End of Year Expectations for Year 6 (Maths)

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| Year 6 Number and Place Value | | | | |
| Number and Place Value | Addition and Subtraction | Multiplication and Division | Fractions (including decimals and percentages) | |
| Sufficient evidence shows the ability to:  PV1- Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.  PV2- Round any whole number to a required degree of accuracy  PV3- Use negative numbers in context, and calculate intervals across 0  PV4- Solve number and practical problems that involve all of the above  PV5- Read Roman numerals to 1000 (M) and recognise years written in Roman numerals. | Sufficient evidence shows the ability to:  AS1- Perform mental calculations, including with mixed operations and large numbers.  AS2- Use their knowledge of the order of operations to carry out calculations involving the 4 operations.  AS3- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.  AS4- Solve problems involving addition, subtraction, multiplication and division.  AS5- Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. | Sufficient evidence shows the ability to:  MD1- Perform mental calculations, including with mixed operations and large numbers.  MD2- Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.  MD3- Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context.  MD4- Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context.  MD5- Identify common factors, common multiples and prime numbers. | Sufficient evidence shows the ability to:  FDP1- Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.  FDP2- Compare and order fractions, including fractions >1.  FDP3- Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.  FDP4- Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, 1/4 × 1/2 = 1/8 ]  FDP5- Divide proper fractions by whole numbers [for example, 1/3 ÷ 2 = 1/6 ]  FDP6- Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8 ]  FDP7- Identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places.  FDP8- Multiply one-digit numbers with up to 2 decimal places by whole numbers.  FDP9- Use written division methods in cases where the answer has up to 2 decimal places.  FDP10- Solve problems which require answers to be rounded to specified degrees of accuracy.  FDP11- Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. | |
| Year 6 Geometry and Measures | | | | |
| Ratio and Proportion | Algebra | Measures | Geometry | Statistics |
| Sufficient evidence shows the ability to:  RP1- Solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts.  RP2- Solve problems involving the calculation of percentages [for example, of measures and such as 15% of 360] and the use of percentages for comparison.  RP3- Solve problems involving similar shapes where the scale factor is known or can be found.  RP4- Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples. | Sufficient evidence shows the ability to:  A1- Use simple formulae.  A2- Generate and describe linear number sequences.  A3- Express missing number problems algebraically.  A4- Find pairs of numbers that satisfy an equation with 2 unknowns.  A5- Enumerate possibilities of combinations of 2 variables. | Sufficient evidence shows the ability to:  M1- Solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate.  M2- Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 decimal places.  M3- Convert between miles and kilometres.  M4- Recognise that shapes with the same areas can have different perimeters and vice versa.  M5- Recognise when it is possible to use formulae for area and volume of shapes.  M6- Calculate the area of parallelograms and triangles.  M7- Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³), and extending to other units [for example, mm³ and km³] | Sufficient evidence shows the ability to:  G1- Draw 2-D shapes using given dimensions and angles.  G2- Recognise, describe and build simple 3-D shapes, including making nets.  G3- Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.  G4- Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.  G5- Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.  G6- Describe positions on the full coordinate grid (all 4 quadrants).  G7- Draw and translate simple shapes on the coordinate plane, and reflect them in the axes. | Sufficient evidence shows the ability to:  S1- Interpret and construct pie charts and line graphs and use these to solve problems.  S2- Calculate and interpret the mean as an average. |