

Year 5 Maths – Autumn Term



| | Week 1-3 Block 1 | Week 4-5 Block 2 | Week 6-7 Block 3 | Week 8-9 Block 4 | Week 10-11 Block 5 | Week 12 |
|------------------------|--|--|--|--|---|-------------------|
| | Number: Place Value | Number: Addition and Subtraction | Statistics | Number: Multiplication and Division | Measurement: Perimeter and Area | Consolidat ion |
| White Rose Small Steps | Counting in 10s, 100s, 1000s, 10,000s, 100,000s Compare and order numbers to a million Round numbers to a million | Add whole numbers with more than 4-digits (compact column method) Subtract whole numbers with more than 4-digits (compact column method) Round to estimate and approximate Inverse operations (addition and subtraction) Multi-step addition and subtraction problems | Read and interpret line graphs Draw line graphs Use line graphs to solve problems Read and interpret tables Two way tables Timetables | 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 | Measure perimeter Calculate perimeter Area of rectangles Area of compound shapes Area of irregular shapes | All |
| National Curriculum | 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 | 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. | Solve comparison, sum and difference problems using information presented in a line graph Complete, read and interpret information in tables, including timetables. | 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 method, including long multiplication for 2-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) 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. | 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 | All |



Year 5 Maths – Spring Term



| | Week 1-3 Block 1 Week 4-9 Block 2 | | Week 10-11 Block 5 | Week 12 | |
|------------------------|---|--|---|---------------|--|
| | Number: Multiplication and Division | Number: Fractions | Number: Decimals and Percentages | Consolidation | |
| White Rose Small Steps | Multiply 4-digits by 1-digit (short multiplication) Multiply 2-digits by 2-digits (long multiplication) Multiply 3-digits by 2-digits (long multiplication) Multiply 4-digits by 2-digits (long multiplication) Divide 4-digits by 1-digit (short division) Divide with remainders | 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 mixed numbers Subtract mixed numbers Subtract 2 mixed numbers Multiply unit fractions by an integer (for example ¹/₆ x 4) Multiply a non-unit fraction by an integer (for example ²/₈ x 2) Multiply mixed numbers by integers (for example 2 ²/₃ x 4) Fractions of amounts Commutativity in fractions (for example 2 lots of ¹/₁₀ is the same as ¹/₁₀ of 2) | Decimals to 2 d.p. Decimals as fractions Understanding thousandths Thousands as decimals Rounding decimals Order and compare decimals Understand percentages Percentages as fractions and decimals Equivalent FDP | All | |
| National Curriculum | 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 Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign | 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 = ⁶/₅ = 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) Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates | Read, write, order and compare numbers with up to three decimal places Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents Round decimals with two decimal places to the nearest whole number and to one decimal place 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 ¹/₂ ¹/₄ ¹/₅ ²/₅ ⁴/₅ and those fractions with a denominator of a multiple of 10 or 25. | All | |



Year 5 Maths – Summer Term



| | Week 1-4 Block 1 | Week 5-7 Block 2 | Week 8 Block 3 | Week 9-10 Block 4 | Week 11 Block 5 | Week 12 |
|------------------------|---|---|--|--|--|-------------------|
| | Number: Decimals | Geometry: Properties of Shapes | Geometry: Position and Direction | Measurement: Converting Units | Measurement: Volume | Consolidat ion |
| White Rose Small Steps | Adding decimals within 1 Subtracting decimals within 1 Finding complements which sum to make 1 (for example 0.55 + _ = 1) Adding decimals – crossing the whole (0.45 + 0.67 = 1.12) Adding decimals with the same number of decimal places Subtracting decimals with the same number of decimal places Adding decimals with a different number of decimal places Adding decimals with a different number of decimal places Adding and subtracting whole numbers and decimals Decimal sequences Multiplying decimals by 10,100 and 1000 Dividing decimals by 10, 100 and 1000 | Measuring angles in degrees Measuring with a protractor Drawing lines and angles accurately Calculating angles on a straight line Calculating angles around a point Calculating lengths and angles in shapes Regular and irregular polygons Reasoning about 3-D shapes | Position in the first quadrant Reflection Reflection with coordinates Translation Translation with coordinates | Convert kilograms to grams and vice versa Convert kilometres to metres and vice versa Covert litres to millilitres and vice versa Convert grams to milligrams and vice versa Converting between metric units e.g. millimetres to metres. inilimetres to metres. Understand and use approximate equivalences between metric units and imperial units such as inches, pounds (lbs) and pints. e.g. 1 inch ≈ 2.5cm Converting units of time e.g. ½ of an hour = minutes Timetables | What is volume? Compare volume Estimate volume Estimate capacity | All |
| National Curriculum | Solve problems involving number up to three decimal places Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. | 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 ½ 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 | 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. | 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 Solve problems involving converting between units of time | Estimate volume [for example, using 1 cm³ blocks to build cuboids (including cubes)] and capacity [for example, using water] Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. | All |







