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| Place Value | Number - 4 operations | Autumn half term | Number - 4 operations  Fractions  Decimals | End of Autumn term |  |
| Weeks 1-3 | Weeks 4-8 | Weeks 9 - 15 | Weeks 16 - 21 |
| EW  - Read, write, order and compare numbers to 10 000 000 and determine the value of each digit.  - Round any whole number to a required degree of accuracy.  - Solve number and practical problems involving the above.  Interpret and construct pie charts and line graphs and use these to solve problems.  DR  - Use negative numbers in context and calculate intervals across zero.  - Identify common factors, multiples and prime numbers.  - Solve number and practical problems involving the above. | EW  - Solve problems involving addition, subtraction, multiplication & division.  - Solve addition and subtraction multi-step problems in context, deciding which operations and methods to use and why.  - Perform mental calculations, including with mixed operations and large numbers.  - Use estimation to check answers to calculations and determine, in the context of a problem, the appropriate degree of accuracy.  - multiply multi-digit numbers up to 4 digits by a 2-digit whole number using formal method of long multiplication.  - Divide numbers up to 4 digits by a 2-digit whole number using the formal method of long division and interpret remainders and whole numbers, fractions or by rounding appropriately.  - Divide numbers up to 4 digits by a 2-digit number using short division where appropriate, interpreting remainders appropriate to the context.  DR  -Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.  - Compare and order fractions, including fractions > 1  - Generate and describe linear number sequences (with fractions) | EW  -Identify the value of each digit in numbers given to 3 decimal places and multiply numbers by 10, 100 and 1,000 giving answers up to 3 decimal places.  - Multiply one-digit numbers with up to 2 decimal places by whole numbers.  - Use written division methods in cases where the answer has up to 2 decimal places.  - Solve problems which require answers to be rounded to specified degrees of accuracy.  - Use their knowledge of the order of operations to carry out calculations involving the 4 operations.  - Solve problems involving addition, subtraction, multiplication & division.  DR  - Add and subtract fractions with different denominations and mixed numbers, using the concept of equivalent fractions.  - Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example 14 x 12 = 18 ]  - Divide proper fractions by whole numbers [for example 13 ÷ 2 = 16 ]  - Associate a fraction with division and calculate decimal fraction equivalents [ for example, 0.375] for a simple fraction [for example 38] | EW  Solve problems involving the calculation of percentages [for example, of measures and such as 15% of 360] and the use of percentages for comparison.  Recall and use equivalences between simple fractions, decimals and percentages including in different contexts.  Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.  Convert between miles and kilometres.    Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3dp.  Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts.    Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.  DR  Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.  Recognise that shapes with the same areas can have different perimeters and vice versa.    Recognise when it is possible to use formulae for area and volume of shapes.    Calculate the area of parallelograms and triangles.  Calculate, estimate and compare volume of cubes and cuboids using standard units, including cm3, m3 and extending to other units (mm3, km3) |

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| Spring half term |  | End of Spring term |  | | | Summer half term |  |
| Weeks 22-28 | Week 29  Week 30 | Week 31 | Week 32 | Weeks 33-39 |
| EW  Use simple formulae.  Generate and describe linear number sequences.  Express missing number problems algebraically.  Find pairs of numbers that satisfy an equation with two unknowns.  Enumerate possibilities of combinations of two variables.  Solve problems involving similar shapes where the scale factor is known or can be found.  Calculate the mean as an average.  Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.  DR  Draw 2-D shapes using given dimensions and angles.  Recognise, describe and build simple 3-D shapes, including making nets.  Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons.  Interpret and construct pie charts and line graphs and use these to solve problems.  - Describe positions on the full coordinate grid (all four quadrants).  - Draw and translate simple shapes on the coordinate plane, and reflect them in the axes. | SATs REVISION | SATS WEEK |  | Problem solving  Enterprise  Transition |