## Faculty: Maths

## Literary Canon Mapping - Overview

| KS3 CURRICULUM |  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
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| Year 7 | Topic/Scheme | Algebraic thinking <br> Sequences (week1-3) <br> Understand and use algebraic notation (week 4-5) <br> Equality \& equivalence (week 6-8) | Place value \& proportion Place value \& ordering integers and decimals (week 9-11) <br> Fraction, decimal \& percentage equivalence (week 12-14) <br> Operations of number Solving problems with addition and subtraction (week 15-17) | Operations of number Solving problems with multiplication \& division (week 18-20) | Fractions \& percentages of amounts (week 21-23) <br> Directed Number <br> Operations \& equations with directed number (week24-25) Fractional thinking Addition and subtraction of fractions (week 26-29) | Lines \& angles Constructing, measuring \& using geometric notation (week30-32) | Lines \& angles <br> Developing geometric reasoning(week33-34) <br> Reasoning with number <br> Sets \& probability (week 35-36) <br> Prime numbers \& proof (week 37-39) |
|  | Reading Material | White Rose Go teach math Mathspad Sparx Corbett math Dr Frost | White Rose Go teach math Mathspad Sparx Corbett math Dr Frost | White Rose Go teach math Mathspad Sparx Corbett math Dr Frost | White Rose Go teach math Mathspad Sparx Corbett math Dr Frost | White Rose Go teach math Mathspad Sparx Corbett math Dr Frost | White Rose Go teach math Mathspad Sparx Corbett math Dr Frost |
|  | Key Vocabulary | Sequences(week1-3) Sequence, Term, Rule, Position, Rule, Term-toterm, Table, Axes, Linear, Non-Linear, Difference, Constant difference, Ascending, Descending, Arithmetic, Second difference, Geometric, Fibonacci, Position | Place value \& ordering integers (week 9-11) Place value, Digit, Billion, Placeholder, Integer, Equal division, Interval, Scale, Gap, Spaces, Approximate, Round, Nearest, Convention, Halfway, Compare, Not equal, Greater than, Less than, $=, \neq,<,>, \leq, \geq$, Order, Ascending, Descending, | Solving problems with multiplication \& division (week 18-20) <br> Product, Multiply, Divide, Inverse, Quotient, Commutative, Factor, Array, Venn diagram, Odd, Even, Integer, Multiple, Common, Lowest Common Multiple, Place value, Ones, Tenths, | Fractions \& percentages of amounts (week 21-23) <br> Fraction, Equivalent, Numerator, Denominator, Whole, Original, Place value, Percent, Percentage, Decimal, Convert, Equivalent, Fraction Operations \& equations with | Constructing, measuring \& using geometric notation (week-30-32) <br> Line, Line segment, Geometric figure, Notation, Polygon, Line, Segment, Length, Height, Width, Figure, Quarter/Half/Three Quarter/ Full turn, Degrees, Angle, | Developing geometric reasoning(week33-34) <br> Sum, Angle, Degrees, Line Segment, Notation, Adjacent, Angle, Vertically opposite, Line, Intersect, Equilateral, Scalene, Right-angled, Sum, Quadrilateral, Convex, Concave, Parallelogram, |





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| $\begin{gathered} \text { Year } \\ 8 \end{gathered}$ | Topic/Scheme | Proportional reasoning <br> Ratio \& scale (week1-3) <br> Multiplicative <br> change(week4-5) <br> Multiplying \& dividing <br> fractions(week 6-8) | Representations <br> Working in the Cartesian plane (week9-11) <br> Representing data (week12-13) <br> Tables \& probability (week14-15) | Algebraic techniques Brackets, equations \& inequalities (week 16-19) | Algebraic techniques <br> Sequences(week 21) <br> Developing number <br>  <br> percentages (week22- <br> 24) <br> Standard index form (week25-26) | Developing geometry <br> Angles in parallel lines \& polygons (week2730) <br> Area of trapezia \& circles (week31-32) | Reasoning with data The data handling cycle (week33-36) Measures of location (week 37-40 |
|  | Reading Material | White Rose Go teach math Mathspad Sparx Corbett math Dr Frost | White Rose Go teach math Mathspad Sparx Corbett math Dr Frost | White Rose Go teach math Mathspad Sparx Corbett math Dr Frost | White Rose <br> Go teach math <br> Mathspad <br> Sparx <br> Corbett math <br> Dr Frost | White Rose Go teach math Mathspad Sparx Corbett math Dr Frost | White Rose Go teach math Mathspad Sparx Corbett math Dr Frost |
|  | Key Vocabulary | Ratio \& scale (week1-3) Ratio, Equal parts, For every, Proportion Relationship, Order, Colon, Divide, Multiply, Part, Double number line, Proportional, Multiplier, Placeholder, Units, Share, Factors, Equivalent, | Working in the Cartesian plane (week9-11) <br> Quadrant, Coordinates, Horizontal, Vertical, Axis, Origin, Parallel, Straight line, Equation, Graph, Diagonal, Scale, Multiple, Steep, Linear, Substitute, Table, Slope, Scale, Axes, | Brackets, equations \& inequalities (week 1619) <br> Expression, Simplify, Term, Substitute, Coefficient, Equivalent, Positive, Negative, Directed, Solve, Expand, Multiply out, Bracket, | Sequences (week 21) <br> Sequence, Position, <br> Term, Linear, Non- <br> linear, Fibonacci, Difference, Constant, Term-to-term, Algebraic, Integer, Non-integer, Substitute, Bracket, | Angles in parallel line \& polygons (week 2730) <br> Adjacent, Angles at a point, Vertically Opposite, Straight, Acute, Obtuse, Reflex, Right angle, Parallel, Transversal, Alternate, | The data handling cycle (week 33-36) Questionnaire, Questions, Design, Multiple choice, Response box, Biased, Pictogram, Bar chart, Line chart, Tally, Frequency, Multiple |




| KS3 CURRICULUM |  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
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| Year 9 | Topic/Scheme | Reasoning with algebra Forming \& solving equations (week1-4) FROM THE WHITE ROSE YEAR 8 SCHEME: <br> Reasoning with data Measures of location (week5-8) | Reasoning with algebra Straight line graphs (week 9-10) <br> Developing geometry Area of trapezia \& circles (week11-12) <br> Constructing in 2 \& 3 dimensions <br> Three dimensional shapes (week 13-15) | Constructing in 2 \& 3 dimensions Constructions \& congruency(week 16-19) Reasoning with numbers Numbers (week20-21) | Reasoning with number <br> Using percentages (week22-23) <br> Maths \& money (week24-25) <br> Reasoning with geometry Rotation and translation (week2628) | Reasoning with geometry <br> Pythagoras' theorem (week 29-32) | Reasoning with <br> proportion <br>  <br> similarity (week33-34) <br>  <br> proportion problems <br> (week35-36) <br> Rates (week 37-39) |
|  | Reading Material | White Rose <br> Go teach math <br> Mathspad <br> Sparx <br> Corbett math Dr Frost | White Rose Go teach math Mathspad Sparx Corbett math Dr Frost | White Rose Go teach math Mathspad Sparx Corbett math Dr Frost | White Rose Go teach math Mathspad Sparx Corbett math Dr Frost | White Rose Go teach math Mathspad Sparx Corbett math Dr Frost | White Rose <br> Go teach math <br> Mathspad <br> Sparx <br> Corbett math <br> Dr Frost |
|  | Key Vocabulary | Forming \& solving equations (week1-4) <br> Equation, Inequality, <br> Greater than, >, Less <br> than, <, Solution, <br> Unknown, Inverse, Solve, Inverse, Expand, Reverse, <br> Equal, Balance, <br> Coefficient, Check, Test, <br> Substitute, Form, <br> Variable, Subject, <br> Formula, Subject, <br> Rearrange, Make the <br> subject of, Inverse <br> operation, Square, <br> Square root, Root <br> Measures of location <br> (week5-8) <br> Average, Mean, Median, <br> Mode, Modal value, <br> Total, Frequency, <br> Represent, <br> Subtotal, Mode, <br> Estimate, Midpoint, | Straight line graphs (week9-10) <br> Parallel, Horizontal, Vertical, Straight line, Axis, Equation, Graph, Intercept, Linear, Straight line, Table of values, Function, Equation, Gradient, Slope, Steep, Positive, Negative, Intercept, Coordinate, y-intercept, Rearrange, Interpret, Direct proportion, Table of values, Real-life, Graphs, Inverse Proportion, Curve, Asymptote, Negative reciprocal Area of trapezia \& circles (week11-12) | Constructions \& congruency (week 16- <br> 19) <br> Acute, Obtuse, Reflex, Right angle, Estimate, Protractor, Scale, Ratio, Multiplier, Estimate, Conversion, mm, cm, m, km, Locus, Path, Equidistant, Construction lines, Point, Stadium, Vertex, Discorectangle, Arc, Perpendicular, Bisector, Construction lines, Line Segment, SSS, SAS, ASA, Net, Prism, Equilateral, Scalene, Isosceles, Congruent, Identical, Invariant, Reflection, Included angle, Unique, Reflection, Corresponding side, Side-Side-Side, Side- | Using percentages (week22-23) <br> Fraction, Decimal, Percentage, Convert, Equivalent, Increase, Decrease, Reduce, Multiplier, Profit, Loss, Original, Change, Reverse, Related facts, Original, Change, Bar model, Repeated, Depreciate, Power, Index, Exponent Maths \& money (week24-25) <br> Total, Debit, Credit, Balance, Expense, Bill, Percentage, Interest, Annual, Deposit, Principal, Rate, Compound, Interest, Multiplier, Per annum, Tax, Rate, Value Added, VAT, Original, | Pythagoras' theorem (week 29-32) <br> Square, Square root, Integer, Significant figures, Decimal places, Hypotenuse, Rightangled triangle, Opposite, Adjacent, Sum, Square root, Origin, Quadrant, Negative, Line segment, Hypotenuse, Gradient, 2-D, 3-D, Cuboid, Diagonal | Enlargement \& similarity (week33-34) <br> Similar, Ratio, <br> Enlargement, Scale factor, Corresponding, Object, Image, Integer, Positive, Centre, Distance, Position, Fraction, Greater than 1, Between 0 and 1, Inverted, Negative, Rotation, Orientation, Similar, Corresponding, Opposite, Adjacent, Hypotenuse, Angle, Right-angle Solving ratio \& proportion problems (week35-36) <br> Relationship, Ratio, Multiplier, Constant, Scale factor, Graph, Relationship, Variable, Linear, Non-linear, |



|  |  | Commutative, Constant, Cross-section, Area of face |  |  |  |  |
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| Link to Scheme <br> (Subject Curriculum Plan or Schemes of $v$ Learning) | Forming \& solving equations <br> https://assets.whiterose education.com/resource s-2022/vear-9/autumn-block-2-forming-and-solving-equations/2-Year-9-Forming-and-solving-equations.pdf Measures of location https://assets.whiterose education.com/resource s-2022/year-8/summer-block-5-measures-of-location/17.-Year-8-Measures-ofLocation.pdf | Straight line graphs https://assets.whiterosee ducation.com/resources-2022/year-9/autumn-block-1-straight-line-graphs/1.-Year-9-Straight-Line-Graphs.pdf <br> Area of trapezia \& circles https://assets.whiterosee ducation.com/resources-2022/year-8/summer-block-2-area-of-trapeziacircles/14.\%20Year\%208\% 20- <br> \%20Area\%20of\%20trapezi a\%20and\%20circles.pdf <br> Three dimensional shapes <br> https://assets.whiterosee ducation.com/resources-2022/year-9/autumn- <br> block-4-three-dimensional-shapes/4.-Year-9-Three-dimensional-shapes.pdf | Constructions and congruency <br> https://assets.whiteros eeducation.com/resourc es-2022/year- <br> 9/autumn-block-5-constructions-and-congruency/5.-Year-9-Constructions-andcongruency.pdf Numbers https://assets.whiteros eeducation.com/resourc es-2022/year-9/spring-block-1- <br> numbers/6.\%20Year\%20 9\%20- <br> \%20Numbers\%20v2.pdf | Using percentages https://assets.whitero seeducation.com/reso urces-2022/year-9/spring-block-2-using-percentages/7.-Year-9-UsingPercentages.pdf Maths \& money https://assets.whitero seeducation.com/reso urces-2022/year-9/spring-block-3-maths-and-money/8.-Year-9-Maths-and- <br> Money.pdf Rotation and translation https://assets.whitero seeducation.com/reso urces-2022/year-9/spring-block-5-rotation-and-translation/10.-Year-9-Rotation-andtranslation.pdf | Pythagoras' theorem https://assets.whitero seeducation.com/reso urces-2022/year-9/spring-block-6-pythagoras-theorem/11.-Year-9-PythagorasTheorem.pdf | Enlargement \& similarity <br> https://assets.whitero seeducation.com/reso urces-2022/year- <br> 9/summer-block-1- <br> enlargement-and- <br> similarity/12.-Year-9- <br> Enlargement-and- <br> Similarity.pdf <br>  <br> proportion problems <br> https://assets.whitero <br> seeducation.com/reso <br> urces-2022/year- <br> 9/summer-block-2- <br> solving-ratio-and- <br> proportion- <br> problems/13.-Year-9- <br> Ratio-and- <br> proportion.pdf <br> Rates <br> https://assets.whitero seeducation.com/reso urces-2022/year- <br> 9/summer-block-3- <br> rates/14.\%20Year\%20 <br> 9\%20-\%20Rates.pdf |


| KS4 CURRICULUM |  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
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| $\begin{gathered} \text { Year } \\ 10 \end{gathered}$ | Topic/Scheme | Similarity <br> Congruence, similarity \& enlargement (week1-3) Trigonometry (week4-6) Developing algebra Representing solutions of equations \& inequalities (week7-8) | Developing algebra <br> Simultaneous equations (week9-10) <br> FROM THE WHITE ROSE <br> YEAR 8 SCHEME: <br> Developing geometry <br>  <br> polygons (week 11) <br> WHITE ROSE YEAR 10 <br> SCHEME: <br> Geometry <br> Angles \& bearings <br> (week12-13) <br> Geometry <br> Working with circles <br> (week14-15) | Proportions \& proportional change <br> Ratios \& fractions (week16-18) <br> Probability (week19-20) | Delving into data Collecting, representing \& interpreting data (week21-25) | Proportions \& proportional change Percentages \& Interest (week27-28) <br> Using number Non-calculator methods (week29-32) | FROM THE WHITE <br> ROSE YEAR 9 SCHEME: <br> Reasoning with <br> proportion <br> Rates (week33-34) <br> Using number <br> Indices \& roots <br> (week35-36) <br> Using number <br> Types of number and sequences (week37- <br> 39) |
|  | Reading Material | White Rose Go teach math Mathspad Sparx Corbett math Dr Frost | White Rose Go teach math Mathspad Sparx Corbett math Dr Frost | White Rose Go teach math Mathspad Sparx Corbett math Dr Frost | White Rose Go teach math Mathspad Sparx Corbett math Dr Frost | White Rose Go teach math Mathspad Sparx Corbett math Dr Frost | White Rose Go teach math Mathspad Sparx Corbett math Dr Frost |
|  | Key Vocabulary | Congruence, similarity \& enlargement (week 1-3) Enlarge, Enlargement, Scale factor, Ratio, Origin, Object, Image, Fractional scale factor, Centre of enlargement, Negative scale factor, Reflection, Ratio, Similar, Proportion, Correspond, Parallel, Corresponding, Alternate, Co-interior, Corresponding angles, Alternate angles, Length of scale factor, Area of scale factor, Image, Volume scale factor, Congruent, In proportion, Side-side-side, Angle- | Simultaneous equations (week9-10) <br> Solution, Substitute, Equation, Variable, Verify, Solve, Variable, Unknown, Inverse, Substitute, Substitution, Subject of the formula, Rearrange, Simultaneous equations, Intersect, Coordinate, Meet, Subtract, Negative, Eliminate, Variable, Expression, Eliminate, Negative, Solve, Equivalent, Coefficient, Multiplier, Lowest Common Multiple, LCM, Multiplier, Formulate, Context, Quadratic, Curve, | Ratios \& fractions (week16-18) <br> Ratio, Simplest form, Convert, Unit, Equivalent, Share, More than, Less than, Part, Whole, Proportion, Fraction, Compare, Direct proportion, Gradient, Equation, Origin, $y=m x(+c)$, Double number line, Exchange rate, Scale, Map, Represent, Bearing, For every....., There are......., Integer, Non-integer, Best value, Unit cost, Combine, LCM, , Variable, | Collecting, representing \& interpreting data (week21-25) <br> Population, Sample, Representative, Biased, Random, Population, Proportion, Stratified, Primary, Secondary, Source, Data, Questionnaire, Experiment, Frequency polygon, Midpoint, Endpoint, Frequency, Class, Interval, Table, Row, Column, Total, Difference, Line chart, Bar chart, Frequency, Difference, Dual, | Percentages \& Interest (week 27-28) <br> Fraction, Decimal, Percentage, Equivalent, Convert, Multiplier, Increase, Decrease, Reduce, Interest, Convert, Multiplier, Numerator, Denominator, Express, Simple, Compound, Interest, Repeated, Power, Index, Exponent, Change, Depreciate, Decimal, Percentage, Reverse, Original, Growth, Decay, Compound, | Rates (week33-34) <br> Speed, Distance, Time, Per, Hours, Minutes, Convert, Rounding, Accuracy, Average, Gradient, Axes, Origin, Density, Mass, Volume, Units, Substitute, Rearrange, Constant rate, Straight line, Curve, Flow rate, Prism, Volume, Conversions, Per, Rate of change, Imperial, Metric, Double number line Indices \& roots (week35-36) |



|  |  | Variable, Solve, Solution, Equation, Expression, Solve, Inverse, Balance, Inequality, Inverse, Solution set, Greater than, >, Less than, <, Equal, Number line, Set notation, The solution set is $x$ such that......., Solution set, Union, Gradient, Positive, Negative, Linear, yintercept, Coordinate, Plot, Set equal, Intersect, Solve graphically, Solve algebraically, Inequality, Satisfy, Region, Dashed line, Solid line, Test point, Is equal to, Value, Unknown, Satisfy, Number line, Balanced, Quadratic, Roots, Factorise, Brackets, Intercept, Factorise, Sketch, $x$-axis, $y$-axis | Sector, Segment, Circumference, Area, Fraction, Minor, Major, Proportion, Centre, Angle, Isosceles, Angle, Isosceles, Semicircle, Right angle, Pythagoras, Subtend, Quadrilateral, Cyclic, Vertices, Opposite, Cylinder, Cone, In terms of $\pi$, Perpendicular height, Base, Frustum, Sphere, Hemisphere, Centre, Surface Area, Curved Surface, Base, Slant height, Scale Factor, Ratio, Proportion, Square, Cube, Root |  |  | Pressure, Area, Density, Mass, Volume | examples, Disprove, Rule, Term-to-term, Position-to-term, Linear, Non-linear, Coefficient, Term, Difference, Quadratic, Coefficient, Show |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Link to Scheme <br> (Subject Curriculum Plan or Schemes of Learning) | Congruence, similarity \& enlargement <br> https://assets.whiterose education.com/resource s-2022/year-10/autumn-block-1-congruence-similarity-and-enlargement/1.-Year-10-Similarity-Congruence-Similarity-andEnlargment.pdf Trigonometry https://assets.whiterose education.com/resource s-2022/year-10/autumn-block-2-trigonometry/2.- | Simultaneous equations https://assets.whiterosee ducation.com/resources-2022/year-10/autumn-block-4-simultaneous-equations/wrm-y10-aut-b4-\%20simultaneousequations.pdf Angles \& bearings (week12-13) <br> https://assets.whiterosee ducation.com/resources-2022/year-10/spring-block-1-angles-and-bearings/5.-Year-10-Angles-and-Bearings.pdf | Ratios \& fractions https://assets.whiteros eeducation.com/resourc es-2022/year-10/spring-block-4-ratio-and-fractions/8.-Year-10-Ratio-and-Fractions.pdf Probability https://assets.whiteros eeducation.com/resourc es-2022/year-10/spring-block-6-probability/year-10probability.pdf | Collecting, representing \& interpreting data https://assets.whitero seeducation.com/reso urces-2022/year-10/summer-block-1-collecting-representing-and-interpretingdata/11.\%20Year\%201 0\%20\%20Delving\%20into\%2 OData.pdf | Percentages \& Interest https://assets.whitero seeducation.com/reso urces-2022/year- <br> 10/spring-block-5-percentages-andinterest/9.\%20Year\%2 010\%20- <br>  <br> \%20Interest.pdf <br> Non-calculator <br> methods (week29-32) <br> https://assets.whitero <br> seeducation.com/reso <br> urces-2022/year- <br> 10/summer-block-2-non-calculator- | Rates <br> https://assets.whitero seeducation.com/reso urces-2022/year- <br> 9/summer-block-3- <br> rates/14.\%20Year\%20 <br> 9\%20-\%20Rates.pdf <br> Indices \& roots <br> https://assets.whitero <br> seeducation.com/reso <br> urces-2022/year- <br> 10/summer-block-4- <br> indices-and-roots/14.- <br> Year-10-Indices- <br> Roots.pdf <br> Types of number and sequences |



| KS4 CURRICULUM |  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
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| Year 11 | Topic/Scheme |  |  |  |  |  |  |
|  | Reading Material |  |  |  |  |  |  |
|  | Key <br> Vocabulary |  |  |  |  |  |  |
|  | Link to Scheme <br> (Subject Curriculum Plan or Schemes of Learning) |  |  |  |  |  |  |

