

Term	Week	Focus	Summary	Learning Outcomes	Learning skills
Term 1.1	1		Baseline Assessments and orientation	Introduction lessons and baseline assessments.	- Automaticity - Meta-cognition - Resilience
	2	Number	Surds	4 operations with Surds including simplifying and expanding brackets; To Rationalising the denominator	- Speed and accuracy - Automaticity - Flexible thinking
	3	Number	Fractional Indices	Find the value of calculations using fractional indices and negative powers. Solve equations with indices by writing each term as a power of the same number.	- Strategy planning - Connection finding - Self regulation
	4	Ratio and proportion	Similarity	Solve problems to find missing lengths of similar shapes. Identify when similar shapes have been enlarged, calculate the scale factor as a ratio of corresponding sides and understand the effect of enlargements on perimeter of shapes.	- Abstraction - Problem solving - Hard working
	5	Ratio and proportion	Similarity	Calculate the scale factor for surface area and volume of enlarged 3D shapes. Work backwards to find the dimensions of the original shape before it was enlarged.	- Critical and logical thinking - Precision - Intellectual playfulness
	6	Ratio and proportion	Direct and Inverse Proportion	Begin to recognise and use direct and inverse proportion, including graphically, understand and use direct and inverse proportions to solve problems by setting up equations and recognise and interpret these graphically.	- Strategy planning - Connection finding - Self regulation

Term 1.2	1	Ratio and proportion	Direct and Inverse Proportion	Set up and use formal equations to solve direct and inverse proportion problems, which may include x squared and square root etc. Ratio Change - Adults and Children are in the ratio 1:3, when 4 Adults are added, the new ratio is 1:2. How many children are there	• Big picture thinking • Hard working • Self regulation
	2	Shape, Space and Measure	Surface Area/Volume	Find the volume and surface area of basic prisms, calculate volume and surface area of more complex prisms (eg. Cylinders).	• Critical and logical thinking • Precision • Intellectual playfulness
	3	Shape, Space and Measure	Surface Area/Volume	Calculate the volume and surface area of pyramids and spheres.	• Strategy planning • Connection finding • Self regulation
	4	Shape, Space and Measure	Surface Area/Volume	Be able to convert between units, solve problems to find missing lengths in similar shapes.	• Critical and logical thinking • Precision • Hard working
	5	Shape, Space and Measure	Density	Understand density as a proportion and be able to identify units.	• Originality • Fluent thinking • Generalisation
	6	Retrieval	Retrieval Practice	To access the topics taught during the half term.	• Automaticity • Meta-cognition • Resilience