## Year 6 Mathematics Teacher Assessment

### Working below age-related expectation

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

These children can:

## 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 mple recording

Name:

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

# Class:

## 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

	Place Value				
N	The pupil can:	EOY5	Autumn	Spring	Summer
u					
m b	round any whole number to a required degree of accuracy				
e r	use negative numbers in context, and calculate intervals across 0				
_	solve number and practical problems that involve all of the above				

	Addition, Subtraction, Multiplication and Division		Evic	lence	
	The pupil can:	EOY5	Autumn	Spring	Summer
	multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication				
N	divide numbers up to 4 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				
N u	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				
m b	perform mental calculations, including with mixed operations and large numbers				
e	identify common factors, common multiples and prime numbers				
r	use their knowledge of the order of operations to carry out calculations involving the 4 operations				
	solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why				
	solve problems involving addition, subtraction, multiplication and division				
	use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy				

	Fractions (including decimals and percentages)		Evic	lence		
	The pupil can:	EOY5	Autumn	Spring	Summer	
	use common factors to simplify fractions; use common multiples to express fractions in the same denomination					
	compare and order fractions, including fractions >1					
	add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions					
N u	multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $1/4 \times 1/2 = 1/8$ ]					
m	divide proper fractions by whole numbers [for example, $1/3 \div 2 = 1/6$ ]					
b e	associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8]					
r	identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places					
	multiply one-digit numbers with up to 2 decimal places by whole numbers					
	use written division methods in cases where the answer has up to 2 decimal places					
	solve problems which require answers to be rounded to specified degrees of accuracy				1	
	recall and use equivalences between simple fractions, decimals and percentages, including in different contexts				1	

Y O

	Ration and proportion	Evidence			
N	The pupil can:	EOY5	Autumn	Spring	Summer
u	solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts				
m b	solve problems involving the calculation of percentages [for example, of measures and such as 15% of 360] and the use of percentages for comparison				
e r	solve problems involving similar shapes where the scale factor is known or can be found				
_	solve problems involving unequal sharing and grouping using knowledge of fractions and multiples				

	ebra			Evidence				
	The pupil can:	EOY5	Autumn	Spring	Summer			
Ν	use simple formulae							
u								
m	generate and describe linear number sequences							
b	express missing number problems algebraically							
e								
r	find pairs of numbers that satisfy an equation with 2 unknowns							
	enumerate possibilities of combinations of 2 variables							

		Evidence			
М	The pupil can:	EOY5	Autumn	Spring	Summer
e	solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate				
a	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				
S	decimal notation to up to 3 decimal places				
u	convert between miles and kilometres				
r					
e	recognise that shapes with the same areas can have different perimeters and vice versa				
m	recognise when it is possible to use formulae for area and volume of shapes				
e					
n	calculate the area of parallelograms and triangles				
t	calculate, estimate and compare volume of cubes and cuboids using standard units, including (cm <sup>3</sup> ) and cubic metres (m <sup>3</sup> ), and extending to other units [e.g. mm <sup>3</sup> ]				

	Properties of shape		Evid	lence	
	The pupil can:	EOY5	Autumn	Spring	Summer
	draw 2-D shapes using given dimensions and angles				
G	recognise, describe and build simple 3-D shapes, including making nets				
e o	compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons				
m	illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius				
e t	recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles				
r	Position and direction	Evidence			
У	The pupil can:	EOY5	Autumn	Spring	Summer
	describe positions on the full coordinate grid (all 4 quadrants)				
	draw and translate simple shapes on the coordinate plane, and reflect them in the axes				

S		Evidence				
ť	The pupil can:	EOY5	Autumn	Spring	Summer	
a	interpret and construct pie charts and line graphs and use these to solve problems					
t	calculate and interpret the mean as an average					
S						

I am working at	PKS	WTS	EXS	GDS
My EOY prediction is				

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