





## Numeracy Implementation

Numeracy is taught as an area of learning in its own right, as well as integrated with other curriculum areas where appropriate. There is also flexibility to seize opportunities to celebrate and acknowledge significant events.

Foundation Stage teach numeracy everyday - discretely - following the Early Learning goals and integrate it across the curriculum throughout the day. KS1 have 5 full sessions per week. KS2 have 5 full sessions per week plus 1 x 1 hour Schofield and Sims session on a Friday.

FS follow the Early Learning Goals; KS1 and KS2 all follow the order of FOCUS MATHS.

Year 5: Overview of the year					
Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
1 Place value	1 Multiplication and division, Factors & multiples	3 Place value. Roman numerals, and negative numbers	5 Multiplication & Division	4 Place value	5 Place value
2 Place value Decimals	2 Multiplication & Division, including problems	3 Addition and subtraction, including problems	4 Geometry 2D and 3D shape	3 Fractions	5 Addition & Subtraction
1 Addition and Subtraction, including problems	1 Fractions compare, order, equivalence	4 Multiplication and Division	2 Fractions	4 Measures Time	5 Fractions
1 Geometry Angles	3 Multiplication & Division	2 Measures Area	3 Measures, including area and volume	4 Fractions	5 Measures Mass, volume & capacity
1 Measures Perimeter and Area	1 Statistics and measures, including time	2 Geometry Reflection and Translation	2 Statistics and measures	4 Addition & Subtraction	5 Geometry -Area and volume of shapes
2 Addition and Subtraction, including Statistics	Consolidate and assess	3 Geometry	Consolidate and assess	6 Multiplication and division	Consolidate and assess



# Whinstone Primary School Year 5 Numeracy



## Maths Vocabulary for Year 5

<b>Number and place value</b>	<b>Addition and subtraction</b>	<b>Multiplication and division</b>	<b>Measure</b>	<b>Geometry (position and direction)</b>	<b>Geometry (properties of shape)</b>	<b>Fractions, decimals and percentages</b>
<ul style="list-style-type: none"><li>• Powers of 10</li></ul>	<ul style="list-style-type: none"><li>• Efficient written method</li></ul>	<ul style="list-style-type: none"><li>• Factor pairs</li><li>• Composite numbers, prime number, prime factors, square number, cubed number</li><li>• Formal written method</li></ul>	<ul style="list-style-type: none"><li>• Volume</li><li>• Imperial units, metric units</li></ul>	<ul style="list-style-type: none"><li>• Reflex angle</li><li>• Dimensions</li></ul>	<ul style="list-style-type: none"><li>• Regular and irregular Polygons</li></ul>	<ul style="list-style-type: none"><li>• Proper fractions, improper fractions, mixed numbers</li><li>• Percentage</li><li>• Half, quarter, fifth, two fifths, four fifths</li><li>• Ratio, proportion</li></ul>



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## Impact

Teachers will regularly assess and will evaluate what knowledge and skills pupils have gained against expectations.

1 Below expectations	2 Meeting expectations	3 Exceeding expectations
	5.1.a.1 Count forwards and backwards with positive and negative whole numbers, including through zero	
	5.1.a.2 Count forwards or backwards in steps of powers of 10 for any given number to 1 000 000	
	5.1.b.1 Read and write numbers to at least 1 000 000 and determine the value of each digit	
	5.1.b.2 Read Roman numerals to 1000 (M) and recognise years written in Roman numerals	
	5.1.b.3 Interpret negative numbers in context	
	5.1.c.1 Order and compare numbers to at least 1 000 000	
	5.1.d.1 Solve number problems and practical problems with number and place value from the Year 5 curriculum	
	5.1.e.1 Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000	
	5.2.a.3 Establish whether a number up to 100 is prime	
	5.2.a.4 Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers	
	5.2.b.1 Add and subtract numbers mentally with increasingly large numbers	
	5.2.b.3 Multiply and divide numbers mentally drawing upon known facts	
	5.2.b.4 Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	
	5.2.c.1 Solve addition and subtraction multi-step problems in familiar contexts, deciding which operations and methods to use and why	
	5.2.c.2 Solve problems involving addition, subtraction, multiplication and division, and a combination of these	
	5.2.c.3 Solve calculation problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes	
	5.2.c.4 Solve problems involving scaling by simple fractions and problems involving simple rates	
	5.2.d.1 Identify multiples and factors, including all factor pairs of a number, and common factors of 2 numbers	
	5.2.d.2 Recognise and square numbers and cube numbers and the notation for squared (2) and cubed (3)	
	5.2.d.3 Recall prime numbers up to 19	
	5.2.e.1 Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)	



# Whinstone Primary School Year 5 Numeracy



1 Below expectations	2 Meeting expectations	3 Exceeding expectations
	5.2.e.2 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	
	5.2.e.3 Divide numbers up to 4 digits by a one-digit number using formal written method of short division and interpret remainders appropriately for the context	
	5.2.f.1 Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	
	5.3.a.3 Recognise and use thousandths and relate them to tenths and hundredths	
	5.3.a.4 Recognise the per cent symbol and understand that per cent relates to 'number of parts per hundred'	
	5.3.b.1 Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	
	5.3.b.2 Recognise mixed numbers and improper fractions and convert from one form to the other	
	5.3.b.4 Read and write decimal numbers as fractions	
	5.3.c.1 Compare and order fractions whose denominators are all multiples of the same number	
	5.3.c.2 Add and subtract fractions with the same denominator and denominators that are multiples of the same number	
	5.3.c.3 Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	
	5.3.c.4 Round decimals with two decimal places to the nearest whole number and to one decimal place	
	5.3.c.5 Read, write, order and compare numbers with up to three decimal places	
	5.3.d.1 Solve a variety of problems involving fractions	
	5.3.d.2 Solve problems involving addition and subtraction involving numbers up to three decimal places	
	5.3.d.3 Solve problems which require knowing key percentage and decimal equivalents	
	5.1.4 Convert between different units of metric measure	
	5.1.5 Understand and use approximate equivalences between metric units and common imperial units	
	5.2.4 Measure the perimeter of composite rectilinear shapes	
	5.2.5 Estimate the area of irregular shapes and volume and capacity	
	5.3.1 Solve problems involving converting between units of time	
	5.3.5 Calculate the perimeter of composite rectilinear shapes	
	5.3.6 Calculate and compare the area of rectangles	



## Whinstone Primary School Year 5 Numeracy



<b>1 Below expectations</b>	<b>2 Meeting expectations</b>	<b>3 Exceeding expectations</b>
	5.1.1 Draw given angles, and measure them in degrees and draw shapes with sides measured to the nearest millimetre	
	5.1.2 Know angles are measured in degrees	
	5.1.3 Identify 3-D shapes, including cubes and other cuboids, from 2-D representations	
	5.2.1 Distinguish between regular and irregular polygons based on reasoning about equal sides and angles	
	5.3.1 Identify angles at a point and one whole turn, angles at a point on a straight line and $\frac{1}{2}$ a turn and other multiples of $90^\circ$	
	5.3.2 Estimate and compare acute, obtuse and reflex angles	
	5.3.3 Use the properties of rectangles to deduce related facts and find missing lengths and angles	
	5.5.1 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.	
	5.1.1 Interpret line graphs	
	5.1.2 Interpret more complex tables, including timetables	
	5.2.2 Complete tables, including timetables	
	5.3.1 Solve comparison, sum and difference problems using information presented in a line graph	
	5.3.2 Solve problems using information in tables, including timetables	