

CURRICULUM PLAN- MATHEMATICS

**KS3:
YEAR 7**

TERM 1	TERM 2	TERM 3
CONTENT Number Skills Decimals and Rounding Algebraic Expressions	CONTENT Indices Solving Equations Ratios	CONTENT Angle rules 2D Shapes – properties, area and perimeter 3d shapes End of year project
ASSESSMENTS <ul style="list-style-type: none"> Standardized Tests which can monitor progress Homework assessments Ninja booklets 	ASSESSMENTS <ul style="list-style-type: none"> Standardized Tests which can monitor progress Homework assessments (Hegarty) Ninja Booklets 	ASSESSMENTS <ul style="list-style-type: none"> Standardized Tests which can monitor progress Homework assessments (Hegarty) Ninja Booklets End of year exam
HOW PARENTS CAN SUPPORT LEARNING Ensuring your child completes homework and brings the correct Maths equipment to every lesson Ensuring your child is able to access and use Hegarty Maths and Maths Watch	HOW PARENTS CAN SUPPORT LEARNING Ensuring your child completes homework and brings the correct Maths equipment to every lesson Ensuring your child is able to access and use Hegarty Maths and Maths Watch	HOW PARENTS CAN SUPPORT LEARNING Ensuring your child completes homework and brings the correct Maths equipment to every lesson Ensuring your child is able to access and use Hegarty Maths and Maths Watch

**KS3:
YEAR 8**

TERM 1	TERM 2	TERM 3
<p>CONTENT</p> <p>Sequences Graphs Basic Standard Form and rules of Indices Bounds</p>	<p>CONTENT</p> <p>Solving complex linear Equations Averages – discrete and Continuous</p> <p>Ratio</p>	<p>CONTENT</p> <p>**Calculator work** Percentages Probability End of year project e .g. best buys/ to include percentages on calc etc</p>
<p>ASSESSMENTS</p> <ul style="list-style-type: none"> Standardized Tests which can monitor progress Homework assessments (Hegarty) Fortnightly times table tests (starting after half term) 	<p>ASSESSMENTS</p> <ul style="list-style-type: none"> Standardized Tests which can monitor progress Homework assessments (Hegarty) Fortnightly times table tests 	<p>ASSESSMENTS</p> <ul style="list-style-type: none"> Standardized Tests which can monitor progress Homework assessments (Hegarty) Fortnightly times table tests End of Year Exam End of year exam
<p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use Hegarty Maths and Maths Watch</p>	<p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use Hegarty Maths and Maths Watch</p>	<p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use Hegarty Maths and Maths Watch</p>

**KS4:
YEAR 9 - Exam Board EDEXCEL**

TERM 1	TERM 2	TERM 3
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<p>CONTENT</p> <p>Ch 1. Number: Calculations Ch 2 Number: Fractions, decimals and percentages Ch 3 and 4 Statistics: Handling Data Ch 5 Algebra: Expressions</p>	<p>CONTENT</p> <p>Ch 5 Algebra: Expressions Ch 10 Algebra: Solving linear equations Ch 6 Geometry: Working with 2D Chapter 7– Geometry: Trigonometry and Pythagoras Chapter 8 sequences</p>	<p>CONTENT</p> <p>Ch 9 ratio and proportion Ch 10 Geometry: Angles and Polygons Ch 11 Statistics: Probability</p>
<p>ASSESSMENTS</p> <ul style="list-style-type: none"> • End of Unit Assessments • Homework Assessments 	<p>ASSESSMENTS</p> <ul style="list-style-type: none"> • End of Unit Assessments • Homework Assessments 	<p>ASSESSMENTS</p> <ul style="list-style-type: none"> • End of Unit Assessments • Homework Assessments • End of Year Exam
<p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use Hegarty Maths and Maths Watch</p>	<p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use Hegarty Maths and Maths Watch</p>	<p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use Hegarty Maths and Maths Watch</p>

YEAR 10 - Exam Board EDEXCEL

TERM 1	TERM 2	TERM 3
<p>Ch 12 Algebra: Graphs 1 Ch 13 Algebra: Equations Ch 14 Number: Factors, powers, roots, calculations 2</p>	<p>Ch 14 Number: Factors, powers, roots, calculations 2 Ch15 Non right Angle Triangles Ch 16: formulae and Functions</p>	<p>Ch 17: Inequalities Ch 18 Geometry: Circles and Constructions Ch 19: Geometry: Working in 3D</p>
<p>ASSESSMENTS</p> <ul style="list-style-type: none"> • End of Unit Assessments • Homework Assessments 	<p>ASSESSMENTS</p> <ul style="list-style-type: none"> • End of Unit Assessments • Homework Assessments • Mid-Year Exams 	<p>ASSESSMENTS</p> <ul style="list-style-type: none"> • End of Unit Assessments • Homework Assessments
<p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use Hegarty Maths and Maths Watch</p>	<p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use Hegarty Maths and Maths Watch</p>	<p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use Hegarty Maths and Maths Watch</p>

YEAR 11 – Exam Board EDEXCEL

TERM 1	TERM 2	TERM 3
<p>Ch 20: Algebra: Graphs 2</p> <p>Ch 21 Number: Units and Proportionality</p>	<p>Ch 22 Data: Probability of combined events</p> <p>ch 23 Number: Measures of Accuracy</p> <p>Ch24 Geometry: vectors</p>	<p>Revision and preparation for GCSE exam</p>
<p>ASSESSMENTS</p> <ul style="list-style-type: none"> • 1 tests measuring progress during this first term • Mock Exams 	<p>ASSESSMENTS</p> <ul style="list-style-type: none"> • 2 tests measuring progress during this second term and regular use of practice papers 	<p>ASSESSMENTS</p> <ul style="list-style-type: none"> • In class exam practice using past papers
<p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use Hegarty Maths and Maths Watch</p>	<p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use Hegarty Maths and Maths Watch</p>	<p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use Hegarty Maths and Maths Watch</p>

YEAR 12 – Mathematics – Exam Board EDEXCEL

TERM 1	TERM 2	TERM 3
<p>Papers 1 and 2: Pure Mathematics 1 Paper 3: Statistics and Mechanics</p> <p><u>Content overview</u></p> <ul style="list-style-type: none"> • Indices and Surds • Quadratics & Discriminant • Simultaneous Equations & Inequalities • Cubic, Quartic and Reciprocal Graphs • Straight Line Graphs • Equation of a Circle • Algebraic Division & Factor Theorem • Sampling • Measures of Spread • Representing Data • Modelling in Mechanics 	<p>Papers 1 and 2: Pure Mathematics 1 Paper 3: Statistics and Mechanics</p> <p><u>Content overview</u></p> <ul style="list-style-type: none"> • Trigonometry • Differentiation • Integration • Constant Acceleration Equations • Probability • Forces and Motion • Resolving Forces • Vectors 	<p>Papers 1 and 2: Pure Mathematics 1 Paper 3: Statistics and Mechanics</p> <p><u>Content overview</u></p> <ul style="list-style-type: none"> • Integration continued • Logarithms and Exponentials • Variable Acceleration • Correlation • Regression • Binomial Distribution & Hypothesis Testing
<p>ASSESSMENTS</p> <ul style="list-style-type: none"> □ Progress test by half term and progress test at end of term <p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use MyMaths online</p>	<p>ASSESSMENTS</p> <ul style="list-style-type: none"> □ Mock exam at start of term, progress test at end of term <p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use MyMaths online</p>	<p>ASSESSMENTS</p> <ul style="list-style-type: none"> □ Ongoing exam preparation and practise <p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use MyMaths online</p>

YEAR 12 – FURTHER MATHS EDEXCEL

TERM 1	TERM 2	TERM 3
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<p>Papers 1 and 2: Pure Mathematics 1 Paper 3: Statistics and Mechanics</p> <p><u>Content overview</u></p> <ul style="list-style-type: none"> ● Indices and Surds ● Quadratics ● Simultaneous Equations & Inequalities ● Cubic, Quartic and Reciprocal Graphs ● Straight Line Graphs ● Equation of a Circle ● Sampling ● Measures of Spread ● Representing Data ● Modelling in Mechanics ● Constant Acceleration Equations ● Probability ● Factor Theorem and Proof ● Trigonometry ● Differentiation ● Integration ● Forces and Motion ● Resolving Forces ● Vectors ● Binomial Theorem 	<p>Papers 1 and 2: Pure Mathematics 1 Paper 3: Statistics and Mechanics</p> <p><u>Content Overview</u></p> <ul style="list-style-type: none"> ● Integration continued ● Logarithms and Exponentials ● Variable Acceleration ● Correlation ● Regression ● Algebraic Fractions ● Sequences and Series ● Functions ● Binomial Expansion ● Radians ● Moments ● Random Variables ● Hypothesis Testing ● Further Trigonometry ● Parametric Equations ● Normal Distribution ● Projectiles ● Differentiation ● Numerical Methods 	<p>Papers 1 and 2: Pure Mathematics 1 Paper 3: Statistics and Mechanics Core Pure 1: Further Maths Pure Paper 1</p> <p><u>Content Overview</u></p> <ul style="list-style-type: none"> ● Vectors ● Integration ● Rigid Bodies ● Further Kinematics ● Complex Numbers ● Matrices ● Further Summations ● Volume of Revolution
<p>ASSESSMENTS</p> <ul style="list-style-type: none"> □ Progress tests 	<p>ASSESSMENTS</p> <ul style="list-style-type: none"> □ Progress tests 	<p>ASSESSMENTS</p> <ul style="list-style-type: none"> □ End of Year Mock
<p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use MyMaths online</p>	<p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use MyMaths online</p>	<p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use MyMaths online</p>

TERM 1	TERM 2	TERM 3
<p><u>Term 1</u> Papers 1 and 2: Pure Mathematics 2 Paper 3: Statistics and Mechanics</p> <p><u>Content Overview</u></p> <ul style="list-style-type: none"> ● Partial Fractions ● Functions ● Binomial Expansion ● Radians ● Trigonometry ● Differentiation ● Trigonometry continued ● Statics and Dynamics 	<p><u>Term 2</u> Papers 1 and 2: Pure Mathematics 2 Paper 3: Statistics and Mechanics</p> <p><u>Content Overview</u></p> <ul style="list-style-type: none"> ● Projectiles ● Parametric Equations ● Numerical Methods ● Further Kinematics ● Rigid Bodies ● Vectors ● Moments ● Normal Distribution ● Integration 	<p><u>Term 3</u> Papers 1 and 2: Pure Mathematics 2 Paper 3: Statistics and Mechanics</p> <p><u>Content Overview</u></p> <ul style="list-style-type: none"> ● Sequences and Series ● Integration continued ● Proof ● Regression
<p>ASSESSMENTS</p> <ul style="list-style-type: none"> □ Progress test by half term and progress test at end of term 	<p>ASSESSMENTS</p> <ul style="list-style-type: none"> □ Mock exam at start of term, progress test at end of term 	<p>ASSESSMENTS</p> <ul style="list-style-type: none"> □ Ongoing exam preparation and practice
<p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use MyMaths online</p>	<p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use MyMaths online</p>	<p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use MyMaths online</p>

YEAR 13 – FURTHER MATHS EDEXCEL

TERM 1	TERM 2	TERM 3
<p>Papers 1 and 2: Pure Mathematics 2 Paper 3: Statistics and Mechanics Paper 4: Core Pure Mathematics 1 <u>Content overview</u></p> <ul style="list-style-type: none"> ● Complex Numbers & Argand Diagrams ● Roots of Polynomials ● Matrix Transformations ● Proof by Induction ● Series (Maclaurin, Taylor and Limits) ● 3D Vectors ● Further Complex Numbers ● Differential Equations ● Hyperbolic Functions ● Methods of Calculus ● Reducible Differential Equations 	<p>Paper 5: Core Pure Mathematics 2 Paper 6: Further Mechanics 1 Paper 7: Further Pure Mathematics 1 <u>Content Overview</u></p> <ul style="list-style-type: none"> ● Momentum and Impulse ● Work, Energy & Power ● Hooke’s Law ● Conics ● Inequalities ● Advanced Trigonometric Approaches ● Collisions ● Elastic Collisions ● Numerical Methods of Differential Equations ● Taylor Series ● Further Methods in Calculus 	<p>Paper 7: Further Pure Mathematics 1 <u>Content Overview</u></p> <p>REVISION</p>
<p>ASSESSMENTS</p> <ul style="list-style-type: none"> □ Progress tests 	<p>ASSESSMENTS</p> <ul style="list-style-type: none"> □ Progress tests 	<p>ASSESSMENTS</p> <ul style="list-style-type: none"> □ End of Year Mock
<p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use MyMaths online</p>	<p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p> <p>Ensuring your child is able to access and use MyMaths online</p>	<p>HOW PARENTS CAN SUPPORT LEARNING</p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p>

Ensuring your child is able to access and use MyMaths online