Maths Teacher Assessment Grid. Year 6

- Growing Tomorrow's Leaders -

Number, Place Value and Algebra	4 operations	Ratio and Proportion	Measurements	Fractions and Decimals	Geometry	Statistics
Read, write, order and compare numbers up to **10,000,000 and determine the value of each digit.**	Multiply up to 4-digit numbers by 2-digit numbers using long multiplication.	**Solve problems involving the relative sizes of two quantities where missing values can be found by using integer x and ÷ facts.**	Solve problems involving the calculation and conversion of units of measure, **using decimal notation up to 3d.p.**	**Use common factors to simplify fractions and use common multiples to express fractions in the same denomination.**	**Draw 2D shapes using given dimensions and angles.**	**Interpret pie charts.**
Round any whole number.	**Divide up to 4-digits by 2-digits using long division** and 4-digits by 1-digit using short division.	**Solve problems involving the calculation of percentages.**	Use, read, write and convert between standard units.	Compare and order fractions, **including fractions >1.**	**Recognise, describe and build simple 3D shapes, including making nets.**	**Construct pie charts**
Use negative numbers in context **and calculate intervals across zero.**	**Interpret remainders as whole numbers, fractions or by rounding.**	**Solve problems involving similar shapes where the scale factor is known or can be found.**	**Convert between miles and kilometres.**	+ and – fractions **with different denominators and mixed numbers, using the concept of equivalent fractions.**	Compare and classify geometric shapes based on their properties and sizes.	**Interpret line graphs.**
Solve number and practical problems that involve all of the above/	**Perform mental calculations with mixed operations and large numbers.**	**Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.**	**Recognise that shapes with the same areas can have different perimeters and vice versa.**	Multiply simple pairs of proper fractions, **writing the answer in its simplest form.**	**Find unknown angles in any triangles, quadrilaterals and regular polygons.**	**Construct line graphs.**
Use simple formulae	Identify common factors, common multiples and prime numbers.	**Recognise and use proportionality and ratio in contexts such as recipes.**	**Recognise when it is possible to use formulae for area and volume of shapes.**	**Divide proper fractions by whole numbers.**	**Illustrate and name parts of circles: radius, diameter and circumference.**	**Calculate and interpret the mean as an average.**
Generate and describe linear number sequences.	**Use knowledge of the order of operations to carry out calculations involving the four operations and brackets.**		**Calculate the area of parallelograms and triangles.**	**Associate a fraction with division and calculate decimal fraction equivalents.**	**Know that the diameter is twice the radius.**	
Express missing number problems algebraically.	Solve multi-step problems in contexts, deciding which operations and methods to use and why.		**Calculate, estimate and compare volume of cubes and cuboids using standard units using cm³, m³, mm³ and km³.**	**Identify the value of each digit in numbers up to 3d.p**. and ÷ numbers by 10, 100 and 1000 **giving answers up to 3d.p.**	Recognise angles: where they meet at a point, on a straight line, **or are vertically opposite and find missing angles.**	
Find pairs of numbers that satisfy an equation with two unknowns.	Solve problems using all of the operations.			**Multiply 1-digit numbers with up to 2d.p. by whole numbers.**	Describe positions on **the full coordinate grid – all 4 quadrants.**	
Enumerate possibilities of combinations with two variables.	Use estimation to check answers to calculations.			**Use written division methods in cases where the answer has up to 2d.p.**	**Draw and translate simple shapes on the coordinate grid.**	
				Recall and use equivalences between simple fractions, decimals and percentages **in different contexts.**	**Reflect shapes in the axes.**	