Year 5 2023-24 Maths Overview

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Number and Place Value ➢ Identify the value of each digit in numbers up to 100,000 (hundred thousand, ten thousand, thousand, hundred, tens, ones) ➢ Order and compare numbers to 100,000 including ordering numbers on a number line. ➢ Read and write numbers up to 100,000 in words and figures. ➢ Count forwards and backwards in steps of powers of 10 (e.g.10, 100, 1000, 10 000,) for any given number up to 100,000 ➢ Round any number up to 100,000 to the nearest 10, 100, 1000, 10 000 Solve number problems and practical problems involving all of the above			**Addition and Subtraction** ➢ Add and subtract whole numbers with more than 4 digits, using formal written methods (columnar addition and subtraction). Including tricky questions such as repeated carrying or repeated exchanging E.g. 32,005 – 9,342 ➢ 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.		**Multiplication and Division** (with some measure) ➢ Multiply and divide numbers mentally drawing upon known facts. ➢ Multiply 3 numbers together e.g. 4 x 5 x 12 ➢ Multiply and divide whole numbers (and those involving decimals) by 10, 100, and 1000 ➢ Multiply 2 and 3 digit numbers by a 1 digit number using written methods for multiplication using expanded method if necessary moving onto short multiplication. ➢ Multiply numbers with up to 4 digits by a one digit number using formal written methods for multiplication. *(All ARE pupils need to be doing this confidently with challenging number sentences.)* Multiply numbers with up to 4 digits by 2 digit numbers using formal written method long multiplication.		Half term	➢ Divide numbers with up to 4 digits by 1 digit using the formal written method of short division initially without carrying and moving into carrying. *(All ARE pupils need to be doing this confidently with challenging number sentences.)* ➢ Interpret remainders appropriately in contexts. ➢ 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 fraction		**Fractions** ➢ Compare and order fractions whose denominators are the same. ➢ Compare and order fractions whose denominators are all multiples of the same number. ➢ Recognise and show, using diagrams, families of common equivalent fractions. ➢ 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.			**Number** ➢ Count backwards through zero to include negative numbers. ➢ Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers through zero. ➢ Solve number problems and practical problems involving all of the above

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Spring Term

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Number and Place Value ➢ Identify the value of each digit in numbers up to 1 000 000 (one million, hundred thousand, ten thousand, thousand, hundred, tens, ones.) ➢ Order and compare numbers up to 1 000 000 including ordering numbers on a number line. ➢ Count forwards and backwards in steps of powers of 10 (e.g.10, 100, 1000, 10 000,100 000) for any given number up to 1000,000 ➢ Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000, 100 000. ➢ Solve number problems and practical problems involving all of the above		**Fractions: Decimals** ➢ . Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten. ➢ Recognise and write the decimal equivalent of any number of tenths or hundredths. ➢ Find the effect of dividing a 1 or 2 digit number by 10 and 100; identifying the value of the digits in the answer as ones, tenths and hundredths ➢ Round decimal with one decimal place to the nearest whole number. ➢ Round decimals with two decimal places to the nearest whole number and to one decimal place ➢ Compare numbers with the same number of decimal places up to 2 decimal places. ➢ Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents ➢ Read and write decimal numbers as fractions [for example, 0.71 = 71/100] ➢ Read, write, order and compare numbers with up to three decimal places ➢ Multiply and divide (whole numbers) and those involving decimals by 10, 100, and 1000 ➢ Add and subtract decimal numbers up to 2 decimal places e.g. 5.67 – 3.07 = ➢ Add and subtract decimals that are compliments of each other e.g. 0.64 + ___ = 1 solve problems involving number up to three decimal places				Half term	**Measurement** ➢ 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 ➢ 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 ➢ Estimate volume [for example, using 1 cm³ blocks to build cuboids (including cubes)] and capacity [for example, using water] ➢ solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days (recap) ➢ read, write and convert time between analogue and digital 12- and 24-hour clocks (recap) ➢ Solve problems involving converting between units of time. ➢ Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling ➢ Solve problems involving converting between units of time.				**Geometry: Properties of shape** (angle) ➢ Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles ➢ Draw given angles, and measure them in degrees (o) ➢ Identify angles at a point and one whole turn (total 360o) ➢ Identify angles at a point on a straight line and 2 1 a turn (total 180o) ➢ Identify other multiples of 90o ➢ 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.	

Year 5 2023-24 Maths Overview

Summer Term													
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Fractions, Decimals and Percentages ➢ Week 1 to recap previously taught fraction, decimal objectives where needed. ➢ Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. ➢ Solve problems involving multiplication and division, including scaling by simple fractions and problem solving involving simple rates. ➢ 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 ½, ¼, 1/5, 2,5, 4/5 and those fractions with a denominator of a multiple of 10 or 25.				**Measurement: Time (Year 4 unit)** ➢ Tell and write the time from an analogue clock, including clocks with Roman numerals with increasing accuracy to the **nearest minute.** ➢ Record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as am/ pm, morning afternoon, noon and midnight. ➢ Know the number of seconds in a minute, number of days in each month and days in a year/ leap year. ➢ Convert between different units of measure, for example hours to minutes. ➢ compare durations of events [for example to calculate the time taken by particular events or tasks]. ➢ Read, write and convert time between analogue and digital 12 and 24 hour clocks. ➢ Solve problems converting from hours to minutes; minutes to seconds; years to months; weeks to days		Half term	**Geometry: Properties of shape** ➢ Compare and classify geometric shapes, including quadrilaterals and triangles based on their properties. ➢ Identify 3-D shapes, including cubes and other cuboids, from 2-D representations ➢ Distinguish between regular and irregular polygons based on reasoning about equal sides and angles	**Geometry: Position and direction** ➢ Describe positions on a 2-D grid as coordinates in the first quadrant ➢ Describe movements between positions as translations of a given unit to the left/right and up/down ➢ Plot specified points and draw sides to complete a given polygon, *including drawing pairs of axis in one quadrant. Read, write and use pairs of coordinates including using ICT tools.*	**Assessment Week** ➢ Read Roman numerals to 1000 (M) and recognise years written as Roman numerals.	**Multiplication** **Factors and composites** ➢ Recognise and use factor pairs and commutativity in mental calculations. ➢ 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 (non-prime) numbers ➢ Establish whether a number up to 100 is a prime number and recall the prime numbers up to 19		**Statistics** ➢ Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs ➢ Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs. Relate the graphical representation of data to represent change over time	