Year 6 Maths Progression

Place Value, Ratio, Proportion and Algebra

- I can enumerate possibilities of combinations of 2 variables.
- I can find pairs of numbers that satisfy an equation with 2 unknowns.
- I can express missing number problems algebraically.
- I can use simple formulae and can generate and describe linear number sequences.
- I can solve problems involving similar shapes where the scale factor is known.
- I can solve problems involving the calculation of percentages.
- I can solve number and practical problems involving all of the below.
- I can use negative numbers in context and calculate intervals across zero.
- I can round any whole number to a required degree of accuracy.
- I can read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.

Addition and Subtraction

- I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
- I can use knowledge of the order of operations to carry out calculations involving the four operations.
- I can perform mental calculations, including with mixed operations and large numbers.

Multiplication and Division

- I can use knowledge of the order of operations to carry out calculations involving the 4 operations.
- I can use the formal method of short division.
- I can interpret remainders as whole number remainders, fractions or by rounding.
- I can multiply and divide multi-digit numbers up to 4-digits by a 2-digit whole number.
- I can use estimation to check answers to calculations and determine an appropriate degree of accuracy.
- I can identify common factors, common multiples and prime numbers.

Fractions and Decimals

- I can recall and use equivalences between simple fractions, decimals and percentages.
- I can associate a fraction with division and calculate decimal fraction equivalents.
- I can multiply and divide numbers by 10, 100 and 1000 and multiply 1-digit numbers with up to 2 decimal places by whole numbers.
- I can identify the value of each digit in numbers given to 3 decimal places.
- I can divide proper fractions by whole numbers.
- I can multiply simple pairs of proper fractions, writing the answer in the simplest form.
- I can compare, order, add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
- I can use common factors to simplify fractions and use common multiples to express fractions in the same denomination.

Measurement

- I can calculate, estimate and compare volume of cubes and cuboids.
- I can calculate the area of parallelograms and triangles.
- I can recognise when it is possible to use formulae for area and volume of shapes.
- I can recognise that shapes with the same areas can have different perimeters and vice versa.
- I can use, read, write and convert between standard units, converting measurements of time.
- I can convert between miles and kilometres.
- I can use, read, write and convert between standard units, converting different types of measurements from a smaller unit to a larger one and vice versa.
- I can solve problems involving the calculation and conversion of units of measure, using decimal notation up to 2 decimal places.

Statistics

- I can calculate and interpret the mean as an average.
- I can interpret and construct pie charts and line graphs and use these to solve problems.

Geometry

- I can describe positions on the full coordinate grid and draw and translate simple 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 find unknown angles in any triangles, quadrilaterals and regular polygons.
- I can recognise, describe and build simple 3-D shapes, including making nets.
- I can illustrate and name parts of circles.
- I can compare and classify geometric shapes.
- I can draw 2-d shapes using given dimensions and angles.