Chapter	Time		Topic Break-Down	Learning Objectives (Students will be able to)
1: Basic Number	**11**	1.1	Place value and ordering	Use a number line to represent negative numbers
				Use inequalities with negative numbers
				Compare and order positive and negative numbers
		1.2	Order of operations - BIDMAS	Work out the answers to problems with more than one mathematical operation
		1.3	The four rules	Use the four rules of arithmetic with integers and decimals
2: Geometry and measures: Measures and scale drawings	**10**	2.1	Systems of measurement	Convert from one metric unit to another
				Convert from one imperial unit to another
		2.2	Conversions factors	Use approximate conversion factors ot change between imperial units and metric units
		2.3	Scale drawings	Read and draw scale drawings
				Use a scale drawing to make estimates
		2.4	Nets	Draw nets of some 3D shapes
				Identify a 3D shape from its net
		2.5	Using an isometric grid	Read from and draw on isometric grids
				Interpret diagrams to draw plans and elevations
Week Commencing 17th October 2022 - Revision & Assessment				
Half Term				

Chapter	Time		Topic Break-Down	Learning Objectives (Students will be able to)
3: Statistics: Charts, tables and averages	**8**	3.1	Frequency Tables	Use tally charts and frequency tables to collect and represent data
				Use grouped frequency tables to collect and represent data
		3.2	Statistical diagrams	Draw pictograms to represent statistical data
				Draw bar charts and vertical line charts to represent statistical data
		3.3	Line graphs	Draw a line graph to show trends in data
		3.4	Statistical averages	Work out the mode, median, mean and range of small sets of data
				Decide which is the best average to use to represent a data set.
4: Geometry and measures: Angles	**14**	4.1	Angle facts	Calculate angles on a straight line
				Calculate angles around a point
				Use vertically opposite points
		4.2	Triangles	Recognise and calculate the angles in different sorts of triangle
		4.3	Angles in a polygon	Calculate the sum of the interior angles in a polygon
		4.4	Regular polygons	Calculate the exterior angles and the interior angles of a regualr polygon
		4.5	Angles in parellel lines	Calculate angles in parallel lines
		4.6	Special quadrilaterals	Use angle properties in quadrilaterals
		4.7	Bearings	Use a bearing to specify a direction

Week Commencing 12th December 2022 - Revision & Assessment

End of Autumn Term

Chapter	Time		Topic Break-Down	Learning Objectives (Students will be able to)
5: Number properties	**10**	5.1	Multiples of whole numbers	Find multiples of whole numbers
				Recognise multiples of numbers
		5.2	Factors of whole numbers	Identify the factors of a number
		5.3	Prime numbers	Identify prime numbers
		5.4	Prime factors, LCM and HCF	Identify prime factors
				Identify the LCM of two numbers
				Identify the HCF of two numbers
		5.5	Square numbers	Identify square numbers
				Use a calculator to find the square of a number
		5.6	Square roots	Recognise the square roots of square numbers up to 225
				Use a calculator to find the square roots of any number
		5.7	Basic calculations on a calculator	Use some of the important keys when working on a calculator
6: Number approximations	**8**	6.1	Rounding whole numbers	Round a whole number
		6.2	Rounding decimals	Round decimal numbers to a given accuracy
		6.3	Approximating calculations	Identify significant figures
				Round numbers to a given number of significant figures
				Use approximation to estimate answers and check calculations
				Round a calculation at the end of a problem, to give what is considered to be a sensible answer

Week Commencing 6th February 2023 - Revision & Assessment

Half Term

Chapter	Time		Topic Break-Down	Learning Objectives (Students will be able to)
7: Number: Decimals and Fractions	**14**	7.1	Calculating with decimals	Multiply and divide with decimals
		7.2	Fractions and reciprocals	Recognise different types of fraction, reciprocal, terminating decimals and recurring decimal
				Convert terminating decimals to fractions
				Convert fractions to decimals
				Find reciprocols of numbers or fractions
		7.3	Writng one quantity as a fraction of another	Work out a fraction of a quantity
				Find one quantity as a fraction of another
		7.4	Adding and subtracting fractions	Add and subtract fractions with different denominators
		7.5	Multiplying and dividing fractions	Multiply proper fractions
				Multiply mixed numbers
				Divide by fractions
		7.6	Fractions on a calculator	Use a calculator to add and subtract fractions

Week Commencing 27th March 2023 - Revision & Assessment

End of Spring Term

Chapter	Time		Topic Break-Down	Learning Objectives (Students will be able to)
8: Algebra: Linear graphs	16	8.1	Graphs and equations	Use flow diagrams ro draw graphs
				Work out the equations of horizontal and vertical lines
		8.2	Drawing linear graphsby finding points	Draw linear graphs without using flow diagrams
		8.3	Gradient of a line	Work out the gradient of a straight line
				Draw a line with a certain gradient
		8.4	y = mx + c	Draw graphs using the gradient-intercept method
				Draw graphs using the cover up method
		8.5	Finding the equation of a line from its graph	Work out the equation of a line, using its gradient and y-intercept
				Work out the equation of a line, given two points on the line
		8.6	The equation of parallel	Work out the equation of a linear graph that is paralllel to another line and passes through a specific point
		8.7	Real-life uses of graphs	Convert from one unit to another unit by using a conversion graph
		8.8	Solving simultaneous equations using graphs	Solve simultaneous equations using graphs

Week Commencing 15th May 2023 - Revision & End of year exams

Week Commencing 22nd May 2023 - Revision & End of year exams

Half Term

Chapter	Time		Topic Break-Down	Learning Objectives (Students will be able to)
9: Algebra: Expressions and Formulae	**16**	9.1	Basic algebra	Write an algebraic expression
				Recognise expressions, equations, formulae and identities
		9.2	Substitution	Substitute into, simplify and use algebraic expressions
		9.3	Expanding brackets	Expand brackets such as 2(x - 3)
				Expand and simplify brackets
		9.4	Factorisation	Factorise an algebraic expression
		9.5	Quadratic expansion	Expand two linear brackets to obtain a quadratic expression
		9.6	Quadratic factorisation	Factorise a quadratic expression of the form x2 + ax + b into two linear brackets
		9.7	Changing the subject of a formual	Change the subject of a formula

Week Commencing 10th July 2023 - Revision and Assessment

End of Summer Term