



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	Vocabulary Lists	
Direct to the following websites;	Proportion	Denominator
Sparxmaths.com	Notation	Reciprocal
	Scale factor	Quadrant
	Multiplicative	Cartesian Plane
www.mathsgenie.co.uk	Radius	Gradient
	Circumference	Parallel
	Diameter	Perpendicular
	Numerator	Intercept