



Maths LTP in Year 5 at Farmilo



	Autumn 1		Autumn 2		Spring 1		Spring 2		Summer 1		Summer 2
1	<u>Short week: Introduction / assessment / Roman numerals</u>	1	<u>Number: Rounding</u>	1	<u>Number: Multiples and factors</u>	1	<u>Number: Multiplication and division 4 by 1</u>	1	<u>Number: Fractions</u>	1	<u>Geometry: Shape</u>
2	<u>Number: Place Value</u>	2	<u>Number: Addition</u>	2	<u>Number: Prime numbers</u>	2	<u>Number: Multiplication and division 2 by 2 / 4 by 2</u>	2	<u>Number: Fractions</u>	2	<u>Geometry: Shape</u>
3	<u>Number: Place Value</u>	3	<u>Number: Subtraction</u>	3	<u>Number: Squared and cubed numbers</u>	3	<u>Residential</u>	3	<u>Number: Fractions</u>	3	<u>Measurement: Area and perimeter</u>
4	<u>Number: Place Value</u>	4	<u>Number: Inverse</u>	4	<u>Number: Multiply by 10,100,1000</u>	4	<u>Number: Division</u>	4	<u>Number: Fractions</u>	4	<u>Geometry: Position and direction</u>
5	<u>Number: Place Value</u>	5	<u>Number: Negative numbers</u>	5	<u>Number: Divide by 10,100,1000</u>	5	<u>Number: Division remainders expressed as fractions</u>	5	<u>Number: Fractions</u>	5	<u>Measurements: Converting units</u>
6	<u>Number: Place Value</u>	6	<u>Number: Statistics</u>	6	<u>Consolidation</u>	6	<u>Consolidation</u>		<u>Number: Decimals</u>	6	<u>Measurements: Converting units</u>
7	<u>Measurement: Time</u>	7	<u>Assessment</u>			7	<u>Assessment</u>		<u>Number: Fractions, decimals and percentages</u>	7	<u>Measurements: Volume</u>



Maths LTP in Year 5 at Farmilo



Year 5			
Place Value	Addition and Subtraction	Multiplication and Division	Fractions
Pupils should be taught to: ♣ 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 zero ♣ 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 all of the above ♣ read Roman numerals to 1000 (M) and recognise years written in Roman numerals.	Pupils should be taught to: ♣ 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.	Pupils should be taught to: ♣ identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers ♣ know and use the vocabulary of prime numbers, prime factors and composite (nonprime) 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 1000 ♣ recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)	Pupils should be taught to: ♣ 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, $5 \frac{2}{4} + 5 \frac{4}{4} = 5 \frac{6}{4} = 1 \frac{5}{4}$] ♣ 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, $0.71 = \frac{71}{100}$] ♣ recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents



Maths LTP in Year 5 at Farmilo



- ♣ 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.

- ♣ round decimals with two decimal places to the nearest whole number and to one decimal place
- ♣ read, write, order and compare numbers with up to three decimal places
- ♣ solve problems involving number up to three decimal places
- ♣ 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
- ♣ solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25.



Maths LTP in Year 5 at Farmilo



Measurement	Geometry	Statistics	
Pupils should be taught to: ♣ 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), and 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]	Statutory requirements 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 ♣ draw given angles, and measure them in degrees (°) ♣ identify: ♣ angles at a point and one whole turn (total 360°) ♣ angles at a point on a straight line and 2 1 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. Pupils should be taught to: ♣ 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.	Pupils should be taught to: ♣ solve comparison, sum and difference problems using information presented in a line graph ♣ complete, read and interpret information in tables, including timetables.	



Maths LTP in Year 5 at Farmilo



- ♣ 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.