Grange Primary School
Year 5 Maths Curriculum Coverage

Autumn

Chapter 1 – Numbers to 1 000 000

To read and represent numbers to 100 000.
To read and represent numbers to 1 000 000.
To read and represent numbers to 1 000 000 using number discs.
To compare numbers to 1 000 000 using place value.
To compare numbers to 1 000 000 using place value.
To compare numbers to 1 000 000 using pictorial representations and proportionality.
To compare numbers to 1 000 000 from pictorial representations, using lists and number lines.
To make and identify patterns in numbers using knowledge of place value.
To make number patterns that decrease in multiples of 10 000 or 100 000.
To round numbers to the nearest 10 000 using number lines and bar graphs.
To round numbers to the nearest 100 000 using number lines and bar graphs.
To round numbers to the nearest 100, 1000, 10 000 and 100 000 using number lines.

Chapter 2 – Whole Numbers: Addition and Subtraction

To add using the 'counting on' strategy with concrete materials and number lines.
To subtract using the counting backwards strategy with concrete materials.
To add numbers within 1 000 000 using rounding and concrete materials.
To use addition and subtraction to solve comparison problems with numbers to 1 000 000.
To add numbers within 1 000 000 using the column method of addition.
To subtract using the column method, number bonds and number discs using numbers to 1 000 000.
To add and subtract using number bonds as a key strategy using numbers within 1 000 000.
To consolidate and refine addition skills and place-value knowledge to solve addition problems.
To subtract numbers to 1 000 000 using concrete materials, the column method and number bonds.
To consolidate and refine subtraction skills and place-value knowledge to solve subtraction problems.
To consolidate and refine subtraction skills and place-value knowledge to solve subtraction problems.

Chapter 3 – Whole Numbers: Multiplication and Division

To consolidate and review multiplication; to find the result of multiplying by a number.
To consolidate and review multiplication; to find the numbers we can multiply by to get a number.
To define and find common factors of numbers to 100.
To identify and name the prime numbers; to recognise prime numbers as numbers that only have 2 factors.
To define and determine prime numbers to 100.
To create and determine square and cubed numbers.
To multiply 1- and 2-digit numbers by 10, 100 and 1000.
To multiply 2- and 3-digit numbers by a single-digit number using multiple strategies.
To multiply 4-digit numbers by single digit numbers.
To multiply 4-digit numbers by single-digit numbers with regrouping, using a variety of strategies.
To multiply a 4-digit number by a single-digit number, with regrouping from the ones, tens and hundreds, using multiple methods.
To multiply 2-digit numbers by 2-digit numbers using multiple methods.
To multiply a 2-digit number by a 2-digit number using multiple methods, including the grid method, number bonds and column method, with regrouping.
To multiply a 3-digit number by a 2-digit number, with the grid method and column method being key strategies.
To multiply a 3-digit number by a 2-digit number with regrouping, using the column method as the key strategy.
To find 1000s, 100s and 10s in a 4-digit number using concrete materials.
To divide 3- and 4-digit numbers by 1-digit numbers using number bonds and long division as the key methods.
To divide 4-digit numbers by single-digit numbers, where number bonds and long division are the key strategies.
To divide 3-digit numbers by single-digit numbers using long division, short division and mental methods that gives rise to remainders.

Chapter 4 – Whole Numbers: Word Problems

To solve word problems involving multiple operations; to identify the operation needed to carry out the plan.
To solve word problems involving multiplication and division using bar models as the main heuristic.
To solve word problems involving multiple operations, identifying key information and representing information using model diagrams.
To solve word problems involving multiple operations, using bar models as they key heuristic to represent key

information.

Chapter 5 – Graphs

To read the information presented in a table and interpret its meaning.

To read and respond to information presented in a table.

To read and respond to tables that have a variety of data sets.

To read and interpret information provided in a line graph where a single line represents the data.

To read and interpret the information presented in a line graph where the data is represented by more than 1 line.

To read and interpret information presented on a line graph when data is presented on more than 1 line.

To read and interpret information presented in a table and turn it into a line graph; to determine relationships between data sets.

Spring

Chapter 6 – Fractions

To divide whole numbers to create fractions; to create mixed numbers and improper fractions when dividing whole numbers.

To write improper fractions and mixed numbers using a number line and pictorial methods.

To find equivalent fractions using pictorial methods.

To compare and order fractions using the pictorial method.

To compare and order improper fractions using the pictorial method.

To compare mixed numbers using pictorial representations; to find common denominators where one fraction is already the common denominator for all fractions in the question.

To make number pairs (number bonds) with fractions of different denominators.

To add unlike fractions by finding a common denominator using pictorial methods.

To add unlike fractions by finding a common denominator using pictorial methods.

To add together unlike fractions where the sum is greater than 1, creating mixed numbers or improper fractions.

To add unlike fractions which create improper fractions and mixed numbers that give rise to simplification.

To subtract fractions with different denominators; to subtract fractions from whole numbers.

To subtract fractions where the denominators are not the same; to use bar models as a key strategy for subtracting fractions.

To subtract fractions and mixed numbers from mixed numbers with different denominators.

To multiply fractions by whole numbers creating other fractions, mixed numbers or improper fractions.

To multiply fractions by whole numbers where the product is an improper fraction or mixed number.

To multiply mixed numbers by whole numbers, creating larger mixed numbers.

To multiply mixed numbers by whole numbers in multi-step word problems.

Chapter 7 – Decimals

To write decimal numbers.

To read and write decimals.

To read and write decimals.

To compare tenths and hundredths written as decimals.

To order and compare decimals.

To compare and order decimals of amounts.

To write fractions as decimals.

To add and subtract amounts in decimals.

To add and subtract decimals. To add and subtract amounts in pounds and pence.

To add and subtract amounts in pounds and pence.

To add and subtract decimals. To add and subtract amounts in pounds and pence.

To add and subtract decimals to find the smallest possible sum and difference.

To add and subtract decimals. To find number pairs that make a total of 1.

To add and subtract the perimeter of an object using decimals.

To round decimals to the nearest whole number. To round numbers to nearest tenth.

Chapter 8 – Percentage

To compare quantities.

To compare fractions, decimals and percentages. To convert fractions to decimals and percentages.

To convert values of an amount into percentages. To convert fractions into percentages.

To convert values of an amount into percentages. To convert fractions into percentages.

Chapter 9 – Geometry

To know the names and qualities of acute, right, obtuse and reflex angles.

To measure angles using a protractor.

To draw, measure and add angles using a protractor.
To measure angles using a protractor. To identify two angles which add up to a straight line.
To investigate angles that, when combined, make 360 degrees.
To draw angles using a protractor.
To draw lines and angles with a high level of accuracy.
To describe the sides and angles of both rectangles and squares.
To investigate the angles of various quadrilaterals, including squares and rectangles.
To solve problems involving angles in rectangles.
To solve problems involving angles.
To use our understanding of angles to solve problems.
To investigate regular polygons.

Summer

Chapter 10 – Position and Movement
To name and plot points.
To describe the position of a shape following a translation.
To describe movements and reflecting shapes.
To describe the movement of a 2-D shape when reflected.
To reflect a shape more than once.

Chapter 11 – Measurements
To convert units of length.
To convert units of length including centimetres and metres.
To convert units of length.
To solve problems by converting units of length.
To convert units of mass.
To convert units of mass, including grams, into kilograms.
To convert units of mass.
To convert units of mass, including kilograms and pounds.
To convert units of time.
To convert units of time from days into weeks and months.
To convert units of time.
To convert units of time.
To convert units of time.
To read the temperature on a thermometer.

Chapter 12 – Area and Perimeter
To find the perimeter of shapes.
To find shapes with a specific perimeter.
To find the perimeter of different shapes.
To use scale diagrams to find the perimeter of a shape.
To measure the area of shapes by counting squares.
To measure the area of squares.
To measure the area of a shape.
To measure area in square metres.
To measure area in square metres.
To find the area of shapes in square metres.
To make an estimation of area in kilometres.

Chapter 13 – Volume
To understand the volume of solids.
To find the volume of 3-D shapes.
To find the volume of solids.
To find the capacity of a cuboid.
To find the capacity of rectangular boxes.
To compare and convert units of volume.
To convert units of volume (metric and imperial).
To convert units of volume (metric and imperial).
To solve word problems involving volume.
To solve word problems involving volume.

Chapter 14 – Roman Numerals
To write Roman numerals to 1000.
To write numbers in their thousands in Roman numerals.