

Mathematics

Year 9 Curriculum Map

Unit One

Topic: Testing Conjectures

Key Learning:

Using known number and algebra facts to test conjectures

Assessment: Topic-test and mid-year exam

Unit Two

Topic: Forming and Solving Equations

Key Learning:

Forming, rearranging and solving equations and inequalities

Assessment: Topic-test and mid-year exam

Unit Three

Topic: Straight Line Graphs

Key Learning:

Understanding gradients and intercepts and finding the equations of given lines

Assessment: Topic-test and mid-year exam

Unit Four

Topic: Working with Surds

Key Learning:

Using number skills to simplify surds and expressions containing surds

Assessment:

Topic-test and mid-year exam

Unit Five

Topic: Using Percentages

Key Learning:

Working with repeated and reverse percentages

Assessment:

Topic-test and mid-year exam

Unit Six

Topic: Maths and Money

Key Learning:

Applying percentage and proportion problems to the real world

Assessment:

Topic-test and mid-year exam

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Year 9 Curriculum Map

Unit Seven

Topic: Three-Dimensional Shapes

Key Learning:

Surface area and volume of 3D shapes

Assessment:

Topic-test and end-of-year exam

Unit Eight

Topic: Deductions

Key Learning:

Using angle facts to solve algebraic problems

Assessment:

Topic-test and end-of-year exam

Unit Nine

Topic: Enlargement and Similarity

Key Learning:

Enlarging shapes by positive and negative scale factors, solving problems with similar triangles and introductions to trigonometric ratios.

Assessment:

Topic-test and end-of-year exam

Unit Ten

Topic: Pythagoras's Theorem

Key Learning:

Calculating missing sides of right-angled triangles using Pythagoras's theorem and exploring proofs

Assessment:

Topic-test and end-of-year exam

Unit Eleven

Topic: Ratio and Proportion

Key Learning:

Solving ratio, direct and indirect proportion problems

Assessment:

Topic-test and end-of-year exam

Unit Twelve

Topic: Rates

Key Learning:

Using ratio and proportion skills to solve problems involving compound measures such as speed and density.

Assessment:

Topic-test and end-of-year exam

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Year 9 Curriculum Map

Unit Thirteen

Topic: Probability

Key Learning:

Working with relative frequency and expected outcomes, and dependent and independent events using tree diagrams.

Assessment:

Topic-test and end-of-year exam

Unit Fourteen

Topic: Algebraic Representation

Key Learning:

Using graphs to solve simultaneous equations and plotting quadratic, cubic and reciprocal graphs.

Assessment:

Topic-test and end-of-year exam

Unit Fifteen

Topic: Rotation and Translation

Key Learning:

Rotating and translating 2D shapes

Assessment:

Topic-test and end-of-year exam

Unit Sixteen

Topic: Constructions and Congruency

Key Learning:

Constructing loci and bisectors to given points, lines or angles

Assessment:

Topic-test

Unit Seventeen

Topic: Simultaneous Equations

Key Learning:

Solving simultaneous equations algebraically by elimination or substitution.

Assessment:

Topic-test