Year 10 Maths Foundation Tier

Module Title:	Module Title:	Module Title:
Number Operations and Algebraic Manipulation and Sequences	Constructing and Interpreting Graphs and Charts, Fractions, Decimals and Percentages and Ratio	Angle Rules, Perimeter, Area Volume and Circles, Co-ordinate Geometry and Linear Graphs, Trigonometry and Probability
Students will use the 4 operations to work with integers, direct numbers, decimals, fractions and percentages. Students will recognise and use multiples, factors and primes. Students will know and use the laws of indices and will extend this to standard form. Students will revise and extend their skills in algebraic manipulation and will form and solve equations and inequalities. Students will recognise and use algebraic expressions to describe sequences and solve related problems.	Students will construct and interpret a range of graphs and charts including in context. Students will work with fractions, decimals and percentages and will convert between them. Students will work with the concepts of ratio and proportion and will solve related problems. Students will become familiar with a range of multiplicative reasoning techniques.	Students will extend their knowledge of 2-D and 3-D shapes and their properties. Students will understand and use the angle rules including those of polygons and solve related problems. Students will revisit the topics of perimeter, area and volume and will extend this to composite 3-D shapes. Students will work with a range of straight-line graphs, including real-life graphs. They will learn and use co-ordinate geometry formulae. Students will learn and apply Pythagoras' Theorem and trigonometry for right-angled triangles.
 Key Content to be learned: Integers and Place Value Decimals Factors Multiples and Primes Indices, Powers and Roots Fractions and Reciprocals Indices and Standard Form Algebraic Manipulation 	Key content to be learned: Tables, Graphs and Charts Pie Charts Scatter Graphs Statistics, Sampling and Averages Fractions, Decimals and Percentages Percentages Ratio	 Key Content to be learned: Properties of Shapes, Parallel Lines and Angle Facts Interior and Exterior Angles of Polygons Perimeter, Area and Volume Real-Life Graphs Straight-Line Graphs Pythagoras' Theorem and Trigonometry

 Expressions and Substitution Equations and Inequalities Sequences 	ProportionMultiplicative Reasoning	• Probability
 Key tasks for this module: Key Task 1 – Number Operations Key Task 2 – Indices and Standard Form Key Task 3 – Expressions and Factorising Key Task 4 – Equations and Inequalities and Sequences Key Task 5 – Summative Assessment 	 Key tasks for this module: Key Task 1 – Statistical Diagrams Key Task 2 – Averages Key Task 3 – Fractions, Decimals and Percentages Key Task 4 – Ratio and Proportion Key Task 5 – Summative Assessment 	 Key tasks for this module: Key Task 1 – Angle Rules Key Task 2 – Perimeter, Area and Volume Key Task 3 – Graphs, Pythagoras' Theorem and Trigonometry Key Task 4 - End of Year Exam Paper 1 Key Task 5 - End of Year Exam Paper 2

Year 11 Maths Foundation Tier

Module Title:	Module Title:	Module Title:
Probability, Similarity, Further Trigonometry and Circles	More Complex Algebra and Equations, Functions, Proof, Vectors and Complex Graphs	Revision and Exam Preparation
Learning Intent for this module: Students will carry out and describe the 4 transformations. Students will understand the term similar and congruent and will learn the conditions for each. Students will look at 2-D representation of 3-D shapes, in particular plan and elevation drawings. Students will learn standard constructions and will apply these when studying loci and bearings. Students will extend their knowledge of quadratic expressions by solving equations. Students will revise and extend their knowledge of various compound measures.	Learning Intent for this module: Students will extend their knowledge of volume and surface area to include shapes that are more complex. Students will understand and use vector geometry. Students will re-arrange equations and expressions. Students will study the graphs of harder functions. Students will form and solve simultaneous equations.	Learning Intent for this Module: Students will now consolidate their learning cross the course. Particular revision will focus on areas for improvement identified in mock 2.
 Key Content to be learned: Transformations Similarity and Congruence in 2-D Plans and Elevations Constructions, Loci and Bearings Quadratic Equations – Expanding and Factorising Compound Measures 	 Key content to be learned: Cones, Cylinders and Spheres Vectors Re-arranging Equations Graphs of Quadratic, Cubic and Reciprocal Functions Simultaneous Equations 	 Key Content to be learned: Revision and Consolidation of topics based on Mock Data Exam Preparation

 Key tasks for this module: Key Task 1 – Transformations and Similarity Key Task 2 – Constructions, Loci and Bearings Key Task 3 – Quadratic Equations Key Task 4 – Mock 1 Paper 1 Key Task 5 – Mock 1 Paper 2/3 	 Key tasks for this module: Key Task 1 – Cones, Cylinders and Spheres Key Task 2 – Vectors Key Task 3 – Simultaneous Equations Key Task 4 – Mock 2 Paper 1 Key Task 5 – Mock 2 Paper 2/3 	Key tasks for this module: