



Haberdashers' Abraham Darby

Year 10 Higher Maths Learning Journey



← This way to Year 10



Exam Preparation

Build a portfolio of revision material, to help remember Powerful Knowledge and commit key information to long term memory. You will be tested on all the content learned over the course of the year ready to build on in Year 10.



Exam Preparation

Exam Preparation
Revise the Core and Powerful Knowledge, committing key information to long term memory. You will be tested on all content covered so far this year.

Work Experience and Exam Preparation Summer Term 2



Unit 14 Further Statistics
Know how to undertake sampling. Draw and interpret cumulative frequency diagrams, box-plots and histograms. Comparing and describing populations.

Unit 15 Equations and Graphs
Solving simultaneous equations graphically. Representing inequalities graphically. Recognise and draw quadratic functions. Solving quadratic equations graphically. Draw and understand graphs of cubic functions.



Statistics, Equations and Graphs Summer Term 1

Unit 12 Similarity and Congruence
Show that two triangles are congruent. Prove congruency. Find missing lengths on similar shapes. Use the link between scale factors for length, area and volume to solve problems..

Unit 13 More Trigonometry and tangent functions. Know and use the sine and cosine rule. Solve bearings problems using trigonometry. Use Pythagoras' and trigonometry theorem in 3D problems. Undertake transformations of graphs. Recognise how changes in a function affect trigonometric graphs.



Similarity, Congruence and Trigonometry Spring Term 2

Unit 10 Probability
Calculate probabilities, including experimental probability. Understand probability language. Create and use tree diagrams and Venn diagrams. Understand and use set notation.

Unit 11 Multiplicative Reasoning
Calculate percentages, repeated percentage change, growth and decay. Calculate speed, distance, time and acceleration.

Exam Preparation
Revise the Core and Powerful Knowledge, committing key information to long term memory. You will be tested on all content covered so far this year.



Probability, Multiplicative Reasoning and Exam Preparation Spring Term 1



Unit 8 Transformations and Constructions
Draw and describe translations, reflections, rotations and enlargements. Calculate bearings. Use scale maps. Construct shapes and loci.

Unit 9 Equations and Inequalities
Solving quadratic equations by finding it's roots, using the formula and by completing the square. Solving simultaneous equations. Solve linear inequalities.



Transformations, Equations and Inequalities Autumn Term 2



Unit 5 Angles and trigonometry
Use angle properties of triangles and quadrilaterals. Calculate interior and exterior angles of polygons. Understand and use Pythagoras theorem and trigonometry.

Unit 6 Graphs
Rearrange an equation into the form $y = mx + c$. Find the equation of a line. Use distance and velocity time graphs. Calculate speed and acceleration. Find midpoint of line segment. Solve quadratic and cubic equations using graphs. Draw a graph of a circle

Unit 7 Area and Volume
Convert between units of area and volume. Calculate circumference and area of circles. Calculate area and perimeter of semicircles and sectors. Work out the volume and surface area of cylinders, pyramids, cones, spheres



Angles, Trigonometry, Graphs, Area and Volume Autumn Term 1



KS3

Students will complete the KS3 mastery scheme with a curriculum which is more aligned to KS4 teaching. It will comprise of elements of number, geometry, algebra, ratio and statistics.



Start here



Haberdashers' Abraham Darby

Year 11 Higher Maths Learning Journey



← This way to Year 12

Ready to build on for Year 12 sixth form or college.

GCSE Exams



Exam Preparation

Build a portfolio of revision material, to help remember Powerful Knowledge and commit key information to long term memory. You will be tested on all the content learned over the GCSE.



Revision

Summer Term 2



Revision Exam Preparation

Be spoke revision programme.



Revision

Summer Term 1



Revision Exam Preparation

Be spoke revision programme.



Revision

Spring Term 2



Mock Exam Preparation

Revise the Core and Powerful Knowledge and commit key information to long term memory. You will be tested on all content covered for the GCSE course.



Mock Exam Preparation

Spring Term 1



Unit 18 Vectors and geometric proof

Use vector notation. Find the magnitude of a vector. Calculate using vectors and represent solutions graphically. Express points as position vectors. Prove lines are parallel and points are collinear. Solve geometric problems and use vector methods for simple geometric proofs.

Unit 19 Proportion and graphs

Use equations to solve direct and inverse proportion problems. Recognise and use graphs of inverse and exponential functions. Calculate the gradient of a tangent. Estimate the area under a non-linear graph. Understand the relationship between translating a graph and the change in its function notation. Reflecting and stretching graphs of functions



Shape and More algebra

Autumn Term 2

Unit 16 Circle theorem

Understand, solve problems and use facts involving angles, triangles, radii, chords, and tangents to a circle. Use proof and give reasons for angle sizes. Use mathematical circle theorem language.



Unit 17 More algebra

Change the subject of formulae. Do calculations using algebraic fractions. Simplify expressions using surds. Rationalise the denominator. Solve algebraic fractions. Use function notation. Find composite functions. Find inverse functions. Prove results using algebra.



Circle theorem and Algebra

Autumn Term 1

KS4

Students will have worked through a comprehensive maths curriculum in Year 10 comprising elements of number, geometry, algebra, ratio and statistics



Start here