

Subject	Year	Term
Mathematics (Foundation)	10	3
Topic		
Angles, Graphs and diagrams, Vectors, Number, Trigonometry and Simultaneous Equations		
Content (Intent)		
Prior Learning (Topic): Types of charts, Coordinates, Squares and cubes, Triangle properties		
- Angles - Graphs and diagrams - Vectors - Factors, powers and surds - Pythagoras' Theorem and Trigonometry - Simultaneous Equations		
Future Learning (Topic)		
What Knowledge and Skills will be taught (Implementation)		How will your understanding be assessed & recorded (Impact)
- To identify angle types and properties within triangles, quadrilaterals, and polygons. - To calculate missing angles using rules and algebra. - To reason and prove geometric facts using angle relationships. - To draw and interpret various statistical diagrams including pie charts, bar charts, and pictograms. - To interpret data shown in time-series, frequency polygons, and stem-and-leaf diagrams. - To compare sets of data using appropriate graphical methods. - To represent and operate with vectors using geometric and algebraic methods. - To add, subtract, and scale vectors accurately. - To solve geometric problems involving vectors. - To identify factors, multiples, and powers, including prime factorisation. - To simplify expressions with indices and surds. - To reason with irrational numbers and apply HCF and LCM in problems. - To identify sides and apply Pythagoras' Theorem and trigonometric ratios. - To calculate unknown lengths or angles in right-angled triangles. - To apply exact values and trigonometric methods in a range of contexts. - To solve simultaneous equations algebraically by elimination and substitution - To solve simultaneous equations graphically		Ongoing Assessment - Q&A in plenary - Mini-whiteboards - Self and Peer assessment - One online homework per week - End of unit tests Formal Assessment Formative assessment in June
How can parents help at home?		
Help to learn 'need-to-know' formulas Encourage use of SparxMaths [or MathsGenie] Review previously taught topics regularly		
Helpful further reading/discussion (including Reading and Vocabulary Lists)		
Reading Direct to the following websites; Sparkmaths.com www.mathsgenie.co.uk	Vocabulary Lists Alternate Corresponding Co-interior Transversal Polygon Interior Exterior Proof Time-series Vector Magnitude Direction Scalar Factor Multiple Prime Irrational Root Surd Index Hypotenuse Opposite Adjacent Ratio	