Whitegate CE Primary School
"Trusting in God; Growing in Wisdom"

Year Three

Number Place value	• **Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.** • **Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).** • **Compare and order numbers up to 1000.** • Round numbers **(up to 1000)** to the nearest ten **or hundred.** • Identify, represent and estimate numbers using different representations. • **Read and write numbers up to 1000 in numerals and in words.** • **Use larger numbers to at least 1000, applying partitioning to place value [for example, 146 = 100 + 40 + 6; 146 = 130 + 16].** • **Solve number problems and practical problems involving these ideas.**
Addition and Subtraction	• **Add and subtract numbers mentally, including:** - **a three-digit number and ones;** - **a three-digit number and tens;** - **a three-digit number and hundreds.** • **Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction. [See Calculation Policy and video footage.]** • **Estimate the answer to a calculation [by using rounding] and use inverse operations to check answers.** • **Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.**
Multiplication and Division	• **Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. [Through doubling, connect the 2, 4 & 8 multiplication tables.]** • **Develop efficient mental methods [for example, 4 x 12 x 5 = 4 x 5 x 12 = 20 x 12 = 240 and 3 x 2 = 6; 6 ÷ 3 = 2 and 6 ÷ 2 = 3].** • **Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.** • **Solve problems, including:** - **missing number problems** - **positive integer scaling problems [for example, four times as high, eight times as long]** - **correspondence problems in which n objects are connected to m objects [for example, 3 hats and four coats, how many different outfits?]**
Fractions	• **Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10. [Link to division by 10.]** • **Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.** • **Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. [Use number lines to deduce relationships between them, such as size and equivalence.]** • **Recognise and show, using diagrams, equivalent fractions with small denominators.** • **Add and subtract fractions with the same denominator within one whole [for example, 5/7 + 1/7 = 6/7].** • **Compare and order unit fractions, and fractions with the same denominators.** • **Solve problems that involve all of the above.**

Measurement	• **Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). [Compare and use mixed units such as 1kg and 200g. use simple equivalents of mixed units, for example, 5m = 500 cm.]** • **Measure the perimeter of simple 2-D shapes.** • Add and subtract amounts of money to give change, using both £ and p in practical contexts. [Record £ and p separately as the decimal recording of money is introduced formally in Y4.] • Tell and write the time from an analogue clock, **including using Roman numerals from I to XII, and 12-hour and 24-hour clocks.** • Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours. • **Use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight.** • Know the number of seconds in a minute and the number of days in each month, year and leap year. • Compare durations of events [for example to calculate the time taken by particular events or tasks].
Geometry Properties of Shapes	• **Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them [extending at this stage to symmetrical and non-symmetrical polygons and polyhedral].** • **Recognise angles as a property of shape or a description of a turn.** • Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn. • **Identify whether angles are greater than or less than a right angle.** • **Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.** • **Connect decimals and rounding to drawing and measuring straight lines in centimetres.**
Statistics	• Interpret and present data using bar charts, pictograms and tables. • **Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts [for example, 2, 5, 10 units per cm] and pictograms and tables.**