

## CURRICULUM PLAN- MATHEMATICS

**KS3:  
YEAR 7**

TERM 1	TERM 2	TERM 3
<b>CONTENT</b>  Number Skills Indices and roots Factors and Multiples	<b>CONTENT</b>  Expressions and Equations Decimals rounding and Percentages Ratios and Proportion	<b>CONTENT</b>  Angle rules 2D Shapes – properties, area and perimeter 3D Shapes  End of year project
<b>ASSESSMENTS</b> <ul style="list-style-type: none"> <li>Standardized Tests which can monitor progress</li> <li>Sparx Homework assessments</li> </ul>	<b>ASSESSMENTS</b> <ul style="list-style-type: none"> <li>Standardized Tests which can monitor progress</li> <li>Sparx Homework assessments</li> </ul>	<b>ASSESSMENTS</b> <ul style="list-style-type: none"> <li>Sparx Homework assessments</li> <li>End of year exam</li> </ul>
<b>HOW PARENTS CAN SUPPORT LEARNING</b>  Ensuring your child completes homework and brings the correct Maths equipment to every lesson  Ensuring your child is able to access and use Sparx, Pinpoint and Maths Watch	<b>HOW PARENTS CAN SUPPORT LEARNING</b>  Ensuring your child completes homework and brings the correct Maths equipment to every lesson  Ensuring your child is able to access and use Sparx, Pinpoint and Maths Watch	<b>HOW PARENTS CAN SUPPORT LEARNING</b>  Ensuring your child completes homework and brings the correct Maths equipment to every lesson  Ensuring your child is able to access and use Sparx, Pinpoint and Maths Watch

**KS3:  
YEAR 8**

TERM 1	TERM 2	TERM 3
<p><b>CONTENT</b></p> <p>Sequences Graphs Basic Standard Form and rules of Indices Bounds</p>	<p><b>CONTENT</b></p> <p>Equations and Formula Percentages Ratios Averages and Range</p>	<p><b>CONTENT</b></p> <p><b>**Calculator work**</b> Probability Circles Displaying Data Volume and surface area of prisms</p>
<p><b>ASSESSMENTS</b></p> <ul style="list-style-type: none"> <li>Standardized Tests which can monitor progress</li> <li>Homework assessments (Hegarty)</li> <li>Fortnightly times table tests (starting after half term)</li> </ul>	<p><b>ASSESSMENTS</b></p> <ul style="list-style-type: none"> <li>Standardized Tests which can monitor progress</li> <li>Homework assessments (Hegarty)</li> <li>Fortnightly times table tests</li> </ul>	<p><b>ASSESSMENTS</b></p> <ul style="list-style-type: none"> <li>Standardized Tests which can monitor progress</li> <li>Homework assessments (Hegarty)</li> <li>Fortnightly times table tests End of Year Exam</li> <li>End of year exam</li> </ul>
<p><b>HOW PARENTS CAN SUPPORT LEARNING</b></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 Sparx, Pinpoint and Maths Watch</p>	<p><b>HOW PARENTS CAN SUPPORT LEARNING</b></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 Sparx, Pinpoint and Maths Watch</p>	<p><b>HOW PARENTS CAN SUPPORT LEARNING</b></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 Sparx, Pinpoint and Maths Watch</p>

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

<b>TERM 1</b>	<b>TERM 2</b>	<b>TERM 3</b>
<b>CONTENT</b>  Ch 1. Number: Calculations Ch 2 Number: Fractions, decimals and percentages Ch 3 and 4 Statistics: Handling Data Ch 5 Algebra: Expressions	<b>CONTENT</b>  Ch 5 Algebra: Equations Ch 6 Geometry: Working with 2D Ch 7 Geometry: Trigonometry and Pythagoras Ch 8 sequences	<b>CONTENT</b>  Ch 9 Ratio and Proportion Ch 10 Geometry: Angles and Polygons Ch 11 Statistics: Probability
<b>ASSESSMENTS</b> <ul style="list-style-type: none"> <li>• End of Unit Assessments</li> <li>• November Standardised Assessment</li> <li>• Homework Assessments</li> </ul>	<b>ASSESSMENTS</b> <ul style="list-style-type: none"> <li>• End of Unit Assessments</li> <li>• Homework Assessments</li> <li>• Mid-Year Standardised Exams</li> </ul>	<b>ASSESSMENTS</b> <ul style="list-style-type: none"> <li>• April Standardised Assessments</li> <li>• End of Year Assessments</li> <li>• Homework Assessments</li> </ul>
<b>HOW PARENTS CAN SUPPORT LEARNING</b>  Ensuring your child completes homework and brings the correct Maths equipment to every lesson  Ensuring your child is able to access and use Sparx, Pinpoint and Maths Watch	<b>HOW PARENTS CAN SUPPORT LEARNING</b>  Ensuring your child completes homework and brings the correct Maths equipment to every lesson  Ensuring your child is able to access and use Sparx, Pinpoint and Maths Watch	<b>HOW PARENTS CAN SUPPORT LEARNING</b>  Ensuring your child completes homework and brings the correct Maths equipment to every lesson  Ensuring your child is able to access and use Sparx, Pinpoint and Maths Watch

## YEAR 10 - Exam Board EDEXCEL

TERM 1	TERM 2	TERM 3
<p>Ch 12 Algebra: Graphs 1 Ch 13 Algebra: Quadratic Equations</p>	<p>Ch 14 Number: Factors, powers, roots, surds and standard form</p> <p>Ch15 Geometry: Non right Angle Triangles</p> <p>Ch 16 formulae and Functions</p>	<p>Ch 17: Inequalities Ch 18 Geometry: Circles and Constructions Ch 19: Geometry: Working in 3D</p>
<p><b>ASSESSMENTS</b></p> <ul style="list-style-type: none"> <li>• End of Unit Assessments</li> <li>• November Standardised Assessment</li> <li>• Homework Assessments</li> </ul>	<p><b>ASSESSMENTS</b></p> <ul style="list-style-type: none"> <li>• January Standardised Assesment</li> <li>• February Standardised Assessment</li> <li>• End of Year Exams</li> <li>•</li> </ul>	<p><b>ASSESSMENTS</b></p> <ul style="list-style-type: none"> <li>• May standardised Assessments</li> <li>• July standardised assessments</li> <li>• Homework Assessments</li> </ul>
<p><b>HOW PARENTS CAN SUPPORT LEARNING</b></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 Sparx, Pinpoint and Maths Watch</p>	<p><b>HOW PARENTS CAN SUPPORT LEARNING</b></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 Sparx, Pinpoint and Maths Watch</p>	<p><b>HOW PARENTS CAN SUPPORT LEARNING</b></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 Sparx, Pinpoint 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>Revision and preparation for GCSE exam</p>
<p>ASSESSMENTS</p> <ul style="list-style-type: none"> <li>• Mock Exams</li> <li>• Mini tests on key skills learnt previously</li> <li>•</li> </ul>	<p>ASSESSMENTS</p> <ul style="list-style-type: none"> <li>• March Mock</li> </ul>	<p>ASSESSMENTS</p> <ul style="list-style-type: none"> <li>• In class exam practice using past papers</li> </ul>
<p><b>HOW PARENTS CAN SUPPORT LEARNING</b></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><b>HOW PARENTS CAN SUPPORT LEARNING</b></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><b>HOW PARENTS CAN SUPPORT LEARNING</b></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  <u>Content overview</u></p> <ul style="list-style-type: none"> <li>● Indices and Surds</li> <li>● Quadratics &amp; Discriminant</li> <li>● Simultaneous Equations &amp; Inequalities</li> <li>● Cubic, Quartic and Reciprocal Graphs</li> <li>● Straight Line Graphs</li> <li>● Equation of a Circle</li> <li>● Algebraic Division &amp; Factor Theorem</li> <li>● Sampling</li> <li>● Measures of Spread</li> <li>● Representing Data</li> <li>● Modelling in Mechanics</li> <li>● Partial fractions</li> <li>● Binomial year 1 and 2</li> <li>● Trigonometry</li> <li>●</li> </ul>	<p>Papers 1 and 2: Pure Mathematics 1            Paper 3: Statistics and Mechanics  <u>Content overview</u></p> <ul style="list-style-type: none"> <li>● Differentiation</li> <li>● Integration</li> <li>● Constant Acceleration Equations</li> <li>● Probability</li> <li>● Forces and Motion</li> <li>● Resolving Forces</li> <li>● Vectors</li> <li>● Binomial Distribution &amp; Hypothesis Testing</li> </ul>	<p>Papers 1 and 2: Pure Mathematics 1            Paper 3: Statistics and Mechanics  <u>Content overview</u></p> <ul style="list-style-type: none"> <li>● Integration continued</li> <li>● Logarithms and Exponentials</li> <li>● Variable Acceleration</li> <li>● Correlation</li> <li>● Regression</li> <li>● Sequences and Series</li> </ul>
<p><b>ASSESSMENTS</b>            -Test of transition work in September            -November assessment on work so far            -End of unit assessments</p>	<p><b>ASSESSMENTS</b>            -January Mock            -End of unit assessments</p>	<p><b>ASSESSMENTS</b>            -End of Year exams            -End of unit assessments</p>
<p><b>HOW PARENTS CAN SUPPORT LEARNING</b></p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p>	<p><b>HOW PARENTS CAN SUPPORT LEARNING</b></p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p>	<p><b>HOW PARENTS CAN SUPPORT LEARNING</b></p> <p>Ensuring your child completes homework and brings the correct Maths equipment to every lesson</p>

## YEAR 12 – FURTHER MATHS EDEXCEL

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

## YEAR 13 MATHEMATICS EDEXCEL

TERM 1	TERM 2	TERM 3
<p><u>Term 1</u> Papers 1 and 2: Pure Mathematics 2 Paper 3: Statistics and Mechanics <u>Content Overview</u></p> <ul style="list-style-type: none"> <li>● Functions</li> <li>● Trigonometry Year 2</li> <li>● Differentiation Year 2</li> <li>● Statics and Dynamics</li> <li>● Projectiles</li> <li>● Further Kinematics</li> <li>● Rigid Bodies</li> <li>● Moments</li> <li>● Vectors</li> <li>●</li> </ul>	<p><u>Term 2</u> Papers 1 and 2: Pure Mathematics 2 Paper 3: Statistics and Mechanics <u>Content Overview</u></p> <ul style="list-style-type: none"> <li>● Parametric Equations</li> <li>● Numerical Methods</li> <li>● Normal Distribution</li> <li>● Integration</li> <li>● Proofs</li> <li>● Revision and Papers</li> </ul>	<p><u>Term 3</u> REVISION</p>
<p><b>ASSESSMENTS</b></p> <ul style="list-style-type: none"> <li>● Progress test by half term and progress test at end of term</li> </ul>	<p><b>ASSESSMENTS</b></p> <ul style="list-style-type: none"> <li>● Mock exam at start of term, progress test at end of term</li> </ul>	<p><b>ASSESSMENTS</b></p> <ul style="list-style-type: none"> <li>● Ongoing exam preparation and practice</li> </ul>
<p><b>HOW PARENTS CAN SUPPORT LEARNING</b></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><b>HOW PARENTS CAN SUPPORT LEARNING</b></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><b>HOW PARENTS CAN SUPPORT LEARNING</b></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"> <li>● Complex Numbers &amp; Argand Diagrams</li> <li>● Series (Maclaurin, Taylor and Limits)</li> <li>● 3D Vectors</li> <li>● Further Complex Numbers</li> <li>● Differential Equations</li> <li>● Methods of Calculus</li> <li>● Reducible Differential Equations</li> </ul>	<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"> <li>● Momentum and Impulse</li> <li>● Work, Energy &amp; Power</li> <li>● Hooke’s Law</li> <li>● Conics</li> <li>● Inequalities</li> <li>● Advanced Trigonometric Approaches</li> <li>● Collisions</li> <li>● Elastic Collisions</li> <li>● Numerical Methods of Differential Equations</li> <li>● Taylor Series</li> <li>● Further Methods in Calculus</li> </ul>	<p>Paper 7: Further Pure Mathematics 1   <u>Content Overview</u>             REVISION</p>
<p><b>ASSESSMENTS</b></p> <ul style="list-style-type: none"> <li>● Progress tests</li> </ul>	<p><b>ASSESSMENTS</b></p> <ul style="list-style-type: none"> <li>● Progress tests</li> </ul>	<p><b>ASSESSMENTS</b></p> <ul style="list-style-type: none"> <li>● End of Year Mock</li> </ul>
<p><b>HOW PARENTS CAN SUPPORT LEARNING</b></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><b>HOW PARENTS CAN SUPPORT LEARNING</b></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><b>HOW PARENTS CAN SUPPORT LEARNING</b></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>