

## **MATHEMATICS FACULTY CURRICULUM MAP**

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| INTENT | To develop pupils as competent mathematicians and promote an enthusiasm to study maths at a higher level and/or recognise the value of maths in everyday life.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                      |
|        | Topics shown in BOLD are Higher Tier only in year 10 & 11.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                      |
|        | YEAR 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | YEAR 8                                                                                                                                                                                                                                                                                                                                                                                                                     | YEAR 9                                                                                                                                                                                                                                                                                                                                  | YEAR 10                                                                                                                                                                                                                                                                                                    | YEAR 11                                                                                                                                              |
| Number | <p><b>PLACE VALUE:</b><br/>Understand place value of integers &amp; decimals and use to put these in order and identify on a number line or scale.</p> <p><b>DIRECTED NUMBER:</b><br/>Understand negative numbers and use to put them in order and identify on a number line.<br/>Calculate with negative numbers.</p> <p><b>CALCULATION:</b><br/>Understand the properties of addition, subtraction, multiplication &amp; division. Use mental and formal methods to calculate with integers and decimals. Solve problems involving the 4 operations. Know and use the correct order of operations.</p> <p><b>INDICES:</b><br/>Recognise square &amp; cube numbers and the associated roots. Calculate powers and roots with and without a calculator. Recognise triangular numbers.</p> | <p><b>DIRECTED NUMBER:</b><br/>Calculate with negative numbers.<br/>Find powers and roots involving negative numbers.</p> <p><b>CALCULATION:</b><br/>Solve problems involving the 4 operations with integers and decimals, including money, time and the calendar. Know &amp; use the correct order of operations.</p> <p><b>INDICES:</b><br/>Calculate higher powers &amp; roots. Know &amp; use the laws of indices.</p> | <p><b>PLACE VALUE:</b><br/>Manipulate calculations to find answers to further calculations.</p> <p><b>CALCULATION:</b><br/>Review in R&amp;R starters</p> <p><b>INDICES:</b><br/>Simplify more complex expressions using the laws of indices, including negative powers. Find the reciprocal of a number. Evaluate negative powers.</p> | <p><b>CALCULATION:</b><br/>Solve problems involving the 4 operations.</p> <p><b>INDICES:</b><br/>Simplify more complex expressions using the laws of indices, including negative and fractional powers. Evaluate negative &amp; fractional powers. Change the base of an index number. Simplify surds.</p> | <p><b>CALCULATION:</b><br/>Solve problems involving the 4 operations, focusing on GCSE questions.</p> <p><b>INDICES:</b><br/>Review in revision.</p> |

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|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                            | <p>Add, subtract, multiply &amp; divide surds.<br/>Expand brackets with surds.<br/>Rationalise the denominator of a surd</p> |                                                                                                                                                                                 |
|  | <p>MULTIPLES, FACTORS &amp; PRIMES:<br/>Find multiples &amp; factors of numbers.<br/>Find the Highest Common Factor (HCF) and Lowest Common Multiple (LCM) of two or more numbers.</p> <p>FRACTIONS, DECIMALS &amp; %:<br/>Represent fractions, decimals and % on a number line.<br/>Identify equivalent fractions &amp; cancel fractions to simplest form.<br/>Understand % as part of 100 and fractions as division.<br/>Convert between key fractions, decimals and %</p> | <p>STANDARD FORM:<br/>Convert between normal numbers &amp; standard form.<br/>Order standard form numbers.<br/>Calculate with standard form numbers with &amp; without a calculator.</p> <p>MULTIPLES, FACTORS &amp; PRIMES:<br/>Write numbers as the product of their prime factors and use to calculate HCF and LCM.</p> <p>FRACTIONS, DECIMALS &amp; %:<br/>Convert fluently between fractions, decimals and % including fractions greater than 1.</p> | <p>STANDARD FORM:<br/>Solve problems involving standard form numbers.</p> <p>MULTIPLES, FACTORS &amp; PRIMES:<br/>Use prime factors to find the HCF or LCM of numbers or expressions.<br/>Solve contextual problems involving HCF &amp; LCM.</p> <p>FRACTIONS, DECIMALS &amp; %:<br/>Convert between fractions and recurring decimals.</p> |                                                                                                                              | <p>STANDARD FORM:<br/>Review in revision.<br/>.</p> <p>MULTIPLES, FACTORS &amp; PRIMES:<br/>Review in revision.</p> <p>FRACTIONS, DECIMALS &amp; %:<br/>Review in revision.</p> |

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|  | <p><b>FRACTIONS &amp; % OF AMOUNTS:</b><br/>Convert between fractions and mixed numbers.<br/>Find fractions and % of amounts with and without a calculator.</p> <p><b>CALCULATE WITH FRACTIONS:</b><br/>Add , subtract, multiply &amp; divide fractions &amp; mixed numbers.</p> <p><b>ROUNDING &amp; ESTIMATION:</b><br/>Round numbers to powers of 10 and decimals places.</p> | <p><b>FRACTIONS &amp; % OF AMOUNTS:</b><br/>Calculate fractions and % of amounts, including fractions greater than 1 and % greater than 100%. Increase and decrease by a fraction or %, including use of decimal multipliers. Express one value as a fraction or % of another. Calculate % change. Find the original value before a % or fractional change.</p> <p><b>CALCULATE WITH FRACTIONS:</b><br/>Solve problems involving the 4 operations with fractions and mixed numbers.<br/>Add, subtract, multiply &amp; divide simple algebraic fractions.</p> <p><b>ROUNDING &amp; ESTIMATION:</b><br/>Round to a given number of significant figures. Estimate answers to calculations by rounding to 1 significant figure. Understand the limits of accuracy when rounding.</p> | <p><b>FRACTIONS &amp; % OF AMOUNTS:</b><br/>Solve problems involving fractions and %<br/>Find the original amount given a fraction or % or after a fractional or % change.<br/>Solve problems involving simple &amp; compound interest.<br/>Solve problems involving repeated % change in other contexts.</p> <p><b>CALCULATE WITH FRACTIONS:</b><br/>Solve problems involving the 4 operations with fractions and mixed numbers.<br/>Add, subtract, multiply &amp; divide simple algebraic fractions.</p> <p><b>ROUNDING &amp; ESTIMATION:</b><br/>Find the upper &amp; lower bounds &amp; error interval of a rounded value.<br/>Calculate with bounds.</p> | <p><b>FRACTIONS &amp; % OF AMOUNTS:</b><br/>Solve problems involving fractions and % of amounts.</p> <p><b>CALCULATE WITH FRACTIONS:</b><br/>Solve problems involving the 4 operations with fractions and mixed numbers.</p> <p><b>ROUNDING &amp; ESTIMATION:</b><br/>Review in revision.</p> | <p><b>FRACTIONS &amp; % OF AMOUNTS:</b><br/>Solve problems involving the fractions &amp; %, focusing on GCSE questions.</p> <p><b>CALCULATE WITH FRACTIONS:</b><br/>Solve problems involving the fractions, focusing on GCSE questions.</p> |
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| Ratio & Proportion | <p>RATIO:<br/>Understand the meaning &amp; representation of ratio.</p> | <p>RATIO:<br/>Find equivalent ratios and cancel ratios to their simplest form.<br/>Write ratio in the form 1:n.<br/>Solve problems where one part of a ratio is known.<br/>Share in a given ratio.<br/>Solve problems where the difference between parts of a ratio are known.<br/>Convert between ratio, fractions and %.</p> <p>PROPORTION:<br/>Solve problems involving direct proportion ( incl exchange rates, best buys, recipes, rates of change &amp; unit conversion).<br/>Use conversion graphs.</p> <p>MAPS &amp; SCALE<br/>DRAWINGS:<br/>Draw &amp; interpret scale diagrams.<br/>Interpret maps using scale factors and ratios.</p> | <p>RATIO:<br/>Solve problems involving ratio.<br/>Combine ratios.</p> <p>PROPORTION:<br/>Solve problems involving direct proportional reasoning.<br/>Plot &amp; use conversion graphs &amp; direct proportion graphs.</p> <p>MAPS &amp; SCALE<br/>DRAWINGS:<br/>Use ratio in maps &amp; scale drawing to convert between measures on maps/drawings and actual lengths.</p> | <p>RATIO:<br/>Solve problems involving ratio.<br/>Combine ratios.<br/><b>Change ratios.</b><br/><b>Relate ratio to fractions &amp; linear functions.</b></p> <p>PROPORTION:<br/>Solve problems involving direct &amp; inverse proportion.<br/>Find missing values in proportion tables.<br/>Represent proportional relationships algebraically &amp; graphically.</p> | Review all ratio & proportion in revision. |

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| Algebra | <p>ALGEBRAIC NOTATION &amp; SIMPLIFYING:<br/>Understand algebraic notation.<br/>Simplify algebraic expressions.</p> <p>FLOWCHARTS, SUBSTITUTION &amp; INVERSE OPERATIONS:<br/>Find the inputs &amp; outputs of a given function machine.<br/>Given the input &amp; output find a function.<br/>Substitute values, including negatives, into simple algebraic expressions.</p> | <p>ALGEBRAIC NOTATION &amp; SIMPLIFYING:<br/>Form algebraic expressions.<br/>Work with negative numbers in expressions.</p> <p>BRACKETS &amp; FACTORISING:<br/>Expand &amp; simplify single brackets.<br/>Factorise expressions into a single bracket.</p> <p>FLOWCHARTS, SUBSTITUTION &amp; INVERSE OPERATIONS:<br/>Substitute values, including negatives &amp; decimals, into expressions &amp; formulae.</p> | <p>QUADRATICS:<br/>Expand &amp; simplify double brackets.<br/>Factorise quadratic expressions into double brackets.</p> <p>FORMULAE:<br/>Substitute fractions into expressions &amp; formulae including key scientific formulae<br/>Rearrange formulae.</p> | <p>QUADRATICS &amp; ALGEBRAIC FRACTIONS:<br/>Review expanding double brackets &amp; factorising.<br/>Solve quadratic equations by factorising.<br/><b>Expand triple brackets.</b><br/><b>Form &amp; solve quadratic equations.</b><br/><b>Solve quadratic equations using the quadratic formula.</b><br/><b>Simplify algebraic fractions.</b><br/><b>Add, subtract, multiply &amp; divide algebraic fractions.</b></p> <p>FORMULAE:<br/>Review substitution into expressions &amp; formulae.<br/>Review rearranging formulae.</p> | <p>QUADRATICS &amp; ALGEBRAIC FRACTIONS:<br/>Review expanding double brackets &amp; factorising.<br/>Review solving quadratic equations by factorising.<br/>Solve quadratic equations graphically.<br/><b>Solve quadratic equations using the quadratic formula.</b><br/><b>Complete the square on algebraic expressions and use to solve equations &amp; find turning points.</b><br/><b>Simplify algebraic fractions.</b><br/><b>Add, subtract, multiply &amp; divide algebraic fractions.</b></p> <p>FUNCTIONS:<br/><b>Understand function notation and find inputs &amp; outputs to functions.</b><br/><b>Find composite &amp; inverse functions.</b></p> |

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|  | <p>LINEAR EQUATIONS:<br/>Solve simple linear equations.</p> <p>COORDINATES &amp; LINEAR GRAPHS:<br/>Work with co-ordinates in 4 quadrants.<br/>Plot linear graphs from a table.</p> | <p>LINEAR EQUATIONS:<br/>Solve more complex linear equations.<br/>Form &amp; solve linear equations.</p> <p>COORDINATES &amp; LINEAR GRAPHS:<br/>Solve geometric problems involving coordinates.<br/>Plot linear graphs.<br/>Understand gradient and y-intercept.<br/>Find the midpoint of a line segment.</p> | <p>LINEAR EQUATIONS &amp; INEQUALITIES:<br/>Review forming &amp; solving linear equations.<br/>Understand inequality notation and represent inequalities on a number line.</p> <p>COORDINATES &amp; GRAPHS:<br/>Understand the link between coordinates on a line and its equation.<br/>Given the equation of a line find its gradient and y-intercept.<br/>Find the equation of a line.<br/>Find the midpoint of a line segment.<br/>Solve simultaneous equations graphically.<br/>Plot quadratic graphs &amp; find the turning point.</p> <p>SEQUENCES:</p> | <p>EQUATIONS &amp; INEQUALITIES:<br/>Solve linear inequalities &amp; represent the solution on a number line.<br/><b>Represent inequalities graphically &amp; using set notation.</b><br/><b>Solve linear simultaneous equations.</b></p> <p>LINEAR &amp; NON-LINEAR GRAPHS:<br/>Review plotting linear graphs.<br/>Review equation of a linear graph.<br/>Recognise equations of parallel lines.<br/><b>Recognise equations of perpendicular lines.</b><br/><b>Work out the equation of parallel &amp; perpendicular lines.</b><br/>Plot quadratic graphs &amp; use to solve quadratic equations.<br/><b>Plot more complex non-linear graphs including cubic, exponential &amp; reciprocal.</b></p> | <p>SIMULTANEOUS EQUATIONS &amp; INEQUALITIES:<br/>Solve linear simultaneous equations.<br/><b>Form &amp; solve simultaneous equations.</b><br/><b>Solve non-linear simultaneous equations.</b><br/><b>Solve linear equations with two variables.</b><br/><b>Solve non-linear simultaneous equations.</b><br/><b>Use iterative methods to solve non-linear equations.</b></p> <p>LINEAR &amp; NON-LINEAR GRAPHS:<br/>Review linear graphs.<br/>Plot &amp; recognise quadratic, cubic &amp; reciprocal graphs.<br/><b>Plot &amp; recognise exponential &amp; circle graphs.</b><br/><b>Recognise the equation of a circle.</b><br/><b>Find the equation of a tangent to a circle.</b><br/><b>Understand how the transformation of a function affects its graphs and the coordinates on the graph.</b></p> |
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|                    | <p>SEQUENCES:<br/>Find the rule for a sequence and use it to find further terms.<br/>Understand the difference between linear &amp; non-linear sequences.</p>                                                                                                                          | <p>SEQUENCES:<br/>Find missing terms in a sequence.<br/>Generate terms in a sequence given a rule or algebraic expression.<br/>Find the rule for the nth term of a linear sequence.</p>                                                                                                         | <p>Recognise different types of sequence.<br/>Use the nth term to find further terms.<br/>Find the nth term of a linear sequence, including ascending, descending &amp; fractional.</p>                                                                                                                                                                                                                                     | <p>SEQUENCES:<br/><b>Find the next term in a quadratic sequence</b><br/><b>Find the nth term of a quadratic sequence &amp; use to find further terms</b></p>                                                                                                                                                                                                                                                             | <p>SEQUENCES:<br/><b>Review quadratic sequences.</b><br/><b>Recognise &amp; find further terms in geometric progressions where the ratio between terms is a surd</b></p> <p>PROOF:<br/><b>Prove a statement by counter-example.</b><br/><b>Prove a statement algebraically.</b></p> |
| Geometry & Measure | <p>MEASURE:<br/>Convert metric units.<br/>Compare &amp; order metric measures.<br/>Measure &amp; draw line segments.</p> <p>PERIMETER, AREA &amp; VOLUME:<br/>Calculate &amp; solve problems with perimeter of shapes and area of rectangles &amp; parallelograms &amp; triangles.</p> | <p>MEASURE:<br/>Solve problems involving conversion of metric units</p> <p>PERIMETER, AREA &amp; VOLUME:<br/>Calculate the area of a trapezium.<br/>Calculate the perimeter &amp; area of compound shapes.<br/>Name parts of a circle &amp; calculate circumference &amp; area of a circle.</p> | <p>MEASURE:<br/>Convert metric units of area &amp; volume.<br/>Convert time between hrs &amp; mins and decimals time.<br/>Calculate compound measures.<br/>Draw &amp; interpret kinematics graphs.</p> <p>PERIMETER, AREA, VOLUME &amp; SURFACE AREA:<br/>Solve problems involving circumference &amp; area of circles.<br/>Identify the properties of 3D shapes.<br/>Calculate the volume &amp; surface area of cubes,</p> | <p>MEASURE:<br/>Review kinematics graphs &amp; draw &amp; interpret other real-life graphs.<br/><b>Calculate speed &amp; acceleration from kinematics graphs.</b><br/>Calculate compound measures.</p> <p>PERIMETER, AREA, VOLUME &amp; SURFACE AREA:<br/>Solve problems involving volume &amp; surface area of cubes, cuboids &amp; prisms, including cylinders.<br/><b>Calculate arc length &amp; sector area.</b></p> | <p>PERIMETER, AREA &amp; VOLUME:<br/>Solve problems involving perimeter, area, volume &amp; surface area, focusing on GCSE questions.<br/><b>Calculate the volume of a frustum.</b><br/><b>Calculate segment area.</b></p>                                                          |

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|  | <p><b>PROPERTIES OF SHAPE:</b><br/>Recognise &amp; know the properties of different types of triangle &amp; quadrilateral.<br/>Recognise different polygons.</p>                                                                                                                                                                      |                                                                                                               | <p>cuboids &amp; other prisms including cylinders.</p>                                                                                                                  | <p><b>Calculate the volume &amp; surface area of cones, spheres &amp; pyramids.</b></p>                                                                                                   |                                                                                                                                                                                                                                                                                                                                       |
|  |                                                                                                                                                                                                                                                                                                                                       |                                                                                                               | <p><b>PYTHAGORAS:</b><br/>Know &amp; use Pythagoras theorem in 2D shapes.</p>                                                                                           | <p><b>PYTHAGORAS:</b><br/>Solve problems involving Pythagoras theorem.<br/><b>Use Pythagoras in 3D shapes.</b></p>                                                                        | <p><b>PYTHAGORAS:</b><br/>Solve problems involving Pythagoras theorem with a focus on GCSE questions.</p>                                                                                                                                                                                                                             |
|  |                                                                                                                                                                                                                                                                                                                                       |                                                                                                               | <p><b>TRIGONOMETRY:</b><br/>Use trigonometry to find missing sides &amp; angles in right-angled triangles. (sets 1 &amp; 2 only)</p>                                    | <p><b>TRIGONOMETRY:</b><br/><b>Use trigonometry to find missing sides &amp; angles in right-angled triangles. Solve problems involving trigonometry in 2D right-angled triangles.</b></p> | <p><b>TRIGONOMETRY:</b><br/>Use trigonometry to find missing sides &amp; angles in right-angled triangles. Know &amp; use exact trig values &amp; use to find missing sides &amp; angles.<br/><b>Solve problems involving trigonometry in 3D shapes. Know &amp; use the sine rule, cosine rule &amp; trig area of a triangle.</b></p> |
|  | <p><b>ANGLES:</b><br/>Identify different types of angle.<br/>Draw &amp; measure angles using a protractor.<br/>Identify parallel &amp; perpendicular lines.<br/>Know &amp; use angle rules, including vertically opposite angles, angles round a point, angles on a straight line &amp; angles in triangles &amp; quadrilaterals.</p> | <p><b>ANGLES:</b><br/>Calculate angles in parallel lines.<br/>Calculate angles in special quadrilaterals.</p> | <p><b>ANGLES:</b><br/>Solve angle problems involving a variety of angle rules.<br/>Calculate angles in polygons.<br/>Measure &amp; draw bearings to locate a point.</p> | <p><b>ANGLES:</b><br/>Solve angle problems involving a variety of angle rules.</p>                                                                                                        | <p><b>ANGLES:</b><br/>Solve angle problems involving a variety of angle rules &amp; bearings with a focus on GCSE questions.</p>                                                                                                                                                                                                      |
|  | <p><b>CONSTRUCTION &amp; LOCI:</b><br/>Construct triangles.</p>                                                                                                                                                                                                                                                                       | <p><b>CONSTRUCTION &amp; LOCI:</b><br/>Construct triangles, quadrilaterals &amp; other polygons.</p>          | <p><b>CONSTRUCTION &amp; LOCI:</b><br/>Use constructions to solve loci problems.</p>                                                                                    | <p><b>CONSTRUCTION &amp; LOCI:</b></p>                                                                                                                                                    | <p><b>CIRCLE THEOREM:</b><br/><b>Know &amp; use all circle theorem.</b></p> <p><b>CONSTRUCTION &amp; LOCI:</b></p>                                                                                                                                                                                                                    |



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|  | <p>SYMMETRY &amp; TRANSFORMATIONS:<br/>Recognise &amp; use line &amp; rotational symmetry.</p> | <p>Construct angle &amp; perpendicular line bisectors.</p> <p>SYMMETRY &amp; TRANSFORMATIONS:<br/>Reflect a shape over a given mirror line.<br/>Rotate a shape about a given point.<br/>Translate a shape by a given vector.<br/>Enlarge a shape by a positive or unit fraction scale factor.</p> <p>SIMILARITY&amp; CONGRUENCE:<br/>Identify similar shapes &amp; understand the multiplicative nature of scale factor.</p> | <p>Draw &amp; interpret 2D &amp; 3D isometric drawings.<br/>Draw &amp; recognise nets &amp; elevations of 3D shapes.</p> <p>SYMMETRY &amp; TRANSFORMATIONS:<br/>Reflect a shape given the equation of the mirror line.<br/>Enlarge a shape from a given centre.</p> <p>SIMILARITY&amp; CONGRUENCE:<br/>Identify similar &amp; congruent shapes.<br/>Prove shapes are similar &amp; find missing lengths &amp; angles.</p> | <p>Use constructions to solve loci problems.</p> <p>SYMMETRY &amp; TRANSFORMATIONS:<br/>Review transformations from previous years.<br/>Describe transformations.<br/>Perform combined transformations.<br/><b>Understand invariance of points.</b></p> <p>SIMILARITY&amp; CONGRUENCE:<br/>Review similarity &amp; congruence from previous years.<br/>Understand the relationship between linear, area &amp; volume scale factors.<br/><b>Prove triangles are congruent.</b></p> <p>VECTORS:<br/><b>Understand the difference between scalar &amp; vector quantities.</b><br/><b>Understand vector notation &amp; represent using line &amp; column vectors.</b><br/><b>Add, subtract &amp; multiply line &amp; column vectors.</b></p> | <p>Use constructions to solve loci problems with a focus on GCSE problems.</p> <p>SYMMETRY &amp; TRANSFORMATIONS:<br/>Review in revision.</p> <p>SIMILARITY&amp; CONGRUENCE:<br/>Review in revision.</p> <p>VECTORS:<br/>Understand the difference between scalar &amp; vector quantities.<br/>Understand vector notation &amp; represent using line &amp; column vectors.<br/>Add, subtract &amp; multiply line &amp; column vectors.<br/><b>Solve vector geometry problems.</b></p> |
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| <p><b>Statistics</b></p>  | <p><b>DATA COLLECTION &amp; REPRESENTATION:</b><br/>Identify different types of data<br/>Draw &amp; interpret frequency trees, bar charts, vertical line graphs &amp; time series .</p> <p>Read &amp; interpret ungrouped frequency tables.</p> <p><b>AVERAGES &amp; SPREAD:</b><br/>Find the mean, median, mode &amp; range of a data set.</p>                          | <p><b>DATA COLLECTION &amp; REPRESENTATION:</b><br/>Understand sampling. Design questionnaires. Identify different types of data.<br/>Read &amp; interpret grouped frequency tables.<br/>Draw &amp; interpret bar charts for grouped data, multiple &amp; composite bar charts.<br/>Complete &amp; interpret two-way tables.<br/>Draw &amp; interpret pie charts.<br/>Draw &amp; interpret scatter graphs.</p> <p><b>AVERAGES &amp; SPREAD:</b><br/>Choose the most appropriate average &amp; use to compare distributions.</p> | <p><b>DATA COLLECTION &amp; REPRESENTATION:</b><br/>Solve more complex problems involving graphs.<br/>Draw &amp; interpret boxplots (sets 1 &amp; 2 only).</p> <p><b>AVERAGES &amp; SPREAD:</b><br/>Find the mode, range &amp; mean from an ungrouped &amp; grouped frequency table and bar charts.<br/>Solve problems involving missing values &amp; reverse mean.</p> | <p><b>DATA COLLECTION &amp; REPRESENTATION:</b><br/>Review data graphs from previous years.<br/><b>Draw &amp; interpret boxplots.</b><br/><b>Draw &amp; interpret cumulative frequency graphs.</b><br/><b>Draw &amp; interpret histograms.</b></p> <p><b>AVERAGES &amp; SPREAD:</b><br/>Review averages &amp; spread from a table.<br/>Find the median from a table.<br/><b>Find missing values in a table given information about the averages or range.</b></p> | <p><b>DATA COLLECTION &amp; REPRESENTATION:</b><br/>Review in revision.</p> <p><b>AVERAGES &amp; SPREAD:</b><br/>Review in revision.</p>                                                                                                                                   |
| <p><b>Probability</b></p> | <p>Understand sets.<br/>Draw &amp; interpret Venn diagrams.<br/>Understand the probability scales and associated vocabulary.<br/>Calculate the theoretical probability for a single event.<br/>Understand that probabilities sum to 1 and calculate the probability an outcome does not occur.<br/>Use systematic methods, including sample space, to list outcomes.</p> | <p>Review &amp; solve problems involving probability from year 7.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <p>Review probabilities from Venn diagrams, two way tables, frequency trees &amp; bar charts.<br/>Use relative frequency as an estimate of probability.<br/>Use the product rule to calculate the number of possible outcomes.</p>                                                                                                                                      | <p>Review probabilities from Venn diagrams, two way tables, frequency trees &amp; bar charts.<br/><b>Use tree diagrams to show outcomes and calculate probabilities of two or more events.</b></p>                                                                                                                                                                                                                                                                | <p>Use tree diagrams to show outcomes and calculate probabilities of two or more events.<br/><b>Know &amp; use the AND/OR rules.</b><br/><b>Solve problems involving probability resulting in equations to be solved.</b><br/><b>Describe sets using set notation.</b></p> |

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|  | Calculate probabilities from sample space, two-way tables & Venn diagrams. |  |  |  |  |
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