

# Key Stage 3 Mathematics Road Map

Mathematics content is cumulative, meaning that each piece of learning builds on and uses previously learned content.

**Year 7 Autumn**  
Sequences  
Understanding and Use of Algebra  
Equality and Equivalence

**Year 7 Spring**  
2-D Shape and Angle Properties  
Coordinates, Area, transformations  
Forming Expressions, Equations and using formulae

**Year 8 Autumn**  
Sequences and Patterns  
Forming and Solving Algebraic Equations – Links to Graphs  
Rounding to given degree of accuracy, Estimation

**Year 7 Summer**  
Using Primes (HCF and LCM), roots, Squares and Cubes  
Fractions, Decimals and Percentages- comparing and all operations

**Year 8 Spring**  
Real Life Graphs  
Direct and Inverse Proportion  
Representing and Interpreting Statistics and Data

**Year 8 Summer**  
Polygons and Angle Properties (interior and Exterior)  
Bearings and Direction  
Area, Perimeter and Volume of Composites and Circles

**Year 9 Spring**  
Constructions and Loci, Similarity and Enlargement  
Pythagoras' Theorem and Trigonometry (Right angle Triangles) and use of Surds

**Year 9 Autumn**  
Fractions, Decimals, Percentages  
Probability diagrams  
Simultaneous Equations – Graphical and algebraic

**Year 9 Summer**  
Quadratic expressions and Equations, Graphical and Algebraic  
Index Notation and Rules  
Standard Form  
Growth and Decay

Key Stage 2

GCSE

Fluency

Problem-Solving



Reasoning

Fluency, Reasoning, and Problem Solving are integrated into the course

To support your learning – assessment is on-going in class, through homework and will use the online systems MathsWatch, Eedi, and TTRockstars

Key	
Number	Geometry and Measure
Algebra	Ratio and Proportion
Probability	Statistics