** (isosceles, right-angled, scalene and equilateral) using their properties.
			I can illustrate and name **parts of circles**, including radius, diameter and circumference, and I know that **the diameter is twice the radius**.
To describe position, direction and movement			I can draw **reflections of shapes** where the mirror line is at 45° and whether the shape is touching the line or not.
			I can **rotate a shape around its centre or vertex**.
			I can describe **positions on the full coordinate grid** (all four quadrants).
			I can predict **missing coordinates**, using my knowledge of properties of shapes.
			I can draw and translate **simple shapes on the coordinate plane,** and reflect them in the axes.
To use measures			I can convert between **standard units of length, mass and volume** using decimals up to 3dp.
			I can convert between **standard units of time**.
			I can convert between **miles and kilometres**.
			I can calculate **intervals on a scale**, including measurements and across zero.
			I can calculate, estimate and compare **the volume of cubes and cuboids using standard units**, including cubic centimetres (cm3) and cubic metres (m3), and extending to other units.
			I can calculate the **perimeters of composite rectilinear shapes**.
			I can recognise that **shapes with the same area can have different perimeters and vice versa**.
			I recognise when it is possible to **use formulae for area and volume of shapes**.
			I can calculate **the area of parallelograms and triangles**.
			I can solve problems involving **the calculation and conversion of units of measure**, using decimal notation up to 3dp.
			I can calculate **time durations** that are over the hour and interpret timetables.
To use statistics			I can interpret and construct **pie charts and line graphs** and use these to solve problems.
			I can use **frequency tables to record discrete data**.
			I can calculate and interpret **the mean as an average**.
			I understand **the mode and range** and use them to describe a set of data.
			I can describe and predict **the outcomes from data**, using the language of chance and likelihood.
To use algebra			I can generate and describe **linear number sequences**, including those involving fractions and decimals.
			I can find the **term to term rule** in a number sequence.
			I understand how to solve **balancing equations**, such as: 20 +? = 40 – 10.
			I am beginning to express **simple formulae** E.g. missing measures in perimeters: 4+2b = 20, where one side of the rectangle is 2cm and the perimeter 20cm).