



Subject	Year	Term																								
Mathematics (Foundation)	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 plot and interpret straight-line graphs and identify gradients and y-intercepts. - To derive equations in the form $y=mx+c$ from graphs or given points. - To apply straight-line graphs in real-world contexts and analyse midpoints and gradients.		<u>Ongoing Assessment</u> - Q&A in plenary - Mini-whiteboards - Self and Peer assessment - One online homework per week - End of unit tests																								
- To calculate probabilities of single and multiple events using sample spaces and tables. - To represent probabilities using tree diagrams and frequency trees. - To reason with independent and dependent events, including expected outcomes.																										
- To interpret rounding to decimal places and significant figures in context. - To estimate answers to calculations using rounded values. - To solve problems involving error intervals, truncation and bounds.		<u>Formal Assessment</u> Formative assessment in March/April																								
- To identify 2D and 3D shapes and label their properties. - To calculate perimeter, area, and volume of basic and compound shapes, including circles. - To apply surface area and nets to solve real-life spatial problems.																										
- To calculate averages and range from frequency tables and grouped data. - To compare distributions using measures of central tendency and spread. - To interpret data through scatter graphs, sampling methods, and extrapolation.																										
- To sketch and interpret quadratic and cubic graphs. - To analyse turning points, intercepts and roots from the graphs. - To approximate solutions using the points where graphs intersect.																										
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>Dependent</td><td>Correlation</td></tr><tr><td>Truncation</td><td>Event</td><td>Sampling</td></tr><tr><td>Estimate</td><td>Perimeter</td><td>Grouped data</td></tr><tr><td>Approximation</td><td>Area</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>Outcome</td><td>Compound</td><td>Intercepts</td></tr><tr><td>Independent</td><td>Frequency</td><td>Symmetry</td></tr></table>		Significant figures	Dependent	Correlation	Truncation	Event	Sampling	Estimate	Perimeter	Grouped data	Approximation	Area	Quadratic	Gradient	Volume	Cubic	Intercept	Surface area	Root	Outcome	Compound	Intercepts	Independent	Frequency	Symmetry
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