

**Curriculum Long Term  
Planning Overview**

**Key Stage 3**

**Subject Area:  
Maths**

**Academic Year: 2022-23**

Year	Study Modules	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Year 7 Set 1	Study Modules	<p><b>Indices and Roots</b></p> <p>Calculate with powers and roots</p> <p>Explore the use of standard form</p> <p>Explore the effects of rounding</p> <p><b>Algebraic</b></p>	<p><b>Algebraic</b></p>	<p><b>Algebraic Expressions and Formulae</b></p> <p>Understand equations and identities</p> <p>Manipulate algebraic expressions</p> <p>Construct algebraic statements</p> <p><b>Proportional Reasoning</b></p> <p>Solve problems involving different types of proportion</p> <p>Investigate ways of representing proportion</p> <p>Understand and solve problems involving congruence</p>	<p><b>Proportional Reasoning</b></p> <p>Solve problems involving different types of proportion</p> <p>Investigate ways of representing proportion</p> <p>Understand and solve problems involving congruence</p> <p><b>Sequences I</b></p> <p>Explore sequences</p>	<p><b>Algebraic Proficiency – Visualising</b></p> <p>Plot and interpret linear graphs</p> <p>Plot and quadratic graphs</p> <p>Model real situations using linear graphs</p>	<p><b>Algebraic Proficiency – Visualising</b></p> <p>Plot and interpret linear graphs</p> <p>Plot and quadratic graphs</p> <p>Model real situations using linear graphs</p> <p><b>Solving Equations and Inequalities</b></p> <p>Solve linear equations with the unknown on one side</p> <p>Solve linear equations with the unknown on both sides</p> <p>Explore connections between graphs and equations</p>



Understand  
and solve  
problems  
involving  
similarity

Know and use  
compound  
units in a  
range of  
situations

**Manipulation**

**Manipulation**

Understand  
the notation of  
algebra

Manipulate  
algebraic  
expressions

Evaluate  
algebraic  
statements

Understand  
the notation of  
algebra

Manipulate  
algebraic  
expressions

Evaluate  
algebraic  
statements

**Visualising  
and  
Constructing**

Know  
standard  
mathematical  
constructions

Apply  
standard  
mathematical  
constructions

Explore ways  
of  
representing  
3D shapes



**Assessment**

Open book  
end of topic  
assessment

Closed book  
end of term  
test

Open book  
end of topic  
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<b>Year</b>	<b>Study Modules</b>	<b>Autumn Term 1</b>	<b>Autumn Term 2</b>	<b>Spring Term 1</b>	<b>Spring Term 2</b>	<b>Summer Term 1</b>	<b>Summer Term 2</b>
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**Year  
8  
Set 1**

**Study  
Modules**

**Conjecturing**

Explore the congruence of triangles

Investigate geometrical situations

Form conjectures

Create a mathematical proof

**Sequences II**

Investigate Fibonacci numbers

Investigate Fibonacci type sequences

Explore quadratic sequences

**Solving Equations and Inequalities I**

Explore the meaning of an inequality

Solve linear inequalities

**Probability**

Understand and use tree diagrams

Develop understanding of probability in situations involving combined events

Use probability to make predictions

**Algebraic Functions**

Investigate features of straight line graphs

Explore graphs of quadratic functions

Explore graphs of other standard non-linear functions

Create and use graphs of non-standard functions

Solve kinematic problems

**Presentation of Data**

Construct and interpret graphs of time series

Interpret a range of charts and graphs

Interpret scatter diagrams

Explore correlation


**Solving Equations and Inequalities III**

Solve simultaneous equations

Use graphs to solve equations

Solve problems involving simultaneous equations

**Transformation**



							Explore enlargement of 2D shapes
							Investigate the transformation of 2D shapes



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