



## Mathematics Assessment Guidelines: Standard 5

AF1 Number, Place Value, Approximation And Estimation/Rounding		
Number, Ratio And Proportion, And Algebra	<ul style="list-style-type: none"><li>Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 <b>5N1</b></li><li>Read, write, order and compare numbers to at least 1 000 000 <b>5N2</b></li><li>Determine the value of each digit in numbers up to 1 000 000 <b>5N3a</b></li><li>Read Roman numerals to 1000 (M) and recognise years written in Roman numerals <b>5N3b</b></li><li>Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 <b>5N4</b></li><li>Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero <b>5N5</b></li><li>Solve number problems and practical problems that involve <b>5N1–5N5 5N6</b></li></ul>	
	AF2 Addition, Subtraction, Multiplication And Division (Calculations)	
	<ul style="list-style-type: none"><li>Add and subtract numbers mentally with increasingly large numbers <b>5C1</b></li><li>Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) <b>5C2</b></li><li>Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy <b>5C3</b></li><li>Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why <b>5C4</b></li><li>Identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers <b>5C5a</b></li><li>Identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers <b>5C5b</b></li><li>Establish whether a number up to 100 is prime and recall prime numbers up to 19 <b>5C5c</b></li><li>Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) <b>5C5d</b></li><li>Multiply and divide numbers mentally drawing upon known facts <b>5C6a</b></li><li>Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 <b>5C6b</b></li><li>Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 <b>5C7a</b></li><li>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 <b>5C7b</b></li><li>Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes <b>5C8a</b></li><li>Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign <b>5C8b</b></li><li>Solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates <b>5C8c</b></li></ul>	

Number, Ratio And Proportion, And Algebra	<b>AF3 Fractions, Decimals And Percentages</b>
	<ul style="list-style-type: none"> <li>Recognise mixed numbers and improper fractions and convert from one form to the other; write mathematical statements <math>&gt;1</math> as a mixed number (e.g. <math>2/5 + 4/5 = 6/5</math> or <math>1\frac{1}{5}</math>) <b>5F2a</b></li> <li>Identify name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths <b>5F2b</b></li> <li>Compare and order fractions whose denominators are all multiples of the same number <b>5F3</b></li> <li>Add and subtract fractions with the same denominator and denominators that are multiples of the same number <b>5F4</b></li> <li>Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams <b>5F5</b></li> <li>Read and write decimal numbers as fractions (e.g. <math>0.71 = 71/100</math>) <b>5F6a</b></li> <li>Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents <b>5F6b</b></li> <li>Round decimals with two decimal places to the nearest whole number and to one decimal place <b>5F7</b></li> <li>Read, write, order and compare numbers with up to three decimal places <b>5F8</b></li> <li>Solve problems involving numbers up to three decimal places <b>5F10</b></li> <li>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 <b>5F11</b></li> <li>Solve problems which require knowing percentage and decimal equivalents of <math>1/2</math>, <math>1/4</math>, <math>1/5</math>, <math>2/5</math>, <math>4/5</math> and those fractions with a denominator of a multiple of 10 or 25 <b>5F11</b></li> </ul>
Measurement, Geometry And Statistics	<b>AF6 Measurement</b>
	<ul style="list-style-type: none"> <li>Solve problems involving converting between units of time <b>5M4</b></li> <li>Convert between different units of metric measure [eg: kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre] <b>5M5</b></li> <li>Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints <b>5M6</b></li> <li>Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres <b>5M7a</b></li> <li>Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm<sup>2</sup>) and square metres (m<sup>2</sup>) and estimate the area of irregular shapes <b>5M7b</b></li> <li>Estimate volume (e.g. using 1cm<sup>3</sup> blocks to build cuboids (including cubes)) and capacity (e.g. using water) <b>5M8</b></li> <li>Use all four operations to solve problems involving measure [money] using decimal notation including scaling <b>5M9a</b></li> <li>Use all four operations to solve problems involving measure (length, mass and capacity) using decimal notation, including scaling <b>5M9</b></li> </ul>
	<b>AF7 Geometry – Properties Of Shape</b>
	<ul style="list-style-type: none"> <li>Use the properties of rectangles to deduce related facts and find missing lengths and angles <b>5G2a</b></li> <li>Distinguish between regular and irregular polygons based on reasoning about equal sides and angles <b>5G2b</b></li> <li>Identify 3-D shapes including cubes and other cuboids, from 2-D representations <b>5G3b</b></li> <li>Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles <b>5G4a</b></li> <li>Identify: <ul style="list-style-type: none"> <li>angles at a point and a whole turn (total 360°)</li> <li>angles at a point on a straight line and <math>\frac{1}{2}</math> a turn (total 180°)</li> <li>other multiples of 90° <b>5G4b</b></li> </ul> </li> <li>Draw given angles and measure them in degrees (°) <b>5G4c</b></li> <li>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 <b>5P5</b></li> </ul>

Measurement, Geometry And Statistics	AF8 Statistics
	<ul style="list-style-type: none"> <li>• Complete, read and interpret information in tables, including timetables <b>5S1</b></li> <li>• Solve comparison, sum and difference problems using information presented in a line graph <b>5S2</b></li> </ul>