



Subject	Year	Term																								
Mathematics (Higher)	10	2																								
Topic																										
Graphs, Probability, Perimeter, Area and Volume and Interpreting data																										
Content (Intent)																										
Prior Learning (Topic): Coordinate plotting, Fractions, Percentages, Basic shapes, Averages, Solving equations																										
- Straight line graphs - Probability - Rounding and estimation	- Perimeter, area and volume - Interpret and represent data - Non-linear graphs																									
Future Learning (Topic) Problem solving																										
What Knowledge and Skills will be taught (Implementation)		How will your understanding be assessed & recorded (Impact)																								
- To interpret, linear relationships in different forms (e.g. $y=mx+c$) - To calculate, gradients, intercepts, and midpoints from coordinates and graphs - To solve, problems using straight-line equations and graphical inequalities	- To explore, likelihood through theoretical and experimental probabilities - To calculate, probabilities from tables, diagrams, and structured methods - To analyse, outcomes and relationships between events (independent, dependent, conditional)	<u>Ongoing Assessment</u> - Q&A in plenary - Mini-whiteboards - Self and Peer assessment - One online homework per week - End of unit tests <u>Formal Assessment</u> Formative assessment in March/April																								
- To interpret, and round values to appropriate levels of accuracy - To estimate, answers to calculations using rounding techniques - To analyse, error bounds and make decisions based on approximations																										
- To calculate, perimeter, area, surface area, and volume of 2D and 3D shapes - To solve, problems involving parts of circles, nets, and compound shapes - To interpret, geometric formulae and apply units appropriately																										
- To interpret, information using averages, spread, and comparisons - To represent, data in tables, charts, and scatter graphs - To analyse, distributions, trends, and population samples																										
- To explore, patterns in quadratic, cubic, and circular functions - To interpret, key features like roots, turning points, and tangents - To estimate, solutions to equations and areas under curves																										
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 <table><tr><td>Significant figures</td><td>Outcome</td><td>Correlation</td></tr><tr><td>Truncation</td><td>Independent</td><td>Sampling</td></tr><tr><td>Estimate</td><td>Dependent</td><td>Grouped data</td></tr><tr><td>Approximation</td><td>Conditional</td><td>Quadratic</td></tr><tr><td>Gradient</td><td>Volume</td><td>Cubic</td></tr><tr><td>Intercept</td><td>Surface area</td><td>Root</td></tr><tr><td>Parallel</td><td>Compound</td><td>Intercepts</td></tr><tr><td>Perpendicular</td><td>Frequency</td><td>Tangent</td></tr></table>		Significant figures	Outcome	Correlation	Truncation	Independent	Sampling	Estimate	Dependent	Grouped data	Approximation	Conditional	Quadratic	Gradient	Volume	Cubic	Intercept	Surface area	Root	Parallel	Compound	Intercepts	Perpendicular	Frequency	Tangent
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