

Year 7 Overview

| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
|--------|----------------------|--------|--------|---------------------------------|--------|--------|------------------------------------|---------------------------|--------|---------|---------|------------------|
| Autumn | Number - Place Value | | | Number - Addition & Subtraction | | | Number – Multiplication & Division | | | | | Revise & Improve |
| Spring | Number - Fractions 1 | | | | | | Statistics 1 | Number – Negative numbers | | | | Revise & Improve |
| Summer | Algebra 1 | | | | | | Geometry – Lines & Angles | | | | | Revise & Improve |

| Year Group | Y7 | Term | Autumn |
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|--|--------|--------|--|--------|--------|---|--------|--------|---------|---|---------|
| <p><u>Number: Place value</u></p> <p>Understand and use place value for decimals, measures and integers of any size.</p> <p>Order positive and negative integers, use the number line as a model for ordering of the real numbers; use the symbols =, \neq, <, >, \leq, \geq</p> <p>Round numbers and measures to an appropriate degree of accuracy [for example, to a number of decimal places or significant figures]</p> | | | <p><u>Number- Addition & subtraction</u></p> <p>Use formal written methods for addition and subtraction of integers and decimals.</p> <p>Recognise and use relationships between addition and subtraction including inverse operations.</p> <p>Calculate and solve problems involving perimeter.</p> | | | <p><u>Number – Multiplication & division</u></p> <p>Multiply and divide by 10, 100 and 1000</p> <p>Use formal written methods for multiplication and division of integers and decimals.</p> <p>Recognise and use relationships between operations including inverse operations.</p> <p>Understand the order of operations.</p> <p>Use the concepts and vocabulary of prime numbers, factors (or divisors), common factors and highest common factor (HCF).</p> <p>Use integer powers and associated real roots (square, cube and higher), recognise powers of 2, 3, 4, 5 and distinguish between exact representations of roots and their decimal approximations.</p> <p>Find the prime factor decomposition of a number.</p> <p>Calculate and solve problems involving area of rectangles, triangles and parallelograms.</p> <p>Calculate the mean average.</p> <p>Use approximation through rounding to estimate answers and calculate possible resulting errors expressed using inequality notation $a < x \leq b$</p> | | | | <p>Time at the beginning or end of the term for consolidation gap filling, seasonal activities, assessments, etc.</p> | |

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| Year Group | Y7 | Term | Spring |
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|--|--------|--------|--------|--------|--------|---|--------|---|---------|---------|---|
| <p><u>Number: Fractions 1</u></p> <p>Represent fractions using diagrams and on a number line.</p> <p>Express one quantity as a fraction of another.</p> <p>Identify and use equivalent fractions.</p> <p>Compare and order fractions; use the symbols =, ≠, <, >, ≤, ≥</p> <p>Convert between mixed numbers and improper fractions.</p> <p>Simplify fractions.</p> <p>Convert between fractions and decimals</p> <ul style="list-style-type: none"> Tenths, hundredths, thousandths Associating a fraction with division to convert any fraction to a decimal. <p>Use the concepts and vocabulary of multiples and lowest common multiple (LCM).</p> <p>Add and subtract any fraction.</p> <ul style="list-style-type: none"> Fractions with the same denominator. Fractions with a denominator that is a multiple of the other. Fractions with different denominators <p>Find a fraction of an amount.</p> | | | | | | <p><u>Statistics 1</u></p> <p>Understand the data handling cycle.</p> <p>Understand the different types of data.</p> <p>Collect, organise and interpret data.</p> <ul style="list-style-type: none"> Tally charts Two way tables Median, mode and range Consider outliers <p>Draw and interpret bar charts, pictograms and line graphs.</p> | | <p><u>Number: Negative numbers</u></p> <p>Use the four operations with negative numbers.</p> <p>Understand the order of operations.</p> | | | <p>Time at the beginning or end of the term for consolidation gap filling, seasonal activities, assessments, etc.</p> |

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| Year Group | Y7 | Term | Summer |
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| Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
|--|--------|--------|--------|--------|--------|--|--------|--------|---------|---------|---|
| <p><u>Algebra 1</u></p> <p>Introduction to algebra</p> <ul style="list-style-type: none"> Understand that a letter represents a variable. Understand the difference between an expression, equation, formula, term, function and identity. Form expressions from situations describes in words. <p>Pupils should be taught to: use and interpret algebraic notation, including:</p> <ul style="list-style-type: none"> ab in place of $a \times b$ $3y$ in place of $y + y + y$ and $3 \times y$ a^2 in place of $a \times a$, a^3 in place of $a \times a \times a$; a^2b in place of $a \times a \times b$ $\frac{b}{a}$ in place of $b \div a$ coefficients written as fractions rather than as decimals brackets <p>Substitute numerical values into formulae and expressions, including scientific formulae. (including examples with negatives)</p> <p>Simplify and manipulate algebraic expressions to maintain equivalence by:</p> <ul style="list-style-type: none"> collecting like terms. <p>Use algebraic methods to solve simple linear equations in one variable where the unknown appears on one side of the equation.</p> <p>Generate terms of a sequence from either a term-to-term or a position-to-term rule. Recognise arithmetic sequences and find the nth term.</p> | | | | | | <p><u>Geometry – Lines & angles</u></p> <p>Describe, sketch and draw using conventional terms and notations: points, lines, parallel lines, perpendicular lines, right angles, regular polygons, and other polygons that are reflectively and rotationally symmetric.</p> <p>Derive and illustrate properties of triangles, quadrilaterals, circles, and other plane figures [for example, equal lengths and angles] using appropriate language and technologies</p> <p>Use a protractor to measure and draw angles.</p> <p>Apply the properties of angles at a point, angles at a point on a straight line, vertically opposite angles.</p> <p>Understand and use alternate and corresponding angles on parallel lines.</p> <p>Derive and use the sum of angles in a triangle and a quadrilateral.</p> <p>Derive and use the sum of angles in a triangle and use it to deduce the angle sum in any polygon, and to derive properties of regular polygons.</p> | | | | | <p>Time at the beginning or end of the term for consolidation gap filling, seasonal activities, assessments, etc.</p> |