Year 5 Mathematics Teacher Assessment Name: Class:

Working below age-related expectation

These children can:

Practise and recall facts and skills (i.e. Curriculum objective)

Use objects and mathematical manipulative, pictures and simple recording to represent concepts

Start to talk about their work

Solve simple problems with support

Working at age-related expectation

These children can:

Apply facts and skills to problems and investigations, identifying what they need to be know and what they need to be able to do in order to solve problems

Represent their work in a variety of ways

Describe and explain their work using mathematical language to reason

Make connections and links between mathematical ideas

Working at greater depth

These children can:

Work independently to choose ways to tackle and solve problems of greater complexity

Present work in a clear and organised way, choosing appropriate methods of recording

Explain work clearly and accurately using mathematical language

Use reasoning to make predictions, conjectures and generalisations and ask their own questions

Use their maths skills confidently in a variety of contexts, including cross curricular tasks

Number	Place Value The pupil can:	Evidence				Overall
		Autumn	Spring 1	Spring 2	Summer	
	read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit					
	count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000					
	interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through 0					
	round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000					
	solve number problems and practical problems that involve all of the above					
	read Roman numerals to 1,000 (M) and recognise years written in Roman numerals					

Number	Addition and Subtraction The pupil can:	Evidence				Overall
		Autumn	Spring 1	Spring 2	Summer	
	add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)					
	add and subtract numbers mentally with increasingly large numbers					
	use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy					
	solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why					

Number	Multiplication and Division The pupil can:	Evidence				Overall
		Autumn	Spring 1	Spring 2	Summer	
	identify multiples and factors, including finding all factor pairs of a number, and common factors of 2 numbers					
	know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers					
	establish whether a number up to 100 is prime and recall prime numbers up to 19					
	multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers					
	multiply and divide numbers mentally, drawing upon known facts					
	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					
	multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000					
	recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3})					
	solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes					
	solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign					
	solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates					

Number	Fractions The pupil can:	Evidence				Overall
		Autumn	Spring 1	Spring 2	Summer	
	compare and order fractions whose denominators are all multiples of the same number					
	identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths					
	recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example,2/5 + 4/5=6/6=1 1/5]					
	add and subtract fractions with the same denominator, and denominators that are multiples of the same number					
	multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams					
	read and write decimal numbers as fractions [for example, 0.71 =71/100]					
	recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents					
	round decimals with 2 decimal places to the nearest whole number and to 1 decimal place					
	read, write, order and compare numbers with up to 3 decimal places					
	solve problems involving number up to 3 decimal places					
	recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per 100', and write percentages as a fraction with denominator 100, and as a decimal fraction					
	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					

	The pupil can:	Evidence				Overall
		Autumn	Spring 1	Spring 2	Summer	
Measurement	convert between different units of metric measure [for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre]					
	understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints					
	measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres					
	calculate and compare the area of rectangles (including squares), including using standard units, square centimetres (cm^2) and square metres (m^2), and estimate the area of irregular shapes					
	estimate volume [for example, using 1 cm^3 blocks to build cuboids (including cubes)] and capacity [for example, using water]					
	solve problems involving converting between units of time					
	use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling					

	Properties of shape The pupil can:	Evidence				Overall
		Autumn	Spring 1	Spring 2	Summer	
Geometry	identify 3-D shapes, including cubes and other cuboids, from 2-D representations					
	know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles					
	draw given angles, and measure them in degrees (°)					
	identify:					
	angles at a point and 1 whole turn (total 360°)					
	angles at a point on a straight line and half a turn (total 180°)					
	other multiples of 90°					
	use the properties of rectangles to deduce related facts and find missing lengths and angles					
	distinguish between regular and irregular polygons based on reasoning about equal sides and angles					
	Position and direction **The pupil can:**	**Evidence**				**Overall**
		Autumn	**Spring 1**	**Autumn**	**Spring 1**	
	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					

	The pupil can:	Evidence				Overall
		Autumn	Spring 1	Spring 2	Summer	
Statistics	solve comparison, sum and difference problems using information presented in a line graph					
	complete, read and interpret information in tables, including timetables					

I am working at...	5e (Significantly below)	5d	5d+	5s	5s+	5m

When making your judgement, number domains always hold the most weighting and should play the major role in informing your decision.