

## Year 6 Mathematics: End of Year Expectations



KS1 Level =		EOY 5 Level =		EOY Target =		Teacher Assessment		
T1 Level =	T2 Level =	T3 Level =	T4 Level =	T5 Level =	T6 Level =	WTS	EXS	GDS
<b>Number: Number and Place Value</b>								
Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit.								
Round any whole number to a required degree of accuracy.								
Use negative numbers in context, and calculate intervals across zero.								
Solve number and practical problems that involve all of the above.								
<b>Number: Addition, Subtraction, Multiplication and Division</b>								
Multiply numbers up to 4 digits by a 2-digit whole number using the formal written methods.								
Divide numbers up to 4 digits by a 2-digit whole number using the formal written methods and interpret remainders as whole number remainders, fractions, or by rounding.								
Identify common factors, common multiples and prime numbers.								
Use their knowledge of the order of operations to carry out calculations involving the four operations.								
Solve multi-step problems in contexts using the four operations, deciding which operations and methods to use and why.								
Use estimation to check answers to calculations and determine an appropriate degree of accuracy.								
<b>Number: Fractions</b>								
Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.								
Compare and order fractions.								
Add and subtract fractions with different denominators and mixed numbers.								
Multiply simple proper fractions and simplify the answer (e.g. $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$ ).								
Divide proper fractions by whole numbers (e.g. $\frac{1}{3} \div 2 = \frac{1}{6}$ ).								
Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places.								
Multiply one-digit numbers with up to two decimal places by whole numbers. Use written division methods in cases where the answer has up to two decimal places.								
Solve problems that require answers to be rounded to specific degrees of accuracy.								
Find and use equivalence between fractions, decimals and percentages, including in different contexts.								
<b>Measurement</b>								
Solve problems involving the calculation and conversion of units of measure.								
Recognise that shapes with the same areas can have different perimeters and vice versa.								
Recognise when it is possible to use formulae for area and volume of shapes including the area of parallelograms and triangles.								
Calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm <sup>3</sup> ) and cubic metres (m <sup>3</sup> ), and extending to other units.								
<b>Geometry: Property of shapes, Position/Direction &amp; Statistics</b>								
Draw 2-D shapes using given dimensions and angles. Recognise, describe and build simple 3-D shapes, including making nets.								
Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.								
Name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.								
Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.								
Describe positions on the full coordinate grid (all four quadrants).								
Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.								
Interpret and construct pie charts and line graphs in order to solve problems.								
Calculate and interpret the mean as an average.								
<b>Ratio, Proportion and Algebra</b>								
Solve problems involving the calculation of percentages (e.g. of measures) such as 15% of 360 and the use of percentages for comparison								
Solve problems involving similar shapes where the scale factor is known or can be found. Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.								
Express missing number problems algebraically. Use simple formulae expressed in words.								
Generate and describe linear number sequences.								
Find pairs of numbers that satisfy number sentences involving two unknowns. Enumerate all possibilities of combinations of two variables.								