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| **Maths at Bowerham** | | | | | | |
| Units of Maths (provisional – these may be subject to change) | | | | | | |
|  | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| Week 1 | Place Value | Counting, Multiplication and Sorting | Place Value | Length | Place Value and statistics | Addition and Subtraction |
| Week 2 | Statistics | Mass and Volume and Capacity | Addition and Subtraction | Addition and Subtraction | Multiplication and Division |
| Week 3 | Length and Mass | Fractions | Addition and Subtraction | 2D and 3D Shape | Capacity and Volume  Temperature | Statistics and Calculation |
| Week 4 | Addition and Subtraction | Capacity and Volume Money | Money | Fractions and Position and Direction | Fractions | Measurement |
| Week 5 | Time | Multiplication and Division | Time | Position and Direction and Time | Assess and Review |
| Week 6 | 2D and 3D Shape | Assess and Review | Assess and Review | 2D and 3D Shape |
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| **Topic** | **End of Year Expectation** |
| Number and Place Value | * Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward * Read and write numbers to at least 100 in numerals and in words * Recognise the place value of each digit in a two-digit number (tens, ones) * Identify, represent and estimate numbers using different representations, including the number line * Partition numbers in different ways (e.g. 23 = 20 + 3 and 23 = 10 + 13) * Compare and order numbers from 0 up to 100; use and = signs * Find 1 or 10 more or less than a given number * Round numbers to at least 100 to the nearest 10 * Understand the connection between the 10 multiplication table and place value * Describe and extend simple sequences involving counting on or back in different steps * Use place value and number facts to solve problems |
| Addition and Subtraction | * Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting) * Select a mental strategy appropriate for the numbers involved in the calculation * Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot * Understand subtraction as take away and difference (how many more, how many less/fewer) * Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 * Recall and use number bonds for multiples of 5 totalling 60 (to support telling time to nearest 5 minutes) * Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: - a two-digit number and ones - a two-digit number and tens - two two-digit numbers - adding three onedigit numbers * Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems * Solve problems with addition and subtraction including with missing numbers: - using concrete objects and pictorial representations, including those involving numbers, quantities and measures - applying their increasing knowledge of mental and written methods |
| Multiplication and Division | * Understand multiplication as repeated addition and arrays * Understand division as sharing and grouping and that a division calculation can have a remainder * Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot * Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers * Derive and use doubles of simple two-digit numbers (numbers in which the ones total less than 10) * Derive and use halves of simple two-digit even numbers (numbers in which the tens are even) * Calculate mathematical statements for multiplication (using repeated addition) and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs * Solve problems involving multiplication and division (including those with remainders), using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts |
| Number – Fractions | * Understand and use the terms numerator and denominator * Understand that a fraction can describe part of a set * Understand that the greater the denominator is, the more pieces it is split into and therefore the smaller each part will be * Recognise, find, name and write fractions 𝟏/𝟑 , 𝟏/𝟒 , 𝟐/𝟒 and 𝟑/𝟒 of a length, shape, set of objects or quantity * Write simple fractions for example, 𝟏 𝟐 of 6 = 3 and recognise the equivalence of 𝟐/𝟒 and 𝟏/2 * Count on and back in steps of 𝟏/𝟐 and 𝟏/4 |
| Geometry – Properties of Shapes | * Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line * Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces * Identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] |
| Geometry – Position and Direction | * Order/arrange combinations of mathematical objects in patterns /sequences * Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise) |
| Statistics | * Compare and sort objects, numbers and common 2-D and 3-D shapes and everyday objects * Interpret and construct simple pictograms, tally charts, block diagrams and simple tables * Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity * Ask and answer questions about totalling and comparing categorical data |
| Measurement | * Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity and volume (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels * Compare and order lengths, mass, volume/capacity and record the results using >, < and = * Recognise and use symbols for pounds (£) and pence (p) * Combine amounts to make a particular value * Find different combinations of coins that equal the same amounts of money * Know the number of minutes in an hour and the number of hours in a day * Compare and sequence intervals of time * Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times * Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change and measures (including time) |
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