

Meadgate Primary School Progression of Skills by Year Group

Maths

Year 6	
Place Value Representing	Can they read, write (order and compare) numbers to at least 10 000 000 and determine the value of each digit?
Place Value Use PV and Compare	Can they read, write, order and compare numbers to 10 000 000 and determine the value of each digit?
Place Value Problems and Rounding	Can they round any whole number to a required degree of accuracy? Can they round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 in context and calculate intervals across zero? Can they solve number problems and practical problems that involve all of the above?
Addition and Subtraction Calculations	Can they undertake calculations involving addition and subtraction, including those with mixed operations and larger numbers? Can they use their knowledge of the order of operations to carry out calculations involving four operations?
Addition and Subtraction Solve Problems	Can they solve subtraction multi-step problems in contexts, deciding which operations and methods to use and why?
Multiplication and Division Recall, Represent, Use	Can they recall and use factors, common multiples and prime numbers? Can they use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy?
Multiplication and Division Calculations	Can they multiply numbers up to four-digits by a two-digit number using the formal written method of long multiplication? Can they divide numbers up to four-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? Can they 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?
Multiplication and Division Solve Problems	Can they solve problems involving addition, subtraction, multiplication and division?
Multiplication and Division Combined Operations	Can they use their knowledge of the order of operations to carry out calculations involving the four operations?

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Algebra	Can they use simple formulae? Can they use linear number sequences? Can they express missing number problems algebraically? Can they find pairs of numbers that satisfy an equation with two unknowns? Can they enumerate possibilities of combinations of two variables?
Fractions Compare	Can they use common factors to simplify fractions; using common multiples to express fractions in the same denomination? Can they compare and order fractions, including fractions >1 ?
Fractions Calculations	Can they add and subtract fractions with different denominators and mixed numbers, using the concepts of equivalent fractions? Can they multiply simple pairs of proper fractions, writing the answer in its simplest form? Can they divide proper fractions by whole numbers?
Decimals Recognise and Write	Can they identify the value of each digit in numbers given to three decimal places?
Decimals Calculations and Problems	Can they multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places? Can they multiply and divide number with up to two decimal places by whole numbers? Can they use written methods in cases where the answer has up to two decimal places? Can they solve problems which require answers to be rounded to a specific degree of accuracy?
Fractions, Decimals and Percentages	Can they associate a fraction with division and calculate decimal fraction equivalents (for example 0.375 for a simple fraction (for example, $3/8$))? Can they recall and use equivalences between simple fractions, decimals and percentages, including in different contexts?
Geometry 2D Shapes	Can they use the properties of rectangles to deduce related facts and find missing lengths and angles, using given dimensions and angles? Can they compare and classify geometric shapes based on their properties and sizes? Can they illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius?
Geometry 3D Shapes	Can they recognise, describe and build simple 3D shapes, including making nets?

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Geometry Angles and Lines	Can they find unknown angles in any triangles, quadrilaterals and regular polygons? Can they recognise angles where they meet at a point, are on a straight line, or are vertically opposite and find missing angles?
Geometry Position and Direction	Can they use the full coordinate grid (all four quadrants)? Can they draw and translate simple shapes on the coordinate plane and reflect them in the axes?
Measurement Using Measures	Can they use all four operations to solve problems involving the calculation and conversation of units of measure, using decimal notation up to three decimals places where appropriate? Can they 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 three decimal places? Can they convert between miles and km?
Measurement Time	Can they convert between standard units, converting measurements of time from a smaller unit of measurement to a larger unit and vice versa?
Measurement Perimeter, Area and Volume	Can they recognise that shapes with the same areas can have different perimeters and vice versa? Can the recognise when it is possible to use formulae for area and volume of shapes? Can they calculate the area of parallelograms and triangles? Can they calculate, estimate and compare volume of cubes and cuboids using standard units including cubic centimetres (cm ³) and cubic metres (m ³) and extending to other units (for example, mm ³ , km ³)
Statistics Present and Interpret	Can they interpret and construct pie charts and line graphs and use these to solve problems?
Statistics Solve Problems	Can they calculate and interpret the mean as an average?
Ratio and Proportion	Can they solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts? Can they solve problems involving the calculation of percentages (for example, of measures such as 15% of 360) and the use of percentages for comparison? Can they solve problems involving similar shapes where the scale factor is known or can be found? Can they solve problems involving unequal sharing and grouping using knowledge of fractions and mulitplies?

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