| Wk | Maths Aspect | Y3 Non-Negotiable | Y4 Non- Negotiable | Resources | Y3 NC obj | Y4 NC obj |
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| 1 & 2 | Fractions | Knows how to connect tenths to place value, decimal measures and to division by 10. Knows unit and non-unit fractions as numbers on the number line and how to represent equivalence. | Knows how to use factors and multiples to recognise equivalent fractions and simplify where appropriate. | NCETM | * To recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.   ● To recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.  ● To compare and order unit fractions, and fractions with the same denominators.  ● To add and subtract fractions with the same denominator within one whole (5/7 + 1/7 = 6/7).  ● To solve problems that involve all of the above. | * To solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.   ● To recognise and write decimal equivalents of any number of tenths or hundredths.  ● To recognise and write decimal equivalents to |
| 3 | Addition and subtraction | Add and subtract numbers mentally using different strategies.  Use the formal written methods for addition and subtraction. | Add and subtract numbers mentally using different strategies.  Use the formal written methods for addition and subtraction  Knows how to choose the order of calculations in two step problems. | Mental strategies: Arithmetic taken form NCETM  Word problems - twinkl | * Add and subtract numbers mentally. * Add and subtract numbers using formal written methods. | * Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.   To estimate and use inverse operations to check answers to a calculation.  ● To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. |
| 4 | Multiplication and division | Knows how to multiply/divide two-digit numbers by one-digit numbers using expanded or formal written methods of short multiplication and division. | Knows how to solve integer scaling problems and harder correspondence problems. | White Rose  NCETM  Word problems | To 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. | ● To recall multiplication facts for multiplication tables up to 12 × 12.  ● To use place value, known and derived facts to multiply and divide mentally, including multiplying by 0 and 1; dividing by 1; multiplying together three numbers.  ● To multiply two-digit and three-digit numbers by a one-digit number using formal written layout.  ● To solve problems involving multiplying and adding, including using the distributive law and harder multiplication problems such as which *n* objects are connected to *m objects.* |
| 5 & 6 | Shape – rotation and translation | Recognise and name 3-D shapes by looking from different angles. | Use coordinates to describe and plot position of shape and describe its movements. | White Rose | * Recognise 3-D shapes in different orientations to describe them. | * Describe positions on a 2D 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. |
| 7 | Measures – time | Compare and calculate durations and length of time between events. |  | White Rose | * Compare durations of events [for example to calculate the time taken by particular events or tasks] | * Solve problems involving converting from hours to minutes, minutes to seconds; years to months; weeks to days. |
| 8 | Shape – angles and lines | Identify right angles and angles greater than or less than. Use right angles to describe turns.  Know what horizontal and vertical means and whether these are parallel or perpendicular. | Order angles and name them based on size.  Know what symmetry is and where it is shown in 2D shapes. Draw their own shapes with lines of symmetry. | White Rose | * Recognise angles as a property of a 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 or less than right angle. * Identify horizontal and vertical lines and pairs of perpendicular and parallel lines. | * Identify acute and obtuse anfles and compare and order angles up to two right angles by size. * Identify lines of symmetry in 2D shapes presented in different orientations. * Complete a simple symmetric figure with respect to a specific line of symmetry. |
| 9 | Statistics | Find, interpret and present data in a range of bar charts, pictograms and tables. | Find, interpret and present data in a range of graphs and tables | White Rose | * Interpret and present data using bar charts, pictograms and tables. * Solve one step and two step questions using information presented in scaled bar charts and pictograms and tables. | * Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. * Solve comparison, sum and difference problem using information presented in bar charts, pictograms, tables and other graphs. |
| 10, 11, 12 | Four operations  Solving mixed problems | Revision and application of skills | Revision and application of skills | Mixed resources | * Revision and application of skills | * Revision and application of skills |