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	AF6 - Measurement	AF7 - Geometry – properties of shape	AF8 - Statistics

Standard 5	• Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 **5N1**
	• Read, write, order and compare numbers to at least 1 000 000 **5N2**
	• Determine the value of each digit in numbers up to 1 000 000 **5N3a**
	• Read Roman numerals to 1000 (M) and recognise years written in Roman numerals **5N3b**
	• Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 **5N4**
	• Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero **5N5**
	• Solve number problems and practical problems that involve 5N1–5N5 **5N6**
		• Add and subtract numbers mentally with increasingly large numbers **5C1**
		• Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) **5C2**
		• Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy **5C3**
		• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why **5C4**
		• Identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers **5C5a**
		• Identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers **5C5b**
		• Establish whether a number up to 100 is prime and recall prime numbers up to 19 **5C5c**
		• Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) **5C5d**
		• Multiply and divide numbers mentally drawing upon known facts **5C6a**
		• Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 **5C6b**
		• Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 **5C7a**
		• Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context **5C7b**
		• Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes **5C8a**
		• Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign **5C8b**
		• Solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates **5C8c**
			• Recognise mixed numbers and improper fractions and convert from one form to the other; write mathematical statements >1 as a mixed number *(e.g. 2/5 + 4/5 = 6/5 or 1 1/5)* **5F2a**
			• Identify name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths **5F2b**
			• Compare and order fractions whose denominators are all multiples of the same number **5F3**
			• Add and subtract fractions with the same denominator and denominators that are multiples of the same number **5F4**
			• Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams **5F5**
			• Read and write decimal numbers as fractions *(e.g. 0.71 = 71/100)* **5F6a**
			• Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents **5F6b**
			• Round decimals with two decimal places to the nearest whole number and to one decimal place **5F7**
			• Read, write, order and compare numbers with up to three decimal places **5F8**
			• Solve problems involving numbers up to three decimal places **5F10**
			• Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred'; write percentages as a fraction with denominator hundred, and as a decimal **5F11**
			• Solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4,1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25 **5F11**
				• Solve problems involving converting between units of time **5M4**
				• Convert between different units of metric measure [eg: kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre] **5M5**
				• Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints **5M6**
				• Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres **5M7a**
				• Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes **5M7b**
				• Estimate volume *(e.g. using 1cm³ blocks to build cuboids (including cubes))* and capacity *(e.g. using water)* **5M8**
				• Use all four operations to solve problems involving measure [money] using decimal notation including scaling **5M9a**
				• Use all four operations to solve problems involving measure (length, mass and capacity) using decimal notation, including scaling **5M9**
					• Use the properties of rectangles to deduce related facts and find missing lengths and angles **5G2a**
					• Distinguish between regular and irregular polygons based on reasoning about equal sides and angles **5G2b**
					• Identify 3–D shapes including cubes and other cuboids, from 2–D representations **5G3b**
					• Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles **5G4a**
					• Identify:
					  - angles at a point and a whole turn (total 360°)
					  - angles at a point on a straight line and ½ a turn (total 180°)
					  - other multiples of 90° **5G4b**
					• Draw given angles and measure them in degrees (°) **5G4c**
					• Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed **5P5**
						• Complete, read and interpret information in tables, including timetables **5S1**
						• Solve comparison, sum and difference problems using information presented in a line graph **5S2**