

		Maths - Year 10 HT			
Topic list Autumn 1	Topic list Autumn 2	Topic list Spring 1	Topic list Spring 2	Topic list Summer 1	Topic list Summer 2
- Unit 1 Number - Unit 2: Algebra - Unit 3: Interpreting and representing data	- Unit 4: Fractions, ratio and percentages - Unit 5: Angles and trigonometry	- Unit 6: Graphs - Unit 7: Area and volume - Unit 8: Transformations and constructions	- Unit 9: Equations and inequalities - Unit 10: Probability	- Unit 11: Multiplicative reasoning - Unit 12: Similarity and congruence - Unit 13: More trigonometry	- Unit 14: Further statistics - Unit 15: Equations and graphs
Why this Why Now	Why this Why Now	Why this Why Now	Why this Why Now	Why this Why Now	Why this Why Now
- Unit 1 builds on rounding as a way of checking support all number manipulations to follow. - Unit 2 builds on manipulating algebraic expressions. supports advance algebraic manipulations - Unit 3 builds on to the collecting manipulating, analysing and displaying OF data. The unit support advance statically analysis	- Unit 4 supports further work in topics such as proportions, ratios and Further algebraic fractions. - Unit 5 builds on work done in years 8 and 9 and introduces new concepts in trigonometry and Pythagoras' Theorem, and how to problem solve in these areas.	- Unit 6 builds on plotting coordinates and plotting simply straight line, Identify and interpret the gradient of a line segment and using the gradient of a line to derive equations parallel and perpendicular line - Unit 7 builds on problem solving with more complex shapes - Unit 8 builds on transformations of shapes and describing enlargements by a positive integer, positive fractional, and negative scale factor	- Unit 9 builds use of the $\geq$ and $\leq$ symbols. substitution, solve and rearrange linear equations and factorising - Unit 10 builds on use of probability scale and distinguish between event, use experimental and theoretical measures of probability, and using probabilities tree and Venn diagrams.	- Unit 11 builds on unit 4. It looks at problem solving using compound measures and percentages - Unit 12 builds on unit 8. It gives understanding in use of SSS, SAS, ASA and RHS to prove the congruence - Unit 13 builds on unit 5. further work in sketching and interpreting trigonometric graphs, and transformation of trigonometric functions.	- Unit 14 builds on data handling use sampling methods and ways of representing and interpreting. - Unit 15 builds on units 2 and 9. it develops understanding in completing the square; and using this to find turning point and sketch a graph of a quadratic function.
Tier 3 Vocabulary and Reading		Tier 3 Vocabulary and Reading		Tier 3 Vocabulary and Reading	
Murderous Maths: Trigonometry the Fiendish Angletron by Kjartan Poskitt Integer, Expression, identity, equation, formula, substitute, term, 'like' terms, mean, median, mode, range, average, discrete, continuous, qualitative, quantitative, scatter graph.	Dr. Math Explains Algebra: Learning Algebra Is Easy! Just Ask Dr. Math! by The Math Forum Improper, recurring, reciprocal, integer, increase, decrease, multiplier, loss, ratio, and proportion, polygon, interior, exterior, proof, tessellation, corresponding, alternate, co-interior, vertices, Pythagoras' Theorem, sine, cosine, tan, opposite, hypotenuse, adjacent	Do you feel lucky? Murderous Maths Polygon, symmetry, vertices, circumference, diameter, composite, sphere, capacity, hemisphere, segment, frustum, bounds, rotation, reflection, translation, transformation, enlargement, vector, congruence, similar, combinations, corresponding bisect, line segment, perpendicular, loci, bearing	Sir Cumference and the Dragon of Pi: A Math Adventure by Cindy Neuschwander Quadratic, root, simultaneous, inequality, completing the square, factorise, rearrange, surd, function, union, and intersection, probability, mutually exclusive, conditional, tree diagrams, sample space, outcomes, theoretical, relative frequency, Venn diagram, fairness	Fractions in disguise by Edward Einhorn Proportional, compound measure, density, volume, pressure, acceleration, velocity, inverse, direct, and constant of proportionality. Congruence, frustum, coordinates, sine, cosine, tan, angle, graph, transformations, side, angle, inverse, diagonal, plane, and cuboid.	Murderous Maths: The Perfect Sausage by Kjartan Poskitt Stratified sample, cumulative frequency, box plot, histogram, frequency density, frequency, quartile, upper quartile, interquartile range, spread, comparison ,and outlier, sketch,, quadratic, factorising, simultaneous equation



Maths - Year 11 HT

Topic list Autumn 1	Topic list Autumn 2	Topic list Spring 1	Topic list Spring 2	Topic list Summer 1	Topic list Summer 2
- Unit 16: Circle theorems - Unit 17: More algebra	- Unit 18: Vectors & geometric proof - Unit 19: Proportion and graphs	- Mock exam prep - Reteach - Gap filling	- Exam prep - Reteach - Gap filling	- Exam prep - Reteach - Gap filling	
Why this Why Now	Why this Why Now	Why this Why Now	Why this Why Now	Why this Why Now	Why this Why Now
- Unit 16 builds on prior knowledge in working with angles. Using angle facts and the theorems - Unit 17 builds on prior knowledge in algebra and introduces composite functions and manipulation of key skills. This unit allows for further work with solving quadratic equations, Rearranging formulae, and Solving algebraic fraction equations.	- Unit 18 builds on prior knowledge in vectors used to describe translations, knowledge of Pythagoras' - Unit 19 this builds prior knowledge in proportions and take a more algebraic approach to problem solving in this area. It also introduces further work with inverse and reciprocal functions	- To support topics that might appear in the GCSE exam - To build and instil confidence with apply the skills from units 1–19	- To support topics that might appear in the GCSE exam - To build and instil confidence with apply the skills from units 1–19	- To support topics that might appear in the GCSE exam - To build and instil confidence with apply the skills from units 1–19	
Tier 3 Vocabulary and Reading		Tier 3 Vocabulary and Reading		Tier 3 Vocabulary and Reading	
The Life-Changing Magic of Numbers by Bobby Seagull Quadratic, function, solve, expand, factorise, simplify, expression, graph, curve, factor, coefficient, bracket	Area, perimeter, formula, length, width, measurement, volume, circle, segment, arc, sector, cylinder, circumference, radius, diameter, pi, sphere, cone, hemisphere, segment, accuracy, surface area				