

Curriculum Overview – Mathematics

| Year | Overview | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 | Student Resources and Educational Trips |
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| 7 | <p>Over the course of year 7, students will begin KS3 by ensuring the security of knowledge gained across KS2. This knowledge is extended and developed to look at applied versions, with a distinct emphasis on problem solving. During the year, students will be introduced to algebraic concepts in depth for the first time. Additionally, students will learn about different types of numbers, including decimals, fractions, prime numbers, square, cube numbers etc., and use them in different capacities, including geometric and ratio problems.</p> | <p>Place value and ordering integers and decimals</p> <ul style="list-style-type: none"> Recognise and use integer place value up to one billion. Recognise and use decimal place value to at least hundredths. Work out intervals and use number lines. Compare and order numbers. Use ordered lists to find the range and the median of a set of numbers. Round numbers to positive powers of ten Round numbers to one significant figure <p>Solving problems with Addition and Subtraction</p> <ul style="list-style-type: none"> Use mental and formal written methods of addition with integers and decimals, including choosing the most appropriate method. Solve problems in the context of perimeter, money and frequency trees and tables. Solve problems in the context of bar charts and line charts. <p>Solving problems with multiplication and division</p> <ul style="list-style-type: none"> Multiply by 10, 100 and 1000, 0.1 and 0.01, and convert metric units. Use mental and formal written methods of multiplication and division. Find the HCF and LCM of small numbers. Evaluate areas of triangles, rectangles, and parallelograms Find the mean of a set of numbers. | <p><i>(Conclude solving problems with multiplication and division, then move on to the next unit)</i></p> <p>Understand and use algebraic notation.</p> <ul style="list-style-type: none"> Use single function machines and series of two function machines with numbers, bar models and letters. Use and interpret algebraic notation. Understand and use inverse operations. Form and substitute into expressions, including to generate sequences. Represent functions graphically. <p>Equality and Equivalence</p> <ul style="list-style-type: none"> Understand equality. Use fact families. Form and solve one-step equations. Understand equivalence of algebraic expressions Collect like terms. <p>Operations and equations with directed number</p> <ul style="list-style-type: none"> Order directed numbers, both in contextualised and abstract situations Revisit four operations to include directed number. Use a calculator with directed number. Solve two-step equations (with and without a calculator) Use the order of operations. | <p><i>(Conclude Operations and equations with directed number then move on to the next unit)</i></p> <p>Addition and subtraction of fractions</p> <ul style="list-style-type: none"> Represent tenths and hundredths on diagrams and number lines. Convert mixed numbers and improper fractions. Add and subtracting fractions with <ul style="list-style-type: none"> the same denominator one denominator a multiple of the other different denominators Add and subtract fractions and decimals e.g., $\frac{3}{4} + 0.2$ <p>Sequences</p> <ul style="list-style-type: none"> Describe and continue sequences in diagram and number forms, both linear and non-linear Compare numerical and graphical forms. | <p><i>(Conclude Sequences then move on to the next unit)</i></p> <p>Geometric Notation and Reasoning</p> <ul style="list-style-type: none"> Mental arithmetic strategies Use known facts to derive other facts, Evaluate an algebraic expression given a related fact. Use estimation. Calculate and use angles at a point, angles on a straight line and vertically opposite angles. Calculate missing angles in triangles and quadrilaterals. | <p>Prime numbers and proof</p> <ul style="list-style-type: none"> Recognise prime, square and triangle numbers. Express a number as a product of prime factors. Powers and roots Make and test conjectures. Understand and use counterexamples. <p>Fraction, decimal and percentage equivalence</p> <ul style="list-style-type: none"> Represent tenths and hundredths on diagrams and number lines. Interchange between fractions, decimals, and percentages for multiples of one tenth and one quarter Interpret pie charts. Equivalent fractions Convert between other fractions, decimals, and percentages. <p>Fractions and Percentages of amounts</p> <ul style="list-style-type: none"> Work out simple fractions and percentages of amounts, with and without a calculator | <p><i>Conclude Fractions and Percentages of Amounts then move on to the next unit)</i></p> <p>Multiplying and Dividing Fractions</p> <ul style="list-style-type: none"> Multiply and divide a fraction by an integer. Multiply and divide a fraction by a fraction. Understand and use the reciprocal. <p>Ratio and Scale</p> <ul style="list-style-type: none"> Understand ratio and its link to multiplication. Use ratio notation. Reduce ratios to simplest form. Solve ratio problems. Calculate the circumference of a circle. | <p>Student Resources</p> <p>Students across all years in KS3 will be given access to SPARX mathematics, for both homework and extra mathematical support. https://sparxmaths.com</p> <p>Additionally, students may also gain benefit from the mathematical courses through Seneca. https://senecalearning.com/en-GB/</p> <p>Alternate locations for further resources are linked below: Corbett Maths https://corbettmaths.com</p> <p>Maths Made Easy https://mmerevise.co.uk</p> <p>Dr Frost Maths (Extend Work) https://www.drfrostmaths.com</p> <p>KS3 Maths BBC Bitesize https://www.bbc.co.uk/bitesize/subjects/zqhs34j</p> <p>Student Educational Trips</p> <p>In year 7, during the Autumn term, students will be given the opportunity to visit the Royal Greenwich Observatory. Students will begin to see the relationship between mathematics and science as they explore the grounds of this museum, considering the mathematics used to work in astronomy. In addition, performances in the planetarium will help inspire students for future studies.</p> |

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| | | <ul style="list-style-type: none"> Find simple fractions and percentages of amounts. Begin to use the order of operations | | | | | | |
| | | Assessment <ul style="list-style-type: none"> Entry diagnostic testing. Low stakes quiz at the end of a block | Assessment <ul style="list-style-type: none"> Low stakes quiz at the end of a block CET KS3 Assessment point 1 | Assessment <ul style="list-style-type: none"> Low stakes quiz at the end of a block | Assessment <ul style="list-style-type: none"> Low stakes quiz at the end of a block | Assessment <ul style="list-style-type: none"> Low stakes quiz at the end of a block | Assessment <ul style="list-style-type: none"> Low stakes quiz at the end of a block CET KS3 Assessment point 2 | |
| 8 | <p>Year 8 students extend and develop their knowledge from year 7 by revisiting and extending their knowledge of algebra. This leads into graphical techniques, which is seen later in the year as well. Students will then begin to develop an understanding of different unit bases, and how the number system can be manipulated to best support us. Furthermore, students begin to look at statistics and statistical representations. Concluding the year, students look at area, perimeter, and volume, with a transformation of geometric figures.</p> | Developing Algebraic Manipulation and Representation <ul style="list-style-type: none"> Expand, and factorise into, single brackets. Form and use expressions, formulae, and identities. Form and solve equations and inequalities with and without brackets. Distinguish between equations, expressions, formulae, and identities. Revisit and extend to equations and inequalities with unknowns on both sides using all previous contexts: angles, probability, area etc. Change the subject of a formula. Plot and interpret straight line graphs. Understand and use the equations of a straight line, including lines parallel to the axes. Make links between direct proportion and straight lines of the form $y = kx$ Model situations by translating them into expressions, formulae, and graphs | <p><i>(Conclude Developing Algebraic Manipulation and Representation, then move to the next unit)</i></p> Number Sense <ul style="list-style-type: none"> Mental arithmetic strategies Use known facts to derive other facts, Evaluate an algebraic expression given a related fact. Use estimation. Developmental strategies Convert between metric measures and units. Estimation, including rounding to a given number of decimal places. Use the order of operations. Sets and Probability <ul style="list-style-type: none"> Understand and use set notation. Draw and interpret Venn diagrams. Understand and use the language of probability. Calculate the probability of a single event. Use the sum of probabilities of an event is 1. | Multiplicative change <ul style="list-style-type: none"> Use scale factors, linking to ratio, to solve simple direct proportion problems. Convert between currencies, including using graphs. Draw and interpret scale diagrams and maps. Fractions and percentages <ul style="list-style-type: none"> Develop understanding of fractions, decimals, and percentages Evaluate percentage increases and decreases. Use multipliers to solve percentage problems. Express one number as a percentage of another Tables and Probability <ul style="list-style-type: none"> List outcomes using sample space diagrams for one and two events. Find probabilities using tables and Venn diagrams. | Representing and Interpreting Data <ul style="list-style-type: none"> Draw and interpret scatter graphs. Understand correlation. Draw and use lines of best fit. Understand grouped and ungrouped, discrete, and continuous data. Design and use one and two-way tables. Understand and use primary and secondary sources of data. Collect data, including using questionnaires. Interpret and construct statistical diagrams, including multiple bar charts. Construct and interpret pie charts. Compare distributions using charts. Identify misleading graphs. | Measures of Location <ul style="list-style-type: none"> Revisit the median and mean, including finding the total given the mean. Find the mean of grouped data. Work out the mode and modal class. Choose the appropriate average. Comparing distributions using measures Angles in parallel lines and polygons <ul style="list-style-type: none"> Review Y7 angles rules Understand and use parallel lines and angles. Revisit geometric notation Work out angles in special quadrilaterals. Find and use the sum of interior and exterior angles of a polygon. Prove simple geometric facts. Area of trapezia and circles <ul style="list-style-type: none"> Review area of shapes covered in year 7. Calculate the area of a trapezium. Calculate the area of a circle, and the area of parts of a circle. Use significant figures. Calculate the area of compound shapes. | <p><i>(Conclude Area if Trapezia and Circles, then move to the next unit)</i></p> Line symmetry and reflection <ul style="list-style-type: none"> Recognise line symmetry in polygons and other shapes. Reflect shapes in horizontal, vertical, and diagonal lines. Three dimensional shapes <ul style="list-style-type: none"> Understand the language of faces, edges, and vertices. Know the names of common prisms and non-prisms. Identify 2-D shapes within 3-D shapes. Work out the volume and surface area of cuboids and cylinders. Work out the volume of any prism. Work out missing lengths given area and/or volume. | Student Resources <p>Students across all years in KS3 will be given access to SPARX mathematics, for both homework and extra mathematical support. https://sparxmaths.com Additionally, students may also gain benefit from the mathematical courses through Seneca https://senecalearning.com/en-GB/ Alternate locations for further resources are linked below: Corbett Maths https://corbettmaths.com Maths Made Easy https://mmerevise.co.uk Dr Frost Maths (Extend Work) https://www.drfrostmaths.com KS3 Maths BBC Bitesize https://www.bbc.co.uk/bitesize/subjects/zqhs34j</p> Student Educational Trips <p>In year 8, during the spring term, students will be given the opportunity to visit Bletchley Park. Students will begin to see the development of the Turing machine, which aided in the reduction of time in WWII. Additionally, they will explore the mathematics in codes and cyphers, and learn about one of the most famous mathematicians in recent History – Alan Turing.</p> |
| | | Assessment <ul style="list-style-type: none"> Low stakes quiz at the end of a block | Assessment <ul style="list-style-type: none"> Low stakes quiz at the end of a block CET KS3 Assessment point 3 | Assessment <ul style="list-style-type: none"> Low stakes quiz at the end of a block | Assessment <ul style="list-style-type: none"> Low stakes quiz at the end of a block | Assessment <ul style="list-style-type: none"> Low stakes quiz at the end of a block | Assessment <ul style="list-style-type: none"> Low stakes quiz at the end of a block CET KS3 Assessment point 4 | |

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| 9 | <p>During year 9, students will bring together knowledge over the past two years. Students start with probability. This is an underlying theme sequenced across the year to allow students to make connections to wider mathematical techniques. Furthermore, during year 9 students will start to explore different types of mathematical problems, including the concept of conjecture and deduction.</p> | <p>Constructions and Congruence</p> <ul style="list-style-type: none"> Construct 3-D shapes from nets and construct the net of a given 3-D shape. Construct and use scale drawings. Construct perpendiculars and bisectors Understand congruency. Exploring congruency via construction <p>Straight line graphs</p> <ul style="list-style-type: none"> Interpret straight line graphs. Find and use the equation of a straight line. Reduce equations to the form $y = mx + c$ Compare to linear sequences and finding the rule for the n^{th} term. <p>Pythagoras' Theorem & Trigonometry</p> <ul style="list-style-type: none"> Identify the hypotenuse of a right-angled triangle. Determine whether a triangle is right-angled. Calculate missing sides in right-angled triangles. Use the ratio of side lengths in right angled triangles to find missing information. | <p><i>(Conclude Pythagoras' Theorem & Trigonometry, then move to the next unit)</i></p> <p>Probability</p> <ul style="list-style-type: none"> Relative frequency Expected number of outcomes Independent events <p>Algebraic Representation</p> <ul style="list-style-type: none"> Drawing and reading from quadratics Interpreting other graphs e.g., reciprocal, piecewise Representing inequalities <p>Sequences</p> <ul style="list-style-type: none"> Describe and continue sequences in diagram and number forms, both linear and non-linear Compare numerical and graphical forms. | <p>Standard index form</p> <ul style="list-style-type: none"> Convert between numbers in ordinary and standard form. Compare numbers given in standard form. Calculate with numbers given in standard form, with and without a calculator. <p>Testing Conjectures</p> <ul style="list-style-type: none"> Test conjectures in a wide range of context e.g. Sums and products of odd and even numbers Is a given number in a sequence? Is this shape...? Are these lines parallel? What would happen if...? <p>Indices</p> <ul style="list-style-type: none"> Form expressions using indices. Understand and use the addition and subtraction rules. | <p>Numbers</p> <ul style="list-style-type: none"> Revisit types of number – extend to include rational and real numbers. Revisit fraction arithmetic Extend knowledge of HCF and LCM Revisit standard form <p>Using percentages</p> <ul style="list-style-type: none"> Revisit percentage increase and decrease. Use percentages over 100% Find percentage changes. Use multipliers in a variety of contexts. Solve "reverse percentage" problems. <p>Maths and Money</p> <ul style="list-style-type: none"> Explore financial mathematics including: <ul style="list-style-type: none"> Bills and bank statements Interest Unit pricing (best buys) | <p>Deduction</p> <ul style="list-style-type: none"> Revisit angles rules, including within special quadrilaterals. Find angles using algebraic methods. Use chains of reasoning to evaluate angles. <p>Solving ratio and proportion problems</p> <ul style="list-style-type: none"> Direct proportion problems and graphs Conversion graphs Solve ratio problems given the whole or a part. Simple inverse proportion Unit pricing problems ('best buys') <p>Transformations</p> <ul style="list-style-type: none"> Identify the order of rotational symmetry of a shape. Find the result of rotating a shape. Translate points and shapes by a given vector. Understand variance and invariance in the context of transformations. Enlarge shapes by a positive scale factor, including from a given point. Calculate the lengths of missing sides in similar shapes. | <p><i>(Conclude Transformations, then move to the next unit)</i></p> <p>Rates</p> <ul style="list-style-type: none"> Work with speed, distance, time Solve problems involving density. Work with compound units <p>Revision</p> <ul style="list-style-type: none"> Teachers to choose topics bases on assessment throughout the Key Stage | <p>Student Resources</p> <p>Students across all years in KS3 will be given access to SPARX mathematics, for both homework and extra mathematical support. https://sparxmaths.com</p> <p>Additionally, students may also gain benefit from the mathematical courses through Seneca https://senecalearning.com/en-GB/</p> <p>Alternate locations for further resources are linked below: Corbett Maths https://corbettmaths.com</p> <p>Maths Made Easy https://mmerevise.co.uk</p> <p>Dr Frost Maths (Extend Work) https://www.drfrostmaths.com</p> <p>KS3 Maths BBC Bitesize https://www.bbc.co.uk/bitesize/subjects/zqhs34j</p> <p>Student Educational Trips</p> <p>In year 9, during the summer term, students will be given the opportunity to visit Thorpe Park. Mathematics is central to the construction of rollercoasters, along with the application of scientific theory. Students will explore these concepts in a workshop completed by Thorpe Park members of staff. This helps draw the knowledge gained in Key Stage 3 to a close, and strengthens links to physics aiding future study</p> |
| | <p>Assessment</p> <ul style="list-style-type: none"> Low stakes quiz at the end of a block | <p>Assessment</p> <ul style="list-style-type: none"> Low stakes quiz at the end of a block CET KS3 Assessment point 5 | <p>Assessment</p> <ul style="list-style-type: none"> Low stakes quiz at the end of a block | <p>Assessment</p> <ul style="list-style-type: none"> Low stakes quiz at the end of a block | <p>Assessment</p> <ul style="list-style-type: none"> Low stakes quiz at the end of a block | <p>Assessment</p> <ul style="list-style-type: none"> Low stakes quiz at the end of a block CET KS3 Assessment point 6 | | |

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| 10 | <p>GCSE year 10 starts with exploring Similarity, with trigonometry being a new concept for students to explore. Algebra is a central part to the GCSE course, so this is revisited in half term 2 and extended for students completing higher GCSE. Following this Geometry is explored which leads into problems surrounding ratio and proportional change. Concluding the year, students review statistics and number work to best prepare them for year 11.</p> | <p>Congruence, similarity, and enlargement</p> <ul style="list-style-type: none"> Understand the difference between congruence and similarity. Enlarge a shape about a given point; understand and use similarity. Find missing sides in similar shapes including pairs of similar triangles. Understand and use the conditions for a pair of congruent triangles. <p>Trigonometry</p> <ul style="list-style-type: none"> Understand trigonometric ratios. Work out missing lengths and angles in right-angled triangles Know and use the exact values of key angles. | <p>Representing solutions of equations and inequalities</p> <ul style="list-style-type: none"> Form and solve equations and inequalities in a variety of contexts, including with unknowns on both sides. Represent solutions to inequalities on a number line. Represent solutions to equations graphically. <p>Simultaneous equations</p> <ul style="list-style-type: none"> Understand the meaning of solution, appreciating that some equations have multiple solutions. Form and solve a pair of linear simultaneous equations graphically. Form and solve a pair of linear simultaneous equations algebraically. | <p>Angles & bearings</p> <ul style="list-style-type: none"> Review KS3 angles rules Understand and use bearings. <p>Working with circles</p> <ul style="list-style-type: none"> Review area and circumference Name parts of a circle and perform related calculations. Find areas and volumes related to circles – cylinder, cone, sphere etc. <p>Vectors</p> <ul style="list-style-type: none"> Understand vector notation. Vector arithmetic – addition, subtraction, and multiplication by a scalar Vectors and translations | <p>Ratios & fractions</p> <ul style="list-style-type: none"> Use ratios, including with mixed units. Fractions in ratios Fractions from ratios Combining ratios Unit pricing ('best buys') Currency conversions <p>Percentages and Interest</p> <ul style="list-style-type: none"> Convert fractions, decimals, and percentages. Find percentages and percentages changes. Find one number as a percentage of another. Calculate simple and compound interest. Evaluate exponential change e.g., depreciation. Find original values. <p>Probability</p> <ul style="list-style-type: none"> Review of single event probability – comparing theoretical and experimental Understand and work with mutually exclusive and independent events. Construct and interpret tree diagrams. Find probabilities from frequency trees, tables, and Venn diagrams. | <p>Collecting, representing, and interpreting data</p> <ul style="list-style-type: none"> Understand sampling, including the possible limitations. Construct and interpret tables and line graphs for time series data. Understand and represent with grouped data. Understand and identify correlation. Use lines of best fit, understanding the dangers of extrapolation Construct and interpret frequency polygons. Evaluate measures of location and dispersion Use statistical diagrams and measures to compare distributions. <p>Non- calculator methods</p> <ul style="list-style-type: none"> Use four operations with integers (positive and negative), decimals and fractions with and without context (include all areas of previous study) Work with exact answers e.g., area and volume Evaluate calculations involving percentages. | <p>Types of number and sequences</p> <ul style="list-style-type: none"> Use factors, multiples, primes, and prime factorisation. Recognise arithmetic and geometric sequences. Recognise and use other sequences. <p>Indices and Roots</p> <ul style="list-style-type: none"> Work out powers and roots. Use the rules of indices. Calculate with numbers in standard index form. <p>Manipulating expressions</p> <ul style="list-style-type: none"> Work with expressions and identities Use algebraic arguments. Use fractions in algebra. | <p>Student Resources</p> <p>Students across all years in KS4 will be given access to SPARX mathematics, for both homework and extra mathematical support. https://sparxmaths.com Additionally, students may also gain benefit from the mathematical courses through Seneca. https://senecalearning.com/en-GB/ Further to physical links, revision guides and workbooks will be made available to parents to purchase through the school, which are developed by CGP resources. https://www.cgpbooks.co.uk</p> <p>Alternate locations for further resources are linked below: Corbett Maths https://www.corbettmaths.com</p> <p>Maths Made Easy https://www.mmerevise.co.uk</p> <p>Dr Frost Maths (Extend Work) https://www.dr frostmaths.com</p> <p>KS4 AQA Maths BBC Bitesize https://www.bbc.co.uk/bitesize/examspecs/z8sg6fr</p> <p>Student Education Trips</p> <p>In Y10, during the school year, students will have the opportunity to attend an inspiring mathematics talk, led by some of the country's leading mathematicians in both academic spaces and creative spaces.</p> |
| | | <p>Assessment</p> <ul style="list-style-type: none"> Key stage 4 tier ring diagnostic assessment Low stakes quiz at the end of a block | <p>Assessment</p> <ul style="list-style-type: none"> Low stakes quiz at the end of a block KS4 CET Assessment point 1 | <p>Assessment</p> <ul style="list-style-type: none"> Low stakes quiz at the end of a block | <p>Assessment</p> <ul style="list-style-type: none"> Low stakes quiz at the end of a block | <p>Assessment</p> <ul style="list-style-type: none"> Low stakes quiz at the end of a block | <p>Assessment</p> <ul style="list-style-type: none"> Low stakes quiz at the end of a block KS4 CET Assessment point 2 | |
| 11 | <p>Year 11 students begin by completing work surrounding graphs, both plotting and interpreting. This leads nicely to a review of algebra for foundation students, and an extension for higher stranded pupils. The last part of the year prior to revision is spent looking</p> | <p>Gradients & lines</p> <ul style="list-style-type: none"> Find and use equations of straight lines. <p>Non-linear graphs</p> <ul style="list-style-type: none"> Plot and read from quadratic curves. Understand and find roots. | <p>Expanding & factorising</p> <ul style="list-style-type: none"> Expand a single bracket and binomials. Factorise into a single bracket. Factorise quadratics of the form $x^2 + bx + c$ Solve quadratic equations. Simplify complex algebraic expressions including algebraic fractions. | <p>Multiplicative Reasoning</p> <ul style="list-style-type: none"> Review scale and enlargement Work with direct and inverse proportion Calculate with pressure and density. Determine whether a problem requires additive or | <p>Transforming & constructing</p> <ul style="list-style-type: none"> Revisit transformations of shapes, linking to types of symmetry Perform standard constructions using ruler and protractor or ruler and compasses. Solve loci problems. | <p>Revision</p> <p>During this last half-term in the run up to the final examinations, we expect teachers to work with students on past papers and topics that have been identified that need further attention. We will provide some support</p> | <p>Examinations</p> | <p>Student Resources</p> <p>Students across all years in KS4 will be given access to SPARX mathematics, for both homework and extra mathematical support. https://sparxmaths.com Additionally, students may also gain benefit from the mathematical courses through Seneca. https://senecalearning.com/en-GB/ Further to physical links, revision guides and workbooks will be made available to parents to purchase through the school, which are developed by CGP resources. https://www.cgpbooks.co.uk</p> |

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| <p>at the different types of exam questions, with problem solving, reasoning and mathematical communication the heart of the course. Revision concludes the contact time of the year as directed by classroom teachers.</p> | <ul style="list-style-type: none"> Plot cubic and reciprocal graphs. <p>Using graphs</p> <ul style="list-style-type: none"> Reflect shapes in a given line. Construct and interpret speed, distance, and time graphs. Construct and interpret real-life graphs | <p>Changing the subject</p> <ul style="list-style-type: none"> Review solving linear equations. Change the subject of a formula, including perimeter, area, and volume formulae. Volume of a pyramid <p>Functions</p> <ul style="list-style-type: none"> Find inputs and outputs. Show algebraic expressions are equivalent. Solve problems using the kinematics formulae. | <p>multiplicative reasoning.</p> <p>Geometric Reasoning</p> <ul style="list-style-type: none"> Review angle facts, focusing on the language of reasons and chains of reasoning. Review Pythagoras' theorem and using trigonometrical ratios. <p>Algebraic Reasoning</p> <ul style="list-style-type: none"> Work with complex indices Review simplification of complex expressions and finding the n^{th} term rule Justify e.g., why a number is/isn't in a given sequence. | <p>Listing & describing</p> <ul style="list-style-type: none"> Work with organised lists Sample spaces and probability Complete and use Venn diagrams. Work with plans and elevations Use data to compare distributions. <p>Show that...</p> <ul style="list-style-type: none"> Illustrate equivalence, numerically and algebraically. Justify answers. Use the language of angles rules. Use the conditions for congruent triangles. | <p>material to help with key topics including:</p> <ul style="list-style-type: none"> Number work, including multi-step problem solving. Forming and solving equations and inequalities Working with formulae that students are expected to know e.g., area and volume formulae. Probability etc. | <p>Alternate locations for further resources are linked below:</p> <p>Corbett Maths https://corbettmaths.com</p> <p>Maths Made Easy https://mmerevise.co.uk</p> <p>Dr Frost Maths (Extend Work) https://www.drfrostmaths.com</p> <p>KS4 AQA Maths BBC Bitesize https://www.bbc.co.uk/bitesize/examspecs/z8sg6fr</p> <p>Student Education Trips In Y10, during the school year, students will have the opportunity to attend an inspiring mathematics talk, led by some of the country's leading mathematicians in both academic spaces and creative spaces.</p> |
| | <p>Assessment:</p> <ul style="list-style-type: none"> Low stakes quiz at the end of a block | <p>Assessment:</p> <ul style="list-style-type: none"> Low stakes quiz at the end of a block KS4 CET Assessment Point 3 | <p>Assessment:</p> <ul style="list-style-type: none"> Low stakes quiz at the end of a block | <p>Assessment:</p> <ul style="list-style-type: none"> Low stakes quiz at the end of a block KS4 CET Assessment point 4 | <p>Assessment:</p> <ul style="list-style-type: none"> Low stakes quiz at the end of a block | |
| <p>Notes: Assessments are conducted to assess cumulative knowledge. All low stakes assessments look at the knowledge of the previous unit. Retrieving content from across either key stage is done so through appropriately crafted engage tasks.</p> | | | <p>Examination Specification: AQA GCSE Mathematics (8300) Higher and Foundation tier, both following the same curriculum base. Topic plans identify the foundation and higher elements of the course.</p> | | | <p>Homework: All homework across mathematics is set and scheduled on SPARX. Students get increasing amounts of homework over the five years they are in secondary education. Homework is retrieval based, whilst also interleaving content of current teaching throughout the year.</p> |