

Mathematics assessment guidelines

Name of child:

Class:

Number, ratio and proportion, and algebra					Measurement, geometry and statistics			
AF1 - Number, place value, approximation and estimation/rounding	AF2 - Addition, subtraction, multiplication and division (calculations)	AF3 - Fractions, decimals and percentages	AF4 - Ratio and proportion	AF5 - Algebra	AF6 - Measurement	AF7 - Geometry – properties of shape	AF8 - Statistics	
Standard 6	<ul style="list-style-type: none"> • Read, write, order and compare numbers up to 10 000 000 6N2 • Determine the value of each digit in numbers up to 10 000 000 6N3 • Round any whole number to a required degree of accuracy 6N4 • Use negative numbers in context, and calculate intervals across zero 6N5 • Solve number problems and practical problems that involve 6N2–6N5 6N6 	<ul style="list-style-type: none"> • Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy 6C3 • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why 6C4 • Identify common factors, common multiples and prime numbers 6C5 • Perform mental calculations, including with mixed operations and large numbers 6C6 • Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication 6C7a • Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication 6C7b • Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication 6C7c • Solve problems involving addition, subtraction, multiplication and division 6C8 • Use their knowledge of the order of operations to carry out calculations involving the four operations 6C9 	<ul style="list-style-type: none"> • Use common factors to simplify fractions; use common multiples to express fractions in the same denomination 6F2 • Compare and order fractions, including fractions >1 6F3 • Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions 6F4 • Multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. $1/4 \times 1/2 = 1/8$) 6F5a • Divide proper fractions by whole numbers (e.g. $1/3 \div 2 = 1/6$) 6F5b • Associate a fraction with division to calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. $3/8$) 6F6 • Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places 6F9a • Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places 6F9b • Use written division methods in cases where the answer has up to two-decimal places 6F9c • Solve problems which require answers to be rounded to specified degrees of accuracy 6F10 • Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts 6F11 	<ul style="list-style-type: none"> • Solve problems involving the relative sizes of two quantities, where missing values can be found by using integer multiplication and division facts 6R1 • Solve problems involving the calculation of percentages (e.g. of measures such as 15% of 360) and the use of percentages for comparison 6R2 • Solve problem involving similar shapes where the scale factor is known or can be found 6R3 • Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples 6R4 	<ul style="list-style-type: none"> • Express missing number problems algebraically 6A1 • Use simple formulae 6A2 • Generate and describe linear number sequences 6A3 • Find pairs of numbers that satisfy an equation with two unknowns 6A4 • Enumerate possibilities of combinations of two variables 6A5 	<ul style="list-style-type: none"> • 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 of up to three decimal places 6M5 • Convert between miles and kilometres 6M6 • Recognise that shapes with the same areas can have different perimeters and vice versa 6M7a • Calculate the area of parallelograms and triangles 6M7b • Recognise when it is possible to use the formulae for the area of shapes 6M7c • Calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm^3) and cubic metres (m^3), and extending to other units (e.g. mm^3 and km^3) 6M8a • Recognise when it is possible to use the formulae for the volume of shapes 6M8b • Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate 6M9 	<ul style="list-style-type: none"> • Compare and classify geometric shapes based on their properties and sizes 6G2a • Describe simple 3-D shapes 6G2b • Draw 2-D shapes using given dimensions and angles 6G3a • Recognise and build simple 3D shapes, including making nets 6G3b • Find unknown angles in any triangles, quadrilaterals and regular polygons 6G4a • Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles 6G4b • Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius 6G5 • Draw and translate simple shapes on the co-ordinate plane, and reflect them in the axes 6P2 • Describe positions on the full co-ordinate grid (all four quadrants) 6P3 	<ul style="list-style-type: none"> • Interpret and construct pie charts and line graphs and use these to solve problems 6S1 • Calculate and interpret the mean as an average 6S3