



# Maths Year 5

## (Ongoing assessment)

**Children in group:**

SEN\* **PP** EAL **KPI's**

**Number: Place value:** Pupils should be taught to:

<b>read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit</b>	count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000	<b>interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero</b>	round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000	solve number problems and practical problems that involve ordering and comparing numbers to 1 000 000, counting forwards or backwards in steps, interpreting negative numbers and rounding	read Roman numerals to 1000 (M) and recognise years written in Roman numerals
---	---	---	---	--	---

**Number- addition and subtraction:** Pupils should be taught to:

<b>add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)</b>	<b>add and subtract numbers mentally with increasingly large numbers</b>	use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	<b>solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why</b>
---	--	--	---

**Number: Multiplication and division** Pupils should be taught to:

<b>identify multiples &amp; factors, including finding all factor pairs of a number &amp; common factors of two numbers</b>	know & use vocabulary of prime numbers, prime factors & composite (non-prime) numbers	establish whether a number up to 100 is prime & 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.
<b>solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates</b>	recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)	multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign	<b>solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.</b>	

**Number: Fractions:** Pupils should be taught to:

<b>compare and order fractions whose denominators are all multiples of the same number</b>	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 e.g. $2/5 + 4/5 = 5/6 = 1 \frac{1}{6}$	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	recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal
<b>read and write decimal numbers as fractions e.g. <math>0.71 = 71/100</math></b>	recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	<b>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> &amp; fractions with a denominator of a multiple of 10 or 25</b>	<b>read, write, order and compare numbers with up to three decimal places</b>	solve problems involving number up to three decimal places	round decimals with two decimal places to the nearest whole number and to one decimal place

**Measurement:** Pupils should be taught to:

<b>convert between different units of metric measure (for example, km &amp; m; cm &amp; m; cm &amp; mm; g/ kg; litre/millilitre)</b>	Understand & use approximate equivalences between metric units & common imperial units e.g. inches, pounds & pints	<b>measure and calculate the perimeter of composite rectilinear shapes in cm &amp; metres</b>	<b>calculate &amp; compare area of rectangles (including squares), including using standard units, (cm<sup>2</sup>, m<sup>2</sup>) &amp; estimate area of irregular shapes</b>	estimate volume e.g. using 1 cm <sup>3</sup> blocks to build cuboids (including cubes) and capacity e.g. using water	solve problems involving converting between units of time	use all four operations to solve problems involving measure e.g. length, mass, volume, money & decimal notation, including scaling	use all four operations to solve problems involving measure e.g. length, mass, volume, money using decimal notation, including scaling
--	--	---	--	--	---	--	--

**Geometry:** Pupils should be taught to:

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	<b>draw given angles, and measure them in degrees (°)</b>	identify angles at a point and one whole turn (total 360°)	identify angles at a point on a straight line and 1/2 a turn (total 180°)
identify other multiples of 90°	use the properties of rectangles to deduce related facts and find missing lengths and angles	<b>distinguish between regular and irregular polygons based on reasoning about equal sides and angles</b>	<b>Statistics:</b> solve comparison, sum and difference problems using information presented in a line graph	<b>Statistics:</b> <b>complete, read and interpret information in tables, including timetables</b>

**Key:** Emerging (beginning to understand): Pink

Expected (Understood): Yellow

Exceeding (greater depth): Green