

Autumn Term Year 5	<u>Place Value</u>	<u>Addition and Subtraction</u>	<u>Multiplication and Division</u>	<u>Fractions, Decimals and Percentages</u>	<u>Measurements</u>	<u>Properties of Shapes</u>	<u>Statistics</u>
WRM Small Steps	<ul style="list-style-type: none"> • Number to 10,000. • Roman numerals to 1,000. • Number to 100,000. • Compare and order numbers to 100,000. • Numbers to a million. • Counting in 10s, 100s, 1,000s, 10,000s and 100,000s. • Negative numbers. 	<ul style="list-style-type: none"> • Add whole numbers with more than 4 digits (column method). • Subtract whole numbers with more than 4-digits (column method). • Inverse operations (addition and subtraction). 	<ul style="list-style-type: none"> • Multiples. • Factors. • Common factors. • Prime numbers. • Square numbers. • Cube numbers. • Multiplying by 10, 100 and 1000. • Dividing by 10, 100 and 1000. • Multiples of 10, 100 and 1000. 	<ul style="list-style-type: none"> • Equivalent fractions. • Improper fractions to mixed numbers. • Mixed numbers to improper fractions. • Number sequences. • Compare and order fractions less than 1. • Compare and order fractions greater than 1. • Add and subtract fractions. • Add fractions within 1. • Add 3 or more fractions. • Add fractions. • Add mixed numbers. • Subtract fractions. • Subtract mixed numbers. • Subtract - breaking the whole. • Subtract 2 mixed numbers. • Multiply unit fractions by an integer. • Multiply non-unit fractions by an integer. • Multiply mixed numbers by integers. • Fraction of an amount. 	<ul style="list-style-type: none"> • Measure perimeter. • Calculate perimeter. • Area of rectangles. • Area of compound shapes. • Area of irregular shapes. 	<ul style="list-style-type: none"> • Measuring angles in degrees. • Measuring with a protractor (1). • Measuring with a protractor (2). • Drawing lines and angles accurately. 	<ul style="list-style-type: none"> • Read and interpret line graphs. • Draw line graphs. • Use line graphs to solve problems.

NC Links

				<ul style="list-style-type: none"> Using fractions as operators. 			
	<ul style="list-style-type: none"> Read, write, order and compare numbers to at least 1000000 and determine the value of each digit. Count forwards or backwards in steps of powers of 10 for any given number up to 1000000. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero. Read Roman numerals to 1000 (M) and recognise years written in Roman numerals. 	<ul style="list-style-type: none"> Add and subtract numbers mentally with increasingly large numbers. Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction). 	<ul style="list-style-type: none"> 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 and divide numbers mentally, drawing upon known facts. 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). 	<ul style="list-style-type: none"> Compare and order fractions whose denominators are 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 $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$]. 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 $0.71 = \frac{71}{100}$]. Solve problems involving multiplication and division, 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. Draw given angles, and measure them in degrees. 	<ul style="list-style-type: none"> Solve comparison, sum and difference problems using information presented in a line graph.

				including scaling by simple fractions and problems involving simple rates.			
TT Statements	<ul style="list-style-type: none"> I can use negative numbers in context when looking at temperature or money; counting forwards and backwards through 0. I can read, write, order and compare numbers to at least 1,000,000 (one million) and say the value of each digit I can read Roman numerals to 1000 and recognise years written in these 	<ul style="list-style-type: none"> I can add and subtract numbers with more than 4 digits using written methods I can add and subtract 2 and 3 digit numbers in my head 	<ul style="list-style-type: none"> I can find multiples and factors of a number and can identify factors common to 2 different numbers I can use vocabulary relating to prime numbers, prime factors and composite numbers I can work out if any given number up to 100 is a prime number and can recall prime numbers up to 19 I can mentally multiply and divide numbers using the times tables I can identify and use square numbers and their notation I can identify and use cube numbers and their notation 	<ul style="list-style-type: none"> I can compare and order fractions whose denominators are all multiples of the same number I can find and name equivalent fractions of a given fraction including tenths and hundredths I can write equivalent fractions of a given fraction including tenths and hundredths I can identify mixed numbers and improper fractions and convert from one to another such as $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$ I can add and subtract fractions whose denominators are all multiples of the same number I can multiply fractions by whole numbers using objects and pictures 	<ul style="list-style-type: none"> I can measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres I can calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm^2), square metres (m^2) and estimate the area of irregular shapes 	<ul style="list-style-type: none"> I can estimate and compare acute, obtuse and reflex angles. I know that angles are measured in degrees I can draw given angles and measure them in degrees 	<ul style="list-style-type: none"> I can solve comparison, sum and difference problems using information presented in a line graph