CURRICULUM PLAN- MATHEMATICS

KS3:

YEAR 7

TERM 1	TERM 2	TERM 3
CONTENT **Number Skills** **Fractions & Decimals** **Percentages**	**CONTENT** **Linear Expressions** **2D Shapes – properties, area and perimeter** **Representation and Interpretation**	**CONTENT** **Angle rules** **Polygons** **End of year project – Travel with scale drawing, bearings**
ASSESSMENTS • **Standardized Tests which can monitor progress** • **Homework assessments (Hegarty)** • **Fortnightly times table tests (starting after half term**	**ASSESSMENTS** • Standardized Tests which can monitor progress • Homework assessments (Hegarty) • Fortnightly times table tests (starting after half term	**ASSESSMENTS** • **Standardized Tests which can monitor progress** • **Homework assessments (Hegarty)** • **Fortnightly times table tests (starting after half term** • **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
CONTENT **Sequences** **Graphs** **Indices** **Solving complex linear Equations**	**CONTENT** Averages – discrete and Continuous Probability Ratio	**CONTENT** ****Calculator work**** **Area and circumference of circle** **3d shapes - Surface Area & Volume prisms** **Rounding and estimating** **End of year project e .g. best buys/ to include percentages on calc etc**
ASSESSMENTS • **Standardized Tests which can monitor progress** • **Homework assessments (Hegarty)** • **Fortnightly times table tests (starting after half term**	**ASSESSMENTS** • Standardized Tests which can monitor progress • Homework assessments (Hegarty) • Fortnightly times table tests	**ASSESSMENTS** • **Standardized Tests which can monitor progress** • **Homework assessments (Hegarty)** • **Fortnightly times table tests End of Year Exam** • **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**

KS4:

YEAR 9 - Exam Board EDEXCEL

TERM 1	TERM 2	TERM 3

CONTENT	CONTENT	CONTENT
Ch 1. Number: Calculations **Ch 2Number: Fractions, decimals and percentages** **Ch 3 and 4 Statistics: Handling Data** **Ch 5 Algebra: Expressions**	**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**	**Ch 9 ratio and proportion** **Ch 10 Geometry:Angles and Polygons** **Ch 11 Statistics: Probablity**
ASSESSMENTS • **End of Unit Assessments** • **Homework Assessments**	**ASSESSMENTS** • **End of Unit Assessments** • **Homework Assessments**	**ASSESSMENTS** • **End of Unit Assessments** • **Homework Assessments** • **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**

YEAR 10 - Exam Board EDEXCEL

TERM 1	TERM 2	TERM 3
Ch 12 Algebra: Graphs 1 Ch 13 Algebra: Equations Ch 14 Number: Factors, powers, roots, calcualtions 2	Ch 14 Number: Factors, powers, roots, calculations 2 Ch15 Non right Angle Triangles Ch 16:formulae and Functions	Ch 17: Inequalities Ch 18 Geometry: Circles and Constructions Ch 19: Geometry: Working in 3D
ASSESSMENTS • **End of Unit Assessments** • **Homework Assessments**	**ASSESSMENTS** • End of Unit Assessments • Homework Assessments • Mid-Year Exams	**ASSESSMENTS** • **End of Unit Assessments** • **Homework Assessments**
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**

YEAR 11 – Exam Board EDEXCEL

TERM 1	TERM 2	TERM 3
Ch 20: Algebra: Graphs 2 Ch 21 **Number: Units and Proportionality**	Ch 22 Data: Probability of combined events ch 23 Number:Measures of Accuracy **Ch24 Geometry: vectors**	**Revision and preparation for GCSE exam**
ASSESSMENTS • **1 tests measuring progress during this first term** • **Mock Exams**	**ASSESSMENTS** • 2 tests measuring progress during this second term and regular use of practice papers	**ASSESSMENTS** • **In class exam practice using past papers**
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**

YEAR 12 – Mathematics – Exam Board EDEXCEL

TERM 1	TERM 2	TERM 3
Papers 1 and 2: Pure Mathematics 1 **Paper 3: Statistics and Mechanics** **Content overview** ● **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**	**Papers 1 and 2: Pure Mathematics 1** **Paper 3: Statistics and Mechanics** **Content overview** ● **Trigonometry** ● **Differentiation** ● **Integration** ● **Constant Acceleration Equations** ● **Probability** ●**Forces and Motion** ● **Resolving Forces** ● **Vectors**	Papers 1 and 2: Pure Mathematics 1 Paper 3: Statistics and Mechanics **Content overview** ● **Integration continued** ● **Logarithms and Exponentials** ● **Variable Acceleration** ● **Correlation** ● **Regression** ● **Binomial Distribution & Hypothesis Testing**

ASSESSMENTS
 	
    □   **Progress test by half term and progress test at end of term**
 	
 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 MyMaths online
	ASSESSMENTS
	
	    □ **Mock exam at start of term, progress test at end of term**
	
	 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 MyMaths online
		ASSESSMENTS
		
		    □ **Ongoing exam preparation and practise**
		
		 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 MyMaths online

YEAR 12 – FURTHER MATHS EDEXCEL

TERM 1	TERM 2	TERM 3

Papers 1 and 2: Pure Mathematics 1 Paper 3: Statistics and Mechanics <u>Content overview</u> ● **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**	**Papers** 1 and 2: Pure Mathematics 1 Paper 3: Statistics and Mechanics <u>Content Overview</u> ● **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**	Papers 1 and 2: Pure Mathematics 1 Paper 3: Statistics and Mechanics Core Pure 1: Further Maths Pure Paper 1 <u>Content Overview</u> ● **Vectors** ● **Integration** ● **Rigid Bodies** ● **Further Kinematics** ● **Complex Numbers** ● **Matrices** ● **Further Summations** ● **Volume of Revolution**
ASSESSMENTS ☐ **Progress tests**	**ASSESSMENTS** ☐ Progress tests	**ASSESSMENTS** ☐ **End of Year Mock**
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 MyMaths online**	**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 MyMaths online**	**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 MyMaths online**

YEAR 13 MATHEMATICS EDEXCEL

TERM 1	TERM 2	TERM 3
Term 1 Papers 1 and 2: Pure Mathematics 2 Paper 3: Statistics and Mechanics **Content Overview** ● **Partial Fractions** ● **Functions** ● **Binomial Expansion** ● **Radians** ● **Trigonometry** ● **Differentiation** ● **Trigonometry continued** ● **Statics and Dynamics**	**Term 2** Papers 1 and 2: Pure Mathematics 2 Paper 3: Statistics and Mechanics **Content Overview** ● **Projectiles** ● **Parametric Equations** ● **Numerical Methods** ● **Further Kinematics** ● **Rigid Bodies** ● **Vectors** ● **Moments** ● **Normal Distribution** ● **Integration**	**Term 3** Papers 1 and 2: Pure Mathematics 2 Paper 3: Statistics and Mechanics **Content Overview** ● **Sequences and Series** ● **Integration continued** ● **Proof** ● **Regression**
ASSESSMENTS ◻ Progress test by half term and progress test at end of term	**ASSESSMENTS** ◻ Mock exam at start of term, progress test at end of term	**ASSESSMENTS** ◻ Ongoing exam preparation and practice
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 MyMaths online	**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 MyMaths online	**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 MyMaths online

YEAR 13 – FURTHER MATHS EDEXCEL

TERM 1	TERM 2	TERM 3
Papers 1 and 2: Pure Mathematics 2 Paper 3: Statistics and Mechanics Paper 4: Core Pure Mathematics 1 **Content overview** ● **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**	Paper 5: Core Pure Mathematics 2 Paper 6: Further Mechanics 1 Paper 7: Further Pure Mathematics 1 Content Overview ● **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**	Paper 7: Further Pure Mathematics 1 **Content Overview** **REVISION**

ASSESSMENTS
    ☐   **Progress tests**
	ASSESSMENTS
	
	    ☐ Progress tests
		ASSESSMENTS
		
		    ☐ **End of Year Mock**

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