| White Rose Maths – New Scheme of Learning (2022 - 2023)<br>Whole School Long Term Plan – Spring Term | | | |
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| **Nursery** | **Number**<br>• Count in lots of different ways and at different opportunities (actions, jumping, clapping)<br>• Beginning to represent numbers using fingers<br>• Count reliably from 1 to 5, pointing to each object as we count.<br>• Understands some talk about immediate past and future, e.g. 'before', 'later' or 'soon'<br>• Use positional language | **Shape**<br>• Shows awareness of shapes in the environment | |
| **Reception** | **Counting Principles**<br>• **1 to 1 principle** (assign one number to each number being counted)<br>• **The stable order principle** (children understand that numbers need to be said in a certain order)<br>• **The cardinal principle** (children know the number assigned to the final object is the total number of objects in the group)<br>• **The abstract principle** (children understand that anything can be counted including things that cannot be touched including sounds and movement)<br>• **The order-irrelevance principle** (children understand that the order we count things in is irrelevant, there will still be the same number) | **Addition and Subtraction**<br>• Numbers to 5 (Introducing 0. Number bonds to 5)<br><br>**Number and Place Value**<br>• Counting to 10 (6, 7, 8, 9, 10. Comparing groups of up to 10)<br><br>**Addition and Subtraction**<br>• Addition to 10 (Combining 2 groups to get the whole. Number bonds to 10 using a Tens Frame. Number Bonds to 10 using a Part-Whole Model) | **Geometry**<br>• **Shape and Space (**Spatial awareness. 3D and 2D shapes) |

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| **Year 1** | **Number: Place Value (within 20)**<br>(To count forwards and backwards within 20. Write numbers to 20 in words and numerals. Understand tens and Ones. Compare and order groups and numbers) | **Number: Addition and Subtraction (within 20)**<br>Add by counting on. Find and make number bonds. Add by making 10. Subtraction not crossing/crossing 10 | **Number: Place Value (within 50)**<br>**Multiples of 2, 5 and 10**<br>Represent numbers to 50. One more/less. Compare objects and numbers within 50. Order numbers within 50. Count in 2s and 5s. | **Measure: Length and Height**<br>Compare length and height. Measure length. | **Measure: Weight and Volume**<br>Introduce weight and mass. Measure and compare mass. Introduce capacity and volume. Measure capacity and volume. |
| **Year 2** | **Measure: Money**<br>(To recognise pounds and pence. Compare money. Find totals of…, Find the difference between…, Give change) | **Number: Multiplication and Division**<br>Make equal groups – sharing and grouping. Divide by 2. Odd and even numbers. Divide by 5 and 10. | **Measure: Length and Height**<br>Measure length cm/m. Compare/ order length. Use 4 operations with length. | **Measure: Mass, capacity and Temperature**<br>Choose and use appropriate units to estimate and measure length, height, mass, temperature and capacity to the nearest unity using rulers, thermometers, scales etc. Compare and order units of measure and record results using < > = | |
| **Year 3** | **Number: Multiplication and Division (B)**<br>Compare statements. Related facts. Multiply 2-digit by 1-digit. Divide 2-digit by 1-digit | **Measure: Length and Perimeter**<br>Measure length. Equivalent length – cm to m, mm to cm. Compare, add, subtract length. Measure and calculate perimeter. | **Number: Fractions (A)**<br>Unit/non-unit fractions. Making the whole. Count in tenths. Tenths as a decimal. Fractions on a number line. Fractions of a set of objects. | **Measure: Mass and Capacity**<br>Measure, compare, add and subtract length, mass, volume and capacity. | |
| **Year 4** | **Number: Multiplication and Division (B)**<br>Multiply 3 numbers. Factor pairs. Efficient multiplication. Written methods. | **Measure: Length and Perimeter**<br>(To measure and calculate the perimeter of a rectilinear shape, including squares in cm and m. | **Number: Fractions**<br>Equivalent fractions. Fractions greater than 1. Counting in fractions. Add 2 or more fractions. Subtract 2 fractions. | **Number: Decimals (A)**<br>Recognise tenths and hundredths. Know tenths as a decimal. Tenths on a place value grid/number line. Divide 1-digit | |

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| | Multiply/divide a 2-digit by 1-digit. Multiply/divide a 3-digit by 1-digit. | convert between different units of measure eg. M to km) | Subtract from whole amounts. Calculate fractions of a quantity. | by 10. Divide 2-digit by 10. Hundredths as a decimal. Hundredths on a place value grid. Divide 1 or 2-digits by 100. | | |
| **Year 5** | **Number: Multiplication and Division (B)** Multiply 4-digits by 1-digit. Multiply 2-digits, 3-digits and 4-digits by 2-digits. Divide 4-digits by 1-digit. Divide with remainders. | **Number: Fractions (B)** Multiply a unit fraction and a non-unit fraction by an integer. Multiply a mixed number by an integer. Calculate a fraction of a quantity and an amount. Find the whole. Use fractions as operators. | **Number: Decimals and Percentages** Read, write, order and compare numbers with up to 3 decimal places. Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. Round decimals with 2 decimal places to the nearest whole number. Percentages as fractions and decimals. | **Measure: Perimeter and Area** (To measure and calculate the perimeter of composite rectilinear shapes in cm and m. Calculate and compare the area of rectangles using standards units of measure. Estimate the area of irregular shapes) | **Statistics** (To complete, read and interpret information in tables including timetables) | |
| **Year 6** | **Number: Ratio** Ratio and fractions. Calculate ratio. Use scale factors. Calculate scale factors. | **Number: Algebra** Use simple formulae. Generate and describe linear number sequences. Express missing number problems algebraically. Find pairs of numbers that satisfy an equation with 2 unknowns. Enumeration possibilities of | **Number: Decimals** Multiply and divide by 10, 100, 1000. Multiply and divide decimals by integers. Use written division methods where the answer has up to 2 decimal places. Round to a specified degree of accuracy. | **Number: Fractions, Decimals and Percentages** Decimal and fraction equivalents. Fractions as division. Understanding percentages. Fractions to percentages. Equivalent fractions, decimals and percentages. Order | **Measure: Perimeter. Area and Volume** Recognise that shapes with the same area can have different perimeters and vice versa. Recognise when it is possible to use a formula for area and volume of shape. Calculate the area of | **Statistics** Read, draw and interpret line graphs and pie charts. Illustrate and name parts of circles inc. radius, diameter, circumference. Know diameter is twice circumference. Calculate mean as an average. |

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| | | combinations of 2 variables. | | fractions, decimals and percentages. 1-step and multi-step percentages of amounts. Percentages – missing values | parallelograms and triangles. Calculate, estimate and compare volume of cubes and cuboids using standard units. | |