Year 5 Mathematics Teacher Assessment

Name:

Class:

St MICHAEL'S

Number

Place Value

The pupil can:	Autumn	Spring 1	Spring 2	Summer	Overall
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					

Addition and Subtraction

The pupil can:	Autumn	Spring 1	Spring 2	Summer	Overall
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					

Multiplication and Division

The pupil can:	Autumn	Spring 1	Spring 2	Summer	Overall
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					

Fractions

The pupil can:	Autumn	Spring 1	Spring 2	Summer	Overall
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				

Measurement

The pupil can:	Evidence				Overall
	Autumn	Spring 1	Spring 2	Summer	
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 (cm²) and square metres (m²), and estimate the area of irregular shapes					
estimate volume [for example, using 1 cm³ 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					

Geometry

Properties of shape

The pupil can:	Evidence				Overall
	Autumn	Spring 1	Spring 2	Summer	
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					

Statistics

The pupil can:	Evidence				Overall
	Autumn	Spring 1	Spring 2	Summer	
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.