



Subject	Year	Term																
Maths	8	1																
Topics																		
Proportional Reasoning and Representations																		
Content (Intent)																		
Prior Learning (Topic)	Constructions and Geometric Reasoning, Number sense, Prime Numbers and Probability																	
- Ratio and scale - Multiplicative change - Multiplying and dividing fractions - Working in the cartesian plane (graphs) - Representing data - Tables and probability																		
Future Learning (Topic)	Algebraic Techniques and Developing Number Sense																	
What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)																	
- Understand and use ratio - Simplify ratio and express in the form 1:n - Divide quantities into ratios - Solve proportional problems involving ratio - Investigate pi in relation to diameter and circumference (H) - Explore direct proportion and conversion graphs - Understand scale factors and explore within similar shapes and maps	<u>Ongoing Assessment</u> - Q&A in plenary - Mini-whiteboards - Self and Peer assessment - One online homework per week - End of unit tests																	
- Multiplying and dividing with fractions, including use with mixed numbers and improper fractions - Work with co-ordinates across all four quadrants - Investigate and draw straight line graphs - Explore non-linear relationships (H) - Explore and represent data using various graphical forms - Investigate various types of data and how best to represent it - Explore probability within various representations – samples spaces, two-way tables and Venn diagrams - Use of the product rule for finding total possible outcomes (H)	<u>Formal Assessment</u> November - Assessment point 1																	
How can parents help at home?																		
Encourage use of SparxMaths																		
Practise times tables on a regular basis. Review previously taught topics regularly																		
Helpful further reading/discussion (including Reading and Vocabulary Lists)																		
Reading Direct to the following websites; Sparxmaths.com www.mathsgenie.co.uk	Vocabulary Lists <table><tr><td>Proportion</td><td>Denominator</td></tr><tr><td>Notation</td><td>Reciprocal</td></tr><tr><td>Scale factor</td><td>Quadrant</td></tr><tr><td>Multiplicative</td><td>Cartesian Plane</td></tr><tr><td>Radius</td><td>Gradient</td></tr><tr><td>Circumference</td><td>Parallel</td></tr><tr><td>Diameter</td><td>Perpendicular</td></tr><tr><td>Numerator</td><td>Intercept</td></tr></table>		Proportion	Denominator	Notation	Reciprocal	Scale factor	Quadrant	Multiplicative	Cartesian Plane	Radius	Gradient	Circumference	Parallel	Diameter	Perpendicular	Numerator	Intercept
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