

Term 1 – Module 1 and 2

Term	Week	Hours	Chapter: Topic	Topic break-down (sub-topics)	Learning Objectives: Students will be able to:
	Week 1	3	Review and revision 5		
	Week 2 – 4	10	11: Geometry and measures: Perimeter and area	11.1 Rectangles 11.2 Compound shapes 11.3 Area of a triangle 11.4 Area of a parallelogram 11.5 Area of a trapezium 11.6 Circles 11.7 The area of a circle 11.8 Answers in terms of π	<ul style="list-style-type: none"> calculate the perimeter and area of a rectangle. calculate the perimeter and area of a compound shape made from rectangles. calculate the area of a triangle use the formula for the area of a triangle. calculate the area of a parallelogram use the formula for the area of a parallelogram. calculate the area of a trapezium use the formula for the area of a trapezium. recognise terms used for circle work calculate the circumference of a circle. calculate the area of a circle. give answers for circle calculations in terms of π.
	Week 5 – 6	7	12: Geometry and measures: Transformations	12.1 Rotational symmetry 12.2 Translation 12.3 Reflections 12.4 Rotations 12.5 Enlargements 12.6 Using more than one transformation	<ul style="list-style-type: none"> work out the order of rotational symmetry for a 2D shape recognise shapes with rotational symmetry. translate a 2D shape. reflect a 2D shape in a mirror line. rotate a 2D shape about a point enlarge a 2D shape by a scale factor. use more than one transformation.
	Week 7	3	Review and revision 6		
	Week 8/9	HALF TERM BREAK			
	Week 1	3	12: Geometry and measures: Transformations	12.7 Vectors	<ul style="list-style-type: none"> represent vectors add and subtract vectors.
	Week 2 – 3	11	13: Probability: Probability and events	13.1 Calculating probabilities 13.2 Probability that an outcome will not happen 13.3 Mutually exclusive and exhaustive outcomes 13.4 Experimental probability 13.5 Expectation 13.6 Choices and outcomes	<ul style="list-style-type: none"> use the probability scale and the language of probability calculate the probability of an outcome of an event. calculate the probability of an outcome not happening when you know the probability of that outcome happening. recognise mutually exclusive and exhaustive outcomes. calculate experimental probabilities and relative frequencies from experiments recognise different methods for estimating probabilities. predict the likely number of successful outcomes, given the number of trials and the probability of any one outcome. apply systematic listing and counting strategies to identify all outcomes for a variety of problems.
	Week 4	3	14: Geometry and measures: Volumes and surface areas of prisms	14.1 3D shapes 14.2 Volume and surface area of a cuboid	<ul style="list-style-type: none"> use the correct terms when working with 3D shapes. calculate the surface area and volume of a cuboid.
	Week 5	3	Examinations and revision		
	Week 6	4	Examinations and revision		
	Week 7	Christmas Break			
	Week 8	Christmas Break			

Term 2 – Module 3 and 4

Term	Week	Hours	Chapter: Topic	Topic break-down (sub-topics)	Learning Objectives: Students will be able to:	
Term 2 – Module 3 and 4	1 – 2	7	14: Geometry and measures: Volumes and surface areas of prisms	14.3 Volume and surface area of a prism	• calculate the volume and surface area of a prism.	
				14.4 Volume and surface area of cylinders	• calculate the volume and surface area of a cylinder.	
	3	3	Number: Recap and review			
	4 – 5	7	15: Algebra: Linear equations	15.1 Solving linear equations	<ul style="list-style-type: none"> • solve linear equations such as $3x - 1 = 11$ where the variable only appears on one side • use inverse operations and inverse flow diagrams • solve equations by balancing • solve equations in which the variable (the letter) appears in the numerator of a fraction 	
	Week 6	4	Review and revision 7			
	Week 7	Half Term Break				
	Week					
	1 – 2	7	15: Algebra: Linear equations	15.2 Solving equations with brackets	• solve equations where you have to first expand brackets.	
				15.3 Solving equations with the variable on both sides	• solve equations where the variable appears on both sides of the equals sign.	
	Week 3	3	Statistics: Recap and review			
	Week					
	4 – 5	7	16: Ratio and proportion and rates of change: Percentages and compound measures	16.1 Equivalent percentages, fractions and decimals	• convert percentages to fractions and decimals and vice versa.	
				16.2 Calculating a percentage of a quantity	• calculate a percentage of a quantity.	
				16.3 Increasing and decreasing quantities by a percentage	• increase and decrease quantities by a percentage.	
				16.4 Expressing one quantity as a percentage of another	• express one quantity as a percentage of another	
				16.5 Compound measures	• recognise and solve problems involving the compound measures of rates of pay, density and pressure.	
	Week 6	4	Review and revision 8			
Week 7	EASTER Break					
Week 8	EASTER Break					

Term 3 – Module 5 and 6

Term	Week	Hours	Chapter: Topic	Topic break-down (sub-topics)	Learning Objectives: Students will be able to:	
	Week 1 – 3	10	17: Ratio and proportion and rates of change: Percentages and variation	17.1 Compound interest and repeated percentage change	<ul style="list-style-type: none"> calculate simple interest calculate compound interest solve problems involving repeated percentage change. 	
				17.2 Reverse percentage (working out the original value)	<ul style="list-style-type: none"> calculate the original amount, given the final amount, after a known percentage increase or decrease. 	
				17.3 Direct proportion	<ul style="list-style-type: none"> solve problems in which two variables have a directly proportional relationship (direct variation) work out the constant of proportionality recognise graphs that show direct variation. 	
				17.4 Inverse proportion	<ul style="list-style-type: none"> solve problems in which two variables have an inversely proportional relationship (inverse variation) work out the constant of proportionality. 	
	Week 4	3	Review and revision 9			
	Week 5	4	Review and revision 9			
	Week 6	Half Term Break				
	Week 1 – 2	7	18: Statistics: Representation and interpretation	18.1 Sampling	<ul style="list-style-type: none"> obtain a random sample from a population collect unbiased and reliable data for a sample. 	
				18.2 Pie charts	<ul style="list-style-type: none"> draw and interpret pie charts. 	
				18.3 Scatter diagrams	<ul style="list-style-type: none"> draw, interpret and use scatter diagrams draw and use a line of best fit. 	
	Week 3	3	Summer examinations and revision			
	Week 4	4	Summer examinations and revision			
	Week 5	3	18: Statistics: Representation and interpretation	18.4 Grouped data and averages	<ul style="list-style-type: none"> identify the modal group calculate an estimate of the mean from a grouped table. 	
	Week 6 – 7	7	19: Geometry and measures: Constructions and loci	19.1 Constructing triangles	<ul style="list-style-type: none"> construct accurate drawings of triangles, using a pair of compasses, a protractor and a straight edge. 	
				19.2 Bisectors	<ul style="list-style-type: none"> construct the bisectors of lines and angles construct angles of 60° and 90° 	
19.3 Defining a locus				<ul style="list-style-type: none"> draw a locus for a given rule. 		
19.4 Loci problems				<ul style="list-style-type: none"> solve practical problems using loci. 		