Y11 Foundation SOW

Y11 Foundation - HT1					
Chapters	**Learning Objectives:**	**Grade**	**R**	**A**	**G**
Ratio and proportion	Divide amounts into given ratios	4			
	Solve problems involving ratios.	5			
	Find the cost per unit mass / mass per unit cost	3			
	Use the unitary method to find which product is better value.	3			
	Convert between currencies and measures.	4			
	Recognise the relationship between speed, distance and time	3			
	Use the formula S = D / T	4			
	Recognise and solve simple problems that involve direct proportion including recipes	4			
	Solve simple problem involving inverse proportion	5			
	Recognise graphs that show direct proportion.	5			
Percentages	Calculate a percentage of a quantity	3			
	Increase and decrease quantities by a percentage.	4			
	Express one quantity as a percentage of another	3			
	Work out percentage change.	4			
	Calculate simple interest	3			
	Calculate compound interest	4			
	Solve problems involving repeated percentage change.	4			
	Calculate the original amount, given the final amount, after a known percentage increase or decrease.	5			
Fractions	Work out a fraction of a quantity	3			
	Find one quantity as a fraction of another.	3			
	Add and subtract fractions with different denominators including mixed numbers	4			
	Multiply / divide fractions including mixed numbers	4			
	Use a calculator to multiply / divide fractions including mixed numbers	4			
	Recognise rational numbers, terminating decimals and recurring decimals.				
	Convert terminating decimals to fractions.	3			
	Find reciprocals of numbers or fractions.	4			

Y11 Foundation -HT2					
Chapters	**Learning Objectives:**	**Grade**	**R**	**A**	**G**
Expressions	Expand and simplify brackets such as 2(5x +3) - 6(x - 5)	4			
	Factorise an algebraic expression.	4			
Quadratics	Expand two linear brackets to obtain a quadratic expression.	4			
	Factorise a quadratic expression of the form $x^2 + bx + c$ into two linear brackets.	5			
	Solve a quadratic expression of the form $x^2 + bx + c$ by factorising	5			
Linear Equations	Solve two step equations	4			
	Solve equations where the unknown appears on both sides.	4			
	Set up equations from given information and then solve them.	5			
Linear Inequalities	Use a number line to represent negative numbers	2			
	Compare and order positive and negative numbers.	2			
	Solve a simple linear inequality and represent it on a number line.	4			
Simultaneous linear equations	Solve simultaneous linear equations using the elimination or the substitution method	5			
	Solve problems using simultaneous linear equations.	5			
	Solve simple simultaneous linear equations graphically.	5			

Y11 Foundation -HT3					
Chapters	**Learning Objectives:**	**Grade**	**R**	**A**	**G**
Perimeter/area	Calculate the perimeter and area of a compound shape made from rectangles.	3			
	Calculate the area of a triangle	3			
	Calculate the area of a parallelogram	3			
	Calculate the area of a trapezium	4			
Circles/Sectors	Calculate the circumference of a circle.	4			
	Calculate the area of a circle.	4			
	Calculate the length of an arc	5			
	Calculate the area and angle of a sector.	5			
Surface Area/Volume	Calculate the volume and surface area of a cuboid.	4			
	Calculate the volume and surface area of simple prisms.	5			
	Calculate the volume and surface area of a cylinder.	5			
Vectors	Add and subtract vectors	5			

Y11 Foundation -HT4					
Chapters	**Learning Objectives:**	**Grade**	**R**	**A**	**G**
Transformations	Translate a 2D shape/describe translations.	3			
	Reflect a 2D shape in a mirror line/describe reflections.	3			
	Rotate a 2D shape about a point/decsibe rotations.	3			
	Enlarge a 2D shape by a positive scale factor/des.	3			
	To understand how to enlarge a shape using the centre of enlargement/describe enlargment	5			
	Use more than one simple transformation.	5			
Similar Shapes	Work out the scale factor between similar shapes	4			
	Use scale drawing	3			
	Use a scale drawing to make estimates.	3			
Pythagoras' theorem.	Calculate the length of the hypotenuse or the shorter in a right-angled triangle.	5			
	Solve problems using Pythagoras' theorem.	5			
Trigonometry - SOH CAH TOA	Use the three trigonometric ratios to find the missing length or angle	5			
	Work out and remember trigonometric values for angles of 30°, 45°, 60° and 90°.	5			
	Solve practical problems using trigonometry	5			
	Solve problems using an angle of elevation or an angle of depression.	5			
	Solve bearing problems using trigonometry.	5			