

5-year AQA Foundation tier Route Map

Year 7

SEPTEMBER		OCTOBER				NOVEMBER	
Weeks 1–2 Using Numbers	Weeks 3–4 Sequences	Weeks 5–6 Perimeter and area	Week 7 <i>Extended project Revision and assessment</i>		Week 8 <i>Holiday</i>	Week 9 Decimal numbers	Week 10 Decimal numbers
NOVEMBER		DECEMBER				JANUARY	
Weeks 11–12 Working with numbers	Weeks 13–14 Statistics	Week 15 <i>Assessment and review</i>	Week 16 <i>Holiday</i>	Week 17 <i>Holiday</i>	Weeks 18–19 Algebra	Weeks 20 - 21 Fractions	
JANUARY	FEBRUARY			MARCH		APRIL	
Weeks 22–23 Angles	Week 23 Assessment	Week 24 <i>Holiday</i>	Weeks 25–26 Coordinates and graphs	Weeks 27–28 Percentages		Weeks 29–30 Probability	Week 31 <i>Holiday</i>
APRIL		MAY				JUNE	
Week 32 <i>Holiday</i>	Weeks 33– 34 Symmetry	Weeks 35–36 Equations	Weeks 36–37 Interpreting data	Week 37 Assessment	Week 38 <i>Holiday</i>	Weeks 39–40 3D shapes	Weeks 41– 42 Ratio
JUNE				JULY			
Weeks 43 - 44 Extended project				Week 45 <i>Assessment</i>			

5-year AQA Foundation tier Route Map

Year 8

SEPTEMBER		OCTOBER				NOVEMBER	
Weeks 1–2 Working with numbers	Weeks 3 - 4 Geometry	Weeks 5–6 Probability	Week 7 Extended project Revision and assessment		Week 8 <i>Holiday</i>	Week 9 Percentages	
NOVEMBER		DECEMBER					
Week 10 Percentages	Weeks 11–12 Sequences	Weeks 13–14 Area	Week 15 <i>Assessment and review</i>		Week 16 <i>Holiday</i>	Week 17 <i>Holiday</i>	
JANUARY		FEBRUARY				MARCH	
Weeks 18–19 Graphs	Weeks 20–21 Simplifying numbers	Weeks 22–23 Interpreting data	Week 23 <i>Assessment</i>		Week 24 <i>Holiday</i>	Weeks 25–27 Algebra	
MARCH	APRIL				MAY		
Weeks 28–29 Congruence and scaling	Week 30 Revision and assessment	Week 31 <i>Holiday</i>	Week 32 <i>Holiday</i>	Weeks 33–35 Fractions and decimals	Weeks 35–36 Proportion	Week 37 Circles	
MAY		JUNE			JULY		
Week 37 Assessment	Week 38 <i>Holiday</i>	Weeks 39–40 Equations and formulae	Weeks 41–42 Comparing data		Weeks 43–44 <i>Extended project</i>	Week 45 <i>Assessment</i>	

5-year AQA Foundation tier Route Map Year 9

SEPTEMBER		OCTOBER			
Weeks 1–2 Percentages	Weeks 3–4 Equations and formulae	Weeks 5–6 Polygons	Weeks 6–7 Using data	Week 7 Assessment	Week 8 Holiday
NOVEMBER			DECEMBER		
Week 9 Circles	Week 10 Circles	Weeks 10–11 Applications of graphs	Weeks 12–13 Pythagoras' theorem	Week 14 Enlargements	Week 15 Assessment and review
DECEMBER		JANUARY		FEBRUARY	
Week 16 Holiday	Week 17 Holiday	Weeks 18–19 Fractions	Week 20–21 Algebra	Weeks 22–23 Decimal numbers	Week 23 Assessment
Week 24 Holiday					
FEBRUARY		MARCH		APRIL	
Weeks 25–26 Surface area and volume of 3D shapes	Weeks 27–28 Prisms and cylinders	Weeks 28–30 Solving equations graphically	Week 30 Revision and assessment	Week 31 Holiday	Week 32 Holiday
APRIL		MAY		JUNE	
Weeks 33–34 Distance, speed and time	Week 35–36 Compound units	Week 36–37 Similar triangles	Week 37 Assessment	Week 38 Holiday	Weeks 39–40 Right-angled triangles
JUNE			JULY		
Weeks 41–42 Revision and GCSE preparation			Weeks 43–44 Extended project		Week 45 Assessment

5-year AQA Foundation tier Route Map Year 10

SEPTEMBER		OCTOBER			NOVEMBER
Weeks 1–3 Number: Basic Number	Weeks 4–6 Geometry and measures: Measures and scale drawings		Week 7 Statistics: Charts, tables and averages	Week 8 <i>Holiday</i>	Week 9 Statistics: Charts, tables and averages
NOVEMBER		DECEMBER		JANUARY	
Weeks 10–12 Geometry and measures: Angles	Weeks 13–15 Number: Number properties	Week 16 <i>Holiday</i>	Week 17 <i>Holiday</i>	Weeks 18–19 Number: Approximations	Weeks 20–21 Number: Decimals and fractions
JANUARY	FEBRUARY		MARCH		APRIL
Weeks 22–23 Algebra: Linear Graphs	Week 24 <i>Holiday</i>	Week 25 Algebra: Linear Graphs	Weeks 26–28 Algebra: Expressions and formulae	Weeks 29–30 Ratio and proportion and rates of change: Ratio, speed and proportion	
APRIL			MAY		
Week 31 <i>Holiday</i>	Week 32 <i>Holiday</i>	Weeks 33–34 Geometry and measures: Perimeter and area	Weeks 35–36 Geometry and measures: Transformations	Week 37 Probability: Probability and events	Week 38 <i>Holiday</i>
MAY	JUNE				JULY
Week 39 Probability: Probability and events	Week 40 Geometry and measures: Volumes and surface areas of prisms	Week 41 <i>Summer examinations and revision</i>	Week 43 Geometry and measures: Volume and surface areas of prisms		Weeks 44–45 Algebra: Linear equations

5-year AQA Foundation tier Route Map

Year 11

SEPTEMBER			OCTOBER			NOVEMBER
Weeks 1–2 Ratio and proportion and rates of change: Percentages and compound measures			Weeks 3–4 Ratio and proportion and rates of change: Percentages and variation			Weeks 5–7 Statistics: Representation and interpretation
Weeks 9–10 Geometry and measures: Constructions and loci			Week 8 <i>Holiday</i>			
NOVEMBER		DECEMBER			JANUARY	
Weeks 11–12 Geometry and measures: Curved shapes and pyramids		Week 13 <i>Revision and review</i>	Weeks 14–15 <i>Mock examinations and revision</i>	Week 16 <i>Holiday</i>	Week 17 <i>Holiday</i>	Weeks 18–19 Algebra: Number and sequences
Weeks 20–21 Geometry and measures: Right-angled triangles						
JANUARY		FEBRUARY			MARCH	
Week 22 Geometry and measures: Right-angled triangles		Week 23 <i>Holiday</i>	Weeks 24–25 Geometry and measures: Congruency and similarity	Weeks 26–27 Probability: Combined events	Weeks 28–29 Number: Powers and standard form	Week 30 Number: Powers and standard form
APRIL			MAY			JUNE
Week 31 <i>Holiday</i>	Week 32 <i>Holiday</i>	Weeks 33–35 Algebra: Simultaneous equations and linear inequalities			Weeks 36–37 Algebra Non-linear graphs	Week 38 <i>Holiday</i>
Weeks 39–40 <i>Revision</i>						
JUNE			JULY			
Week 41 <i>June examinations</i>			Week 42 <i>June examinations</i>		Week 43	Week 44
					Week 45	

5-year Scheme of Work

This 5-year Foundation Scheme of Work offers a flexible approach for Year 7 to Year 11. It is based on a minimum of seven one hour Maths lessons per fortnight (assuming a two week timetable of three lessons in one week and four in the second). This accounts for an average of 140 teaching hours per academic year, with the exception of Year 11, which has 115 due to GCSE examinations in summer (2). In addition to this, there are assessment and review sessions built in.

Core texts are Maths Frameworking (3rd edition) Pupil Books 1.1, 1.2, 2.1, 2.2, 3.1, 3.2 and AQA GCSE Maths (4th Edition) Foundation Student Book.

Mathematical reasoning, problem solving activities and applications are an integral part of each topic.

Students should progress at their own rate with book 2 not being appropriate for all.

There are opportunities for extended projects throughout, which are intended to span a sequence of lessons and give students the opportunity to use, apply and experience the mathematics they have learned in practical real-life situations or in a problem solving and reasoning context.

		Week	Hours	Book: Chapter: Topic	Topic break-down (sub-topics)	Learning Objectives: Students will be able to:
Year 7	Term 1	1–2	7	1.1:1:Using numbers 1.2:1: Using numbers	1.1 The Calendar	• read and use calendars
					1.2 The 12-hour and 24-hour clocks	• read and use 12-hour and 24-hour clocks • convert between 12-hour and 24-hour systems
					1.3 Managing money	• work out everyday money problems
					1.1 Timetables, charts and money	• carry out calculations from information given in tables and charts
					1.4 Positive and negative numbers	• use a number line to order positive and negative whole numbers • solve problems involving negative temperatures
					1.5 Adding negative numbers	• carry out additions and subtractions involving negative numbers • use a number line to calculate with negative numbers
					1.6 Subtracting negative numbers	• carry out subtractions involving negative numbers
		3–4	7	1.1:2: Sequences 1.2:2: Sequences	2.1 Function machines	• use function machines to generate inputs and outputs
					2.2 Sequences and rules	• recognise, describe and write down sequences that are based on a simple rule
					2.3 Finding terms in patterns	• find missing terms in a sequence
					2.4 The square numbers	• introduce the sequence of square numbers
					2.5 The triangular numbers	• introduce the sequence of triangular numbers
					2.4 Other sequences	• know and understand square and triangular number sequences

		5–6	7	1.1:3: Perimeter and area 1.2:3: Perimeter, area and volume	3.1 Length and perimeter	<ul style="list-style-type: none"> measure and draw lines accurately work out the perimeter of a shape
					3.2 Area	<ul style="list-style-type: none"> work out the area of a shape by counting squares
					3.1 Perimeter and area	<ul style="list-style-type: none"> work out the perimeter and area of 2D shapes
					3.3 Perimeter and area of rectangles	<ul style="list-style-type: none"> work out the perimeter of a rectangle
					3.2 Perimeter and area of rectangles	<ul style="list-style-type: none"> work out the area of a rectangle use a simple formula to calculate the area and perimeter of a rectangle
					3.3 Perimeter and area of compound shapes	<ul style="list-style-type: none"> work out the perimeter and area of compound shapes
					3.4 Volume of cubes and cuboids	<ul style="list-style-type: none"> work out the volume of a cube or cuboid using a simple formula work out the capacity of a cube or cuboid
		7	3	Extended project opportunity / revision		
		7	1	Assessment		
		8		HALF TERM		
		9–10	7	1.1:4: Decimal numbers 1.2:4: Decimal numbers	4.1 Multiplying and dividing by 10, 100 and 1000	<ul style="list-style-type: none"> multiply and divide decimal numbers by 10, 100 and 1000
					4.2 Ordering decimals	<ul style="list-style-type: none"> order decimal numbers according to size
					4.3 Estimates	<ul style="list-style-type: none"> estimate calculations in order to spot possible errors
					4.4 Adding and subtracting decimals	<ul style="list-style-type: none"> add and subtract decimal numbers
					4.5 Multiplying and dividing decimals	<ul style="list-style-type: none"> be able to multiply and divide decimal numbers by any whole number
		11–12	7	1.1:5: Working with numbers 1.2:5: Working with numbers	5.1 Square numbers	<ul style="list-style-type: none"> recognise and use square numbers up to 225 (15^2)
					5.1 Square numbers and square roots	<ul style="list-style-type: none"> recognise and use square roots up to $\sqrt{225}$
					5.2 Rounding	<ul style="list-style-type: none"> round numbers to the nearest whole number 10, 100 or 1000
					5.3 Order of operations	<ul style="list-style-type: none"> use the conventions of BIDMAS to carry out calculations
					5.4 Long and short multiplication	<ul style="list-style-type: none"> choose a written method for multiplying two numbers together use written methods to carry out multiplications accurately
					5.5 Long and short division	<ul style="list-style-type: none"> choose a written method for dividing one number by another use written methods to carry out divisions accurately
					5.6 Calculations with measurements	<ul style="list-style-type: none"> convert between common metric units use measurements in calculations recognise and use appropriate metric units
		13 - 14	7	1.1:6: Statistics 1.2:6: Statistics	6.1 Mode, median and range	<ul style="list-style-type: none"> understand the meaning of mode, median and range
					6.2 The Mean	<ul style="list-style-type: none"> understand and calculate the mean average of data
					6.2 Reading data from tables and charts	<ul style="list-style-type: none"> read data from tables and charts
					6.3 Using a tally chart	<ul style="list-style-type: none"> create and use a tally chart
					6.3 Statistical diagrams	<ul style="list-style-type: none"> be able to read and interpret different statistical diagrams

Term 2				6.4 Using data 6.4 Collecting and using data	<ul style="list-style-type: none"> understand how to use (and collect) data
				6.5 Grouped frequency	<ul style="list-style-type: none"> understand and use grouped frequency
				6.6 Data collection	<ul style="list-style-type: none"> gain a greater understanding of data collection
	15	3	Assessment and review		
	16–17		CHRISTMAS HOLIDAY		
	18–19	7	1.1:7: Algebra 1.2:7: Algebra	7.1 Expressions and substitution	<ul style="list-style-type: none"> use algebra to write simple expressions substitute numbers into expressions to work out their value
				7.2 Simplifying expressions	<ul style="list-style-type: none"> learn the rules for simplifying expressions
				7.3 Using formulae	<ul style="list-style-type: none"> use formulae
				7.4 Writing formulae	<ul style="list-style-type: none"> write formulae
	20–21	7	1.1:8: Fractions 1.2:8: Fractions	8.1 Equivalent fractions	<ul style="list-style-type: none"> find simple equivalent fractions write fractions in their simplest form
				8.2 Comparing fractions	<ul style="list-style-type: none"> compare and order two fractions
				8.3 Adding and subtracting fractions	<ul style="list-style-type: none"> add and subtract fractions with the same denominator The add and subtract fractions with different denominators
				8.4 Mixed numbers and improper fractions	<ul style="list-style-type: none"> convert between mixed numbers and improper fractions
				8.5 Calculations with mixed numbers	<ul style="list-style-type: none"> add and subtract simple mixed numbers with the same denominator add and subtract simple mixed numbers with different denominators
	22–23	6	1.1:9: Angles 1.2:9: Angles	9.1 Using the compass to give directions	<ul style="list-style-type: none"> use a compass to give directions
				9.2 Measuring angles	<ul style="list-style-type: none"> know the different types of angles use a protractor to measure an angle
				9.3 Drawing angles	<ul style="list-style-type: none"> use a protractor to draw an angle
				9.4 Calculating angles	<ul style="list-style-type: none"> calculate angles at a point calculate angles on a straight line calculate opposite angles
				9.3 Angles in a triangle	<ul style="list-style-type: none"> know that the sum of the angles in a triangle is 180°
				9.4 Angles in a quadrilateral	<ul style="list-style-type: none"> know that the sum of the angles in a quadrilateral is 360°
				9.5 Properties of triangles and quadrilaterals	<ul style="list-style-type: none"> understand the properties of parallel, intersecting and perpendicular lines understand and use the properties of a triangle understand and use the properties of quadrilaterals
	23	1	Assessment		
	24		HALF TERM		
	25–26	7	1.1:10: Coordinates and graphs 1.2:10: Coordinates and graphs	10.1 Coordinates	<ul style="list-style-type: none"> understand and use coordinates to locate points.
				10.2 From mappings to graphs	<ul style="list-style-type: none"> work out coordinates from a rule draw a graph for a simple rule
				10.3 Naming graphs	<ul style="list-style-type: none"> recognise and draw line graphs of fixed values
				10.2 Graphs from relationships	<ul style="list-style-type: none"> draw a graph for a simple relationship
				10.3 Graphs for fixed values of x and y	<ul style="list-style-type: none"> recognise and draw line graphs with fixed values of x and y

Term 3				10.4 Graphs of the form $y = ax$	<ul style="list-style-type: none"> recognise and draw lines of the form $y = ax$
				10.5 Graphs of the form $x + y = a$	<ul style="list-style-type: none"> recognise and draw graphs of the form $x + y = a$
				10.4 Graphs from the real world	<ul style="list-style-type: none"> learn how graphs can be used to represent real-life situations draw and use real-life graphs
	27–28	7	1.1:11: Percentages 1.2:11: Percentages	11.1 Fractions and percentages	<ul style="list-style-type: none"> understand what a percentage is understand the equivalence between some simple fractions and percentages
				11.2 Fractions of a quantity	<ul style="list-style-type: none"> find a fraction of a quantity
				11.3 Percentages of a quantity	<ul style="list-style-type: none"> find a percentage of a quantity
				11.4 Percentages with a calculator	<ul style="list-style-type: none"> write a percentage as a decimal use a calculator to find a percentage of a quantity
				11.5 Percentage increases and decreases	<ul style="list-style-type: none"> work out the result of a simple percentage change
	29–30	5	1.1:12: Probability 1.2:12: Probability	12.1 Probability words	<ul style="list-style-type: none"> learn and use words about probability
				12.2 Probability scales	<ul style="list-style-type: none"> know and use the 0 – 1 probability scale work out probabilities based on equally likely outcomes
				12.3 Experimental probability	<ul style="list-style-type: none"> learn about and understand experimental probability understand the difference between theoretical and experimental probability
	30	2	Assessment and review		
	31–32		EASTER HOLIDAY		
	33–34	7	1.1:13: Symmetry 1.2:13: Symmetry	13.1 Line symmetry	<ul style="list-style-type: none"> recognise shapes that have reflective symmetry draw lines of symmetry on a shape
				13.2 Rotational symmetry	<ul style="list-style-type: none"> recognise shapes that have rotational symmetry find the order of rotational symmetry for a shape
				13.3 Reflections	<ul style="list-style-type: none"> understand how to reflect a shape use a coordinate grid to reflect shapes
				13.4 Tessellations	<ul style="list-style-type: none"> understand how to tessellate shapes
	35–36	5	1.1:14: Equations 1.2:14: Equations	14.1 Finding unknown numbers	<ul style="list-style-type: none"> find missing numbers in simple calculations
				14.2 Solving equations	<ul style="list-style-type: none"> understand what an equation is solve equations involving one operation
				14.3 Solving more complex equations	<ul style="list-style-type: none"> solve equations involving two operations
				14.4 Setting up and solving equations	<ul style="list-style-type: none"> use algebra to set up and solve equations
	36–37	5	1.1:15 Interpreting data 1.2:15 interpreting data	15.1 Pie charts	<ul style="list-style-type: none"> read data from pie charts, where the data is given in simple sectors use a scaling method to draw a pie chart
				15.2 Comparing data by median and the range	<ul style="list-style-type: none"> use the median and range to compare data make sensible decisions by comparing the median and range of two sets of data

Year 8 Term 1				15.2 Comparing mean and range	<ul style="list-style-type: none">• use the mean and range to compare data• make sensible decisions by comparing the mean and range of two sets of data	
				15.3 Statistical surveys	<ul style="list-style-type: none">• use charts and diagrams to interpret data.	
	37	1	Assessment			
	38		HALF TERM			
	39–40	7	1.1:16 3D Shapes 1.2:16 3D Shapes	16.1 3D shapes and nets	<ul style="list-style-type: none">• know how to count the faces, edges and vertices on a 2D shape• draw nets for 3D shapes	
				16.1 Naming and drawing 3D shapes	<ul style="list-style-type: none">• be familiar with the names of 3D shapes and their properties• use isometric paper to draw shapes made from cubes	
				16.2 Using nets to construct 3D shapes	<ul style="list-style-type: none">• construct 3D shapes from nets.	
				16.3 3D investigations	<ul style="list-style-type: none">• work out the rule connecting faces, edges and vertices in 3D shapes (Euler)	
	41–42	7	1.1:17 Ratio 1.2:17 Ratio	17.1 Introduction to ratios	<ul style="list-style-type: none">• introduce ratio notation• use ratios to compare quantities	
				17.2 Simplifying ratios	<ul style="list-style-type: none">• write a ratio as simply as possible	
				17.3 Ratios and sharing	<ul style="list-style-type: none">• use ratios to find missing quantities	
				17.4 Ratios and fractions	<ul style="list-style-type: none">• understand the connection between ratios and fractions	
	43–44	7	Extended project opportunity / revision			
	45	4	Assessment, revision and review			
	END OF YEAR 7 / SUMMER HOLIDAY					
	Year 8 Term 1	1–2	7	2.1:1: Working with numbers 2.2:1: Working with numbers	1.1 Adding and subtracting with negative numbers	<ul style="list-style-type: none">• carry out additions and subtractions involving negative numbers
					1.2 Multiplying and dividing negative numbers	<ul style="list-style-type: none">• carry out multiplications and divisions involving negative numbers
					1.3 Factors and highest common factors (HCF)	<ul style="list-style-type: none">• understand and use highest common factors
					1.4 Multiples and lowest common multiple (LCM)	<ul style="list-style-type: none">• understand and use lowest common multiples
					1.5 Squares, cubes and roots	<ul style="list-style-type: none">• understand and use squares and square roots• understand and use cubes and cube roots
					1.4 Powers and roots	<ul style="list-style-type: none">• understand and use powers and roots
					1.6 Prime factors	<ul style="list-style-type: none">• know what prime numbers are• identify the prime factors of a number
		3–4	7	2.1:2: Geometry 2.2:2: Geometry	2.1 Parallel and perpendicular lines	<ul style="list-style-type: none">• identify parallel lines• identify perpendicular lines
					2.1 Angles in parallel lines	<ul style="list-style-type: none">• calculate angles in parallel lines
					2.2 Angles in triangles and quadrilaterals	<ul style="list-style-type: none">• know that the sum of the angles in a triangle is 180°• know that the sum of the angles in a quadrilateral is 360°
					2.2 The geometric properties of quadrilaterals	<ul style="list-style-type: none">• know the geometric properties of quadrilaterals
					2.3 Translations	<ul style="list-style-type: none">• know how to translate a point or shape

			2.4 Rotations	• know how rotate a shape
			2.5 Constructions	• construct the mid-point and perpendicular bisector of a line • construct an angle bisector
5–6	7	2.1:3: Probability 2.2:3: Probability	3.1 Probability scales	• use a probability scale represent a chance
			3.2 Collecting data on a frequency table	• collect data and use it find probabilities • decide if an event is fair or biased
			3.2 Mutually exclusive events	• recognise mutually exclusive events
			3.3 Mixed events	• recognise mixed events where you can distinguish different probabilities
			3.3 Using a sample space calculate probabilities	• use a sample space calculate probabilities
			3.4 Experimental probability 3.5 Experimental probability	• calculate probabilities from experiments
7	3	Extended project opportunity / revision		
7	1	Assessment		
8		HALF TERM		
9–10	7	2.1:4: Percentages 2.2:4: Percentages	4.1 Calculating percentages	• write one percentage as a percentage of another
			4.2 Calculating the result of a percentage change 4.2 Calculating percentage increases and decreases	• calculate the result of a percentage increase or decrease • use a multiplier calculate a percentage change
			4.3 Calculating a percentage change	• work out a change in value as a percentage increase or decrease.
11–12	7	2.1:5: Sequences 2.2:5: Sequences	5.1 The Fibonacci sequence 5.4 The Fibonacci sequence	• know and understand the Fibonacci sequence
			5.2 Algebra and function machines	• use algebra with function machines
			5.3 The n th term of a sequence	• use the n th term of a sequence
			5.3 Working out the n th term of a sequence	• work out the n th term of a sequence
13–14	7	2.1:6: Area 2.2:6: Area of 2D and 3D shapes	6.1 Area of a rectangle	• use a formula work out the area of a rectangle
			6.2 Areas of compound shapes	• work out the area of a compound shape
			6.3 Area of a triangle	• use a formula work out the area of a triangle
			6.4 Area of a parallelogram	• work out the area of a parallelogram
			6.3 Area of a trapezium	• work out the area of a trapezium
			6.4 Surface areas of cubes and cuboids	• find the surface areas of cubes and cuboids
15	3	Assessment and review		
16–17		CHRISTMAS HOLIDAY		

H	18–19	7	2.1:7: Graphs 2.2:7: Graphs	7.1 Rules from coordinates	• recognise patterns with coordinates
---	-------	---	--------------------------------	----------------------------	---------------------------------------

				7.2 Graphs from rules	<ul style="list-style-type: none"> draw graphs of linear rules
				7.1 Graphs from linear equations	<ul style="list-style-type: none"> recognise and draw the graph of a linear equations
				7.2 Gradient (steepness) of a straight line	<ul style="list-style-type: none"> work out the gradient in a graph from a linear equation work out an equation of the form $y = mx + c$ from the graph
				7.3 Graphs from simple quadratic equations	<ul style="list-style-type: none"> recognise and draw the graph from a simple quadratic equation
				7.3 Graphs from simple quadratic equations	
				7.4 Distance-time graphs	<ul style="list-style-type: none"> read and draw distance-time graphs
				7.4 Real-life graphs	<ul style="list-style-type: none"> draw graphs from real-life situations illustrate the relationship between two variables
	20–21	7	2.1:8: Simplifying numbers 2.2:8: Simplifying numbers	8.1 Powers of 10	<ul style="list-style-type: none"> multiply and divide by 100 and 1000
				8.2 Large numbers and rounding	<ul style="list-style-type: none"> round large numbers
				8.3 Significant figures	<ul style="list-style-type: none"> round one significant figure
				8.4 Estimating answers	<ul style="list-style-type: none"> use rounding estimate rough answers calculations
				8.5 Problem solving with decimals	<ul style="list-style-type: none"> solve problems involving decimals
				8.4 Standard form with large numbers	<ul style="list-style-type: none"> write a large number in standard form
				8.5 Multiplying with numbers in standard form	<ul style="list-style-type: none"> multiply with numbers in standard form
	22–23	6	2.1:9: Interpreting data 2.2:9: Interpreting data	9.1 Information from charts	<ul style="list-style-type: none"> revise reading from charts and tables
				9.2 Reading pie charts	<ul style="list-style-type: none"> interpret a pie chart
				9.3 Creating pie charts	<ul style="list-style-type: none"> use a scaling method draw pie charts
				9.3 Scatter graphs and correlation	<ul style="list-style-type: none"> read scatter graphs understand correlations
				9.4 Creating scatter graphs	<ul style="list-style-type: none"> create scatter graphs
	23	1	Assessment		
	24		HALF TERM		
	25–27	10	2.1:10: Algebra 2.2:10: Algebra	10.1 Algebraic notation	<ul style="list-style-type: none"> simplify algebraic expressions involving the four basic operations
				10.2 Like terms	<ul style="list-style-type: none"> simplify algebraic expression by combining like terms
				10.3 Expanding brackets	<ul style="list-style-type: none"> remove brackets from an expression
				10.4 Using algebra 10.4 Using algebraic expressions	<ul style="list-style-type: none"> use algebraic expressions in different contexts manipulate algebraic expressions identify equivalent expressions
				10.5 Using powers 10.5 Using index notation	<ul style="list-style-type: none"> write algebraic expressions involving powers
	28–29	7	2.1:11: Congruence and scaling 2.2:11: Congruence and scaling	11.1 Congruent shapes	<ul style="list-style-type: none"> recognise congruent shapes
				11.2 Shape and ratio	<ul style="list-style-type: none"> use ratio compare lengths and areas of 2D shapes
				11.2 Enlargements	<ul style="list-style-type: none"> enlarge a 2D shape by a scale factor

Term 2				11.3 Scale diagrams 11.4 Scales	<ul style="list-style-type: none"> understand and use scale diagrams know how use map ratios
	30	3	Revision		
	30	1	Assessment and review		
	31–32		EASTER HOLIDAY		
	33–35	9	2.1:12: Fractions and decimals 2.2:12: Fractions and decimals	12.1 Adding and subtracting fractions	<ul style="list-style-type: none"> add and subtract fractions and mixed numbers
				12.2 Multiplying fractions and integers	<ul style="list-style-type: none"> multiply by a fraction or a mixed number by an integer
				12.3 Dividing with integers and fractions	<ul style="list-style-type: none"> divide a unit fraction by an integer divide an integer by a unit fraction
				12.4 Multiplication with powers of ten 12.4 Multiplication with large and small numbers	<ul style="list-style-type: none"> multiply by a power of ten multiply with combinations of large and small numbers mentally
				12.5 Division with powers of ten 12.5 Division with large and small numbers	<ul style="list-style-type: none"> mentally divide by a power of ten divide combinations of large and small numbers mentally
	35–36	4	2.1:13: Proportion 2.2:13: Proportion	13.1 Direct proportion	<ul style="list-style-type: none"> understand the meaning of direct proportion find missing values in problems involving proportion
				13.2 Graphs and direct proportion	<ul style="list-style-type: none"> represent direct proportion graphically and algebraically
				13.3 Inverse proportion	<ul style="list-style-type: none"> understand what is meant by inverse proportion solve problems using inverse proportion
				13.4 Comparing direct proportion and inverse proportion	<ul style="list-style-type: none"> recognise direct and inverse proportion and work out missing values
	37	4	2.1:14: Circles 2.2:14: Circles	14.1 The circle and its parts	<ul style="list-style-type: none"> know the definition of a circle and the names of its parts
				14.2 Circumference of a circle	<ul style="list-style-type: none"> work out the relationship between the circumference and the diameter of a circle
				14.3 A formula work out the approximate circumference of a circle 14.3 Formula for the circumference of a circle	<ul style="list-style-type: none"> use a formula calculate the circumference of a circle
				14.4 Formula for the area of a circle	<ul style="list-style-type: none"> use a formula calculate the area of a circle
	37	1	Assessment		
	38		HALF TERM		
	39–40	7	2.1:15: Equations and formulae 2.2:15: Equations and formulae	15.1 Equations	<ul style="list-style-type: none"> solve simple equations
				15.2 Equations with brackets	<ul style="list-style-type: none"> solve equations that include brackets
				15.2 Equations with the variable on both sides	<ul style="list-style-type: none"> solve equations with the variable on both sides
				15.3 More complex equations	<ul style="list-style-type: none"> solve equations involving two operations
				15.4 Substituting in formulae	<ul style="list-style-type: none"> substitute values in a variety of formulae
				15.4 Rearranging formulae	<ul style="list-style-type: none"> change the subject of a formula

Year 9 Term 1	41–42	7	2.1: 16: Comparing data 2.2:16: Comparing data	16.1 Frequency tables	<ul style="list-style-type: none">• create a frequency table from raw data
				16.2 The mean	<ul style="list-style-type: none">• understand and use the mean average of data
				16.1 Grouped frequency tables	<ul style="list-style-type: none">• create a grouped frequency table from raw data
				16.3 Drawing frequency diagrams	<ul style="list-style-type: none">• be able draw a diagram from a frequency table
				16.4 Comparing data	<ul style="list-style-type: none">• use the mean and range compare data from two sources
				16.5 Which average use?	<ul style="list-style-type: none">• understand when each different type of average is most useful
	43–44	7	Extended project opportunity / revision		
	45	4	Assessment, revision and review		
	END OF YEAR 8 / SUMMER HOLIDAY				
	Year 9 Term 1	1–2	7	3.1:1: Percentages 3.2:1: Percentages	1.1 Simple interest
1.2 Percentage increases and decreases					<ul style="list-style-type: none">• calculate the result of a percentage increase or decrease• choose the most appropriate method calculate percentage change
1.3 Calculating the original value					<ul style="list-style-type: none">• Given the result of a percentage change, calculate the original value
1.4 Using percentages					<ul style="list-style-type: none">• make links between fractions, decimals and percentages• choose the correct calculation work out a percentage
3–4		7	3.1:2: Equations and formulae 3.2:2: Equations and formulae	2.1 Multiplying out brackets	<ul style="list-style-type: none">• multiply out brackets
				2.2 Factorising algebraic expressions	<ul style="list-style-type: none">• factorise expressions
				2.3 Equations with brackets	<ul style="list-style-type: none">• solve equations with one or more sets of brackets
				2.4 Equations with fractions	<ul style="list-style-type: none">• solve equations with fractions
				2.5 Rearranging formulae	<ul style="list-style-type: none">• change the subject of a formula
5–6		5	3.1:3: Polygons 3.2:3: Polygons	3.1 Polygons	<ul style="list-style-type: none">• know the names of polygons• know the difference between an irregular and a regular polygon
				3.2 Angles in polygons	<ul style="list-style-type: none">• work out the sizes of the interior angles of regular polygons
				3.2 Constructions	<ul style="list-style-type: none">• make accurate geometric constructions
				3.3 Angles in regular polygons	<ul style="list-style-type: none">• work out the exterior and interior angles of a regular polygon
				3.4 Regular polygons and tessellations	<ul style="list-style-type: none">• work out which regular polygons tessellate
6–7		5	3.1:4: Using data 3.2:4: Using data	4.1 Scatter graphs and correlation	<ul style="list-style-type: none">• infer a correlation from two related scatter graphs
				4.2 Interpreting graphs and diagrams	<ul style="list-style-type: none">• use and interpret a variety of graphs and diagrams
				4.2 Time-series graphs	<ul style="list-style-type: none">• use and interpret a variety of time-series graphs
				4.3 Two-way tables	<ul style="list-style-type: none">• interpret a variety of two-way tables
				4.4 Comparing two or more sets of data	<ul style="list-style-type: none">• compare two sets of data from statistical diagrams
				4.5 Statistical investigations	<ul style="list-style-type: none">• plan a statistical investigation
7		1	Assessment		

Term 2	8	HALF TERM			
	9–10	6	3.1:5: Circles	5.1 The formula for the circumference of a circle	• calculate the circumference of a circle
				5.2 The formula for the area of a circle	• calculate the area of a circle
				5.3 Mixed problems	• solve problems involving the circumference and area of a circle
	10–11	5	3.2:5: Applications of graphs	5.1 Step graphs	• interpret step graphs
				5.2 Time graphs	• interpret and draw time graphs
				5.3 Exponential growth graphs	• interpret and draw exponential growth graphs
	12–13	7	3.2:6: Pythagoras' theorem	6.1 Introducing Pythagoras' theorem	• understand Pythagoras' theorem
				6.2 Calculating the length of the hypotenuse	• calculate the length of the hypotenuse in a right-angled triangle
				6.3 Calculating the length of a shorter side	• calculate the length of a shorter side in a right-angled triangle
				6.4 Using Pythagoras' theorem solve problems	• show that a triangle is right-angled
	14	3	3.1: 6: Enlargements	6.1 Scale factors and enlargements	• use a scale factor show an enlargement
				6.2 The centre of enlargement	• enlarge a shape around a centre of enlargement
				6.3 Enlargements on grids	• enlarge a shape on a coordinate grid
	15	3	Assessment and review		
	16–17		CHRISTMAS HOLIDAY		
	18–19	7	3.1:7 Fractions 3.2:7 Fractions	7.1 Adding and subtracting fractions	• add or subtract any two fractions
				7.2 Multiplying fractions	• multiply two fractions
				7.3 Multiplying mixed numbers	• multiply one mixed number by another
				7.3 Dividing fractions 7.4 Dividing fractions and mixed numbers	• divide one fraction or mixed number by another
	20–21	7	3.1:8: Algebra 3.2:8: Algebra	8.1 Expanding brackets 8.1 More about brackets	• multiply out brackets with a variable or constant outside them
				8.2 Factorising algebraic expressions 8.2 Factorising expressions containing powers	• factorise expressions • take out a variable as a factor
				8.3 Expand and simplify 8.3 Expanding the product of two brackets	• expand expressions with two brackets and simplify them
	22–23	6	3.1:9: Decimal numbers 3.2:9: Decimal numbers	9.1 Multiplication of decimals	• multiply decimal numbers
				9.2 Powers of ten	• understand and work with both positive and negative powers of ten
				9.2 Standard form	• understand and work with standard form, using both positive and negative powers of ten

Term 3				9.3 Rounding suitably 9.3 Rounding appropriately	<ul style="list-style-type: none"> round numbers a suitable or appropriate degree of accuracy
				9.4 Dividing decimals	<ul style="list-style-type: none"> divide with decimals
				9.4 Mental calculations	<ul style="list-style-type: none"> learn and understand some routines that can be used when calculating mentally
				9.5 Solving problems	<ul style="list-style-type: none"> solve real-life problems involving multiplication or division
	23	1	Assessment		
	24		HALF TERM		
	25–26	7	3.1:10: Surface area and volume of 3D shapes	10.1 Surface areas of cubes and cuboids	<ul style="list-style-type: none"> work out the surface areas of cubes or cuboids
				10.2 Volume formulae for cubes and cuboids	<ul style="list-style-type: none"> use a simple formula work out the volume of a cube or cuboid
				10.3 Volumes of triangular prisms	<ul style="list-style-type: none"> work out the volume of a triangular prism
	27–28	6	3.2:10: Prisms and cylinders	10.1 Metric units for area and volume	<ul style="list-style-type: none"> convert from one metric unit another
				10.2 Volume of a prism	<ul style="list-style-type: none"> calculate the volume of a prism
				10.3 Surface area of a prism	<ul style="list-style-type: none"> calculate the surface area of a prism
				10.4 Volume of a cylinder	<ul style="list-style-type: none"> calculate the volume of a cylinder
				10.5 Surface area of a cylinder	<ul style="list-style-type: none"> calculate the curved surface area of a cylinder calculate the total surface area of a cylinder
	28–30	6	3.1:11: Solving equations graphically 3.2:11: Solving equations graphically	11.1 Graphs from equations in the form $y = mx + c$	<ul style="list-style-type: none"> draw a linear graph from any linear equation solve a linear equation from a graph
				11.2 Problems involving straight-line graphs	<ul style="list-style-type: none"> draw graphs solve some problems
				11.1 Graphs from equations in the form $ay \pm bx = c$	<ul style="list-style-type: none"> draw any linear graph from any linear equation solve a linear equation from a graph
				11.2 Graphs from quadratic equations	<ul style="list-style-type: none"> draw graphs from quadratic equations
				11.3 Solving simple quadratic equations by drawing graphs 11.3 Solving quadratic equations by drawing graphs	<ul style="list-style-type: none"> solve a quadratic equation by drawing a graph
				11.4 Problems involving quadratic graphs	<ul style="list-style-type: none"> solve problems that use quadratic graphs
				11.4 Solving simultaneous equations by graphs	<ul style="list-style-type: none"> solve a pair of simultaneous equations graphically
	30	2	Assessment and review		
	31–32		EASTER HOLIDAY		
	33–34	7	3.1:12 Distance, speed and time	12.1 Distance	<ul style="list-style-type: none"> work out the distance travelled in a certain time at a given speed use and interpret distance-time graphs
				12.2 Speed	<ul style="list-style-type: none"> work out the speed of an object, given the distance travelled and the time taken

Year 10	Term 1				12.3 Time	<ul style="list-style-type: none">work out the time an object will take on its journey, given its speed and the distance travelled		
		35–36	5	3.2:12: Compound units	12.1 Speed	<ul style="list-style-type: none">understand and use measures of speed		
					12.2 More about proportion	<ul style="list-style-type: none">understand and use density and other compound measures		
					12.3 Unit costs	<ul style="list-style-type: none">understand and use unit pricing		
		36–37	5	3.1:13: Similar triangles	13.1 Similar triangles	<ul style="list-style-type: none">understand what similar triangles are		
					13.2 A summary of similar triangles	<ul style="list-style-type: none">use and recall facts about similar triangles		
					13.3 Using triangles solve problems	<ul style="list-style-type: none">know that triangles can be used solve some real-life problems		
		37	1	Assessment				
		38		HALF TERM				
		39–40	7	3.2:13 Right-angled triangles	13.1 Introducing trigonometric ratios	<ul style="list-style-type: none">understand what trigonometric ratios are		
					13.2 How find trigonometric ratios of angles	<ul style="list-style-type: none">understand what the trigonometric ratios sine, cosine and tangent are		
					13.3 Using trigonometric ratios find angles	<ul style="list-style-type: none">find the angle identified from a trigonometric ratio		
					13.4 Using trigonometric ratios find lengths	<ul style="list-style-type: none">find an unknown length of a right-angled triangle, give one side and another angle		
		41–42	7	3.1:14: Revision and GCSE preparation 3.2:14: Revision and GCSE preparation	Practice	<ul style="list-style-type: none">practise topics covered in this course		
					Revision	<ul style="list-style-type: none">revise topics covered in this course		
					GCSE-type questions	<ul style="list-style-type: none">be introduced the GCSE course		
		43–44	7	Extended project				
		45	4	Assessment, revision and review				
		END OF YEAR 9 / SUMMER HOLIDAY						
		Year 10	Term 1	1–3	10	F:1: Number: Basic Number	1.1 Place value and ordering numbers	<ul style="list-style-type: none">use a number line represent negative numbersuse inequalities with negative numberscompare and order positive and negative numbers
							1.2 Order of operations and BIDMAS	<ul style="list-style-type: none">work out the answers problems with more than one mathematical operation
							1.3 The four rules	<ul style="list-style-type: none">use the four rules of arithmetic with integers and decimals
				4–6	10	F:2: Geometry and measures: Measures and scale drawings	2.1 Systems of measurement	<ul style="list-style-type: none">convert from one metric unit anotherconvert from one imperial unit another
							2.2 Conversion factors	<ul style="list-style-type: none">use approximate conversion factors change between imperial units and metric units
							2.3 Scale drawings	<ul style="list-style-type: none">read and draw scale drawingsuse a scale drawing make estimates
							2.4 Nets	<ul style="list-style-type: none">draw nets of some 3D shapesidentify a 3D shape from its net

Term 2				2.5 Using an isometric grid	<ul style="list-style-type: none"> read from and draw on isometric grids interpret diagrams draw plans and elevations
	7	3	F:3: Statistics: Charts, tables and averages	3.1 Frequency tables	<ul style="list-style-type: none"> use tally charts and frequency tables collect and represent data use grouped frequency tables collect and represent data
				3.2 Statistical diagrams	<ul style="list-style-type: none"> draw pictograms represent statistical data draw bar charts and vertical line charts represent statistical data
	8		HALF TERM		
	9	4	F:3: Statistics: Charts, tables and averages	3.3 Line graphs	<ul style="list-style-type: none"> draw a line graph show trends in data
				3.4 Statistical averages	<ul style="list-style-type: none"> work out the mode, median, mean and range of small sets of data decide which is the best average use represent a data set
	10–12	10	F:4:Geometry and measures: Angles	4.1 Angles facts	<ul style="list-style-type: none"> calculate angles on a straight line calculate angles around a point use vertically opposite angles
				4.2 Triangles	<ul style="list-style-type: none"> recognise and calculate the angles in different sorts of triangle
				4.3 Angles in a polygon	<ul style="list-style-type: none"> calculate the sum of the interior angles in a polygon
				4.4 Regular polygons	<ul style="list-style-type: none"> calculate the exterior angles and the interior angles of a regular polygon
				4.5 Angles in parallel lines	<ul style="list-style-type: none"> calculate angles in parallel lines
				4.6 Special quadrilaterals	<ul style="list-style-type: none"> use angle properties in quadrilaterals
				4.7 Bearings	<ul style="list-style-type: none"> use a bearing specify a direction
	13–15	10	F:5: Number: Number properties	5.1 Multiples of whole numbers	<ul style="list-style-type: none"> find multiples of whole numbers recognise multiples of numbers
				5.2 Factors of whole numbers	<ul style="list-style-type: none"> identify the factors of a number
				5.3 Prime numbers	<ul style="list-style-type: none"> identify prime numbers
				5.4 Prime factors, LCM and HCF	<ul style="list-style-type: none"> identify prime factors identify the lowest common multiple (LCM) of two numbers identify the highest common factor (HCF) of two numbers
				5.5 Square numbers	<ul style="list-style-type: none"> identify square numbers use a calculator find the square of a number
				5.6 Square roots	<ul style="list-style-type: none"> recognise the square roots of square numbers up 225 use a calculator find the square roots of any number
				5.7 Basic calculations on a calculator	<ul style="list-style-type: none"> use some of the important keys when working on a calculator
	16–17		CHRISTMAS HOLIDAY		
	18–19	7	F:6: Number: Approximations	6.1 Rounding whole numbers	<ul style="list-style-type: none"> round a whole number
				6.2 Rounding decimals	<ul style="list-style-type: none"> round decimal numbers a given accuracy
				6.3 Approximating calculations	<ul style="list-style-type: none"> identify significant figures round numbers a given number of significant figures use approximation estimate answers and check calculations

					<ul style="list-style-type: none"> round a calculation at the end of a problem, give what is considered be a sensible answer
	20–21	7	F:7: Number: Decimals and fractions	7.1 Calculating with decimals 7.2 Fractions and reciprocals 7.3 Writing one quantity as a fraction of another 7.4 Adding and subtracting fractions 7.5 Multiplying and dividing fractions 7.6 Fractions on a calculator	<ul style="list-style-type: none"> multiply and divide with decimals recognise different types of fraction, reciprocal, terminating decimal and recurring decimal convert terminating decimals fractions convert fractions decimals find reciprocals of numbers or fractions work out a fraction of a quantity find one quantity as a fraction of another add and subtract fractions with different denominators multiply proper fractions multiply mixed numbers divide by fractions use a calculator add and subtract fractions use a calculator multiply and divide fractions
	22–23	7	F:8: Algebra: Linear graphs	8.1 Graphs and equations 8.2 Drawing linear graphs by finding points 8.3 Gradient of a line 8.4 $y = mx + c$ 8.5 Finding the equation of a line from its graph 8.6 The equation of a parallel line	<ul style="list-style-type: none"> use flow diagrams draw graphs work out the equations of horizontal and vertical lines draw linear graphs without using flow diagrams work out the gradient of a straight line draw a line with a certain gradient draw graphs using the gradient-intercept method draw graphs using the cover-up method 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 work out the equation of a linear graph that is parallel another line and passes through a specific point
	24		HALF TERM		
	25	4	F:8: Algebra: Linear graphs	8.7 Real-life uses of graphs 8.8 Solving simultaneous equations using graphs	<ul style="list-style-type: none"> convert from one unit another unit by using a conversion graph use straight-line graphs work out formulae solve simultaneous linear equations using graphs
	26–28	10	F:9: Algebra: Expressions and formulae	9.1 Basic algebra 9.2 Substitution 9.3 Expanding brackets 9.4 Factorisation	<ul style="list-style-type: none"> write an algebraic expression recognise expressions, equations, formulae and identities substitute into, simplify and use algebraic expressions expand brackets such as $2(x-3)$ expand and simplify brackets factorise an algebraic expression

Term 3	29–30	7	F:10: Ratio and proportion and rates of change: Ratio, speed and proportion	9.5 Quadratic expansion	<ul style="list-style-type: none"> expand two linear brackets obtain a quadratic expression
				9.6 Quadratic factorisation	<ul style="list-style-type: none"> factorise a quadratic expression of the form $x^2 + ax + b$ into two linear brackets
				9.7 Changing the subject of a formula	<ul style="list-style-type: none"> change the subject of a formula
				10.1 Ratio	<ul style="list-style-type: none"> simplify a ratio express a ratio as a fraction divide amounts in given ratios complete calculations from a given ratio and partial information
				10.2 Speed, distance and time	<ul style="list-style-type: none"> recognise the relationship between speed, distance and time calculate average speed from distance and time calculate distance travelled from the speed and the time taken calculate the time taken on a journey from the speed and the distance
				10.3 Direct proportion problems	<ul style="list-style-type: none"> recognise and solve problems that involve direct proportion
				10.4 Best buys	<ul style="list-style-type: none"> find the cost per unit mass find the mass per unit cost use the above find which product is better value.
				EASTER HOLIDAY	
				EASTER HOLIDAY	
	33–34	7	F:11: Geometry and measures: Perimeter and area	11.1 Rectangles	<ul style="list-style-type: none"> calculate the perimeter and area of a rectangle
				11.2 Compound shapes	<ul style="list-style-type: none"> calculate the perimeter and area of a compound shape made from rectangles
				11.3 Area of a triangle	<ul style="list-style-type: none"> calculate the area of a triangle use the formula for the area of a triangle
				11.4 Area of a parallelogram	<ul style="list-style-type: none"> calculate the area of a parallelogram use the formula for the area of a parallelogram
				11.5 Area of a trapezium	<ul style="list-style-type: none"> calculate the area of a trapezium use the formula for the area of a trapezium
				11.6 Circles	<ul style="list-style-type: none"> recognise terms used for circle work calculate the circumference of a circle
				11.7 The area of a circle	<ul style="list-style-type: none"> calculate the area of a circle
				11.8 Answers in terms of π	<ul style="list-style-type: none"> give answers for circle calculations in terms of δ
	35–36	7	F:12: Geometry and measures: Transformations	12.1 Rotational symmetry	<ul style="list-style-type: none"> work out the order of rotational symmetry for a 2D shape recognise shapes with rotational symmetry
				12.2 Translation	<ul style="list-style-type: none"> translate a 2D shape
				12.3 Reflections	<ul style="list-style-type: none"> reflect a 2D shape in a mirror line
				12.4 Rotations	<ul style="list-style-type: none"> rotate a 2D shape about a point
				12.5 Enlargements	<ul style="list-style-type: none"> enlarge a 2D shape by a scale factor
				12.6 Using more than one transformation	<ul style="list-style-type: none"> use more than one transformation
				12.7 Vectors	<ul style="list-style-type: none"> represent vectors add and subtract vectors

Year 11 Term 1	37	3	F:13: Probability: Probability and events	13.1 Calculating probabilities	<ul style="list-style-type: none"> use the probability scale and the language of probability calculate the probability of an outcome of an event
				13.2 Probability that an outcome will not happen	<ul style="list-style-type: none"> calculate the probability of an outcome not happening when you know the probability of that outcome happening
				13.3 Mutually exclusive and exhaustive outcomes	<ul style="list-style-type: none"> recognise mutually exclusive and exhaustive outcomes
	38		HALF TERM		
	39	4	F:13: Probability: Probability and events	13.4 Experimental probability	<ul style="list-style-type: none"> calculate experimental probabilities and relative frequencies from experiments recognise different methods for estimating probabilities
				13.5 Expectation	<ul style="list-style-type: none"> predict the likely number of successful outcomes, given the number of trials and the probability of any one outcome
				13.6 Choices and outcomes	<ul style="list-style-type: none"> apply systematic listing and counting strategies identify all outcomes for a variety of problems
	40	3	F:14:Geometry and measures: Volumes and surface areas of prisms	14.1 3D shapes	<ul style="list-style-type: none"> use the correct terms when working with 3D shapes
				14.2 Volume and surface area of a cuboid	<ul style="list-style-type: none"> calculate the surface area and volume of a cuboid
	41–42	7	Summer examinations and revision		
	43	4	F:14:Geometry and measures: Volumes and surface areas of prisms	14.3 Volume and surface area of a prism	<ul style="list-style-type: none"> calculate the volume and surface area of a prism
				14.4 Volume and surface area of cylinders	<ul style="list-style-type: none"> calculate the volume and surface area of a cylinder
	44–45	7	F: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
				15.2 Solving equations with brackets	<ul style="list-style-type: none"> solve equations where you have first expand brackets
				15.3 Solving equations with the variable on both sides	<ul style="list-style-type: none"> solve equations where the variable appears on both sides of the equals sign.
	END OF YEAR 10 / SUMMER HOLIDAY				
	1–2	7	F:16: Ratio and proportion and rates of change: Percentages and compound measures	16.1 Equivalent percentages, fractions and decimals	<ul style="list-style-type: none"> convert percentages fractions and decimals and vice versa
				16.2 Calculating a percentage of a quantity	<ul style="list-style-type: none"> calculate a percentage of a quantity
				16.3 Increasing and decreasing quantities by a percentage	<ul style="list-style-type: none"> increase and decrease quantities by a percentage
				16.4 Expressing one quantity as a	<ul style="list-style-type: none"> express one quantity as a percentage of another work out percentage change

			percentage of another	
			16.5 Compound measures	<ul style="list-style-type: none"> recognise and solve problems involving the compound measures of rates of pay, density and pressure
3–4	7	F: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
5–7	10	F: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
			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
8	HALF TERM			
9–10	7	F: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
11–12	7	F:20: Geometry and measures: Curved shapes and pyramids	20.1 Sectors	<ul style="list-style-type: none"> calculate the length of an arc calculate the area and angle of a sector
			20.2 Pyramids	<ul style="list-style-type: none"> calculate the volume and surface area of a pyramid
			20.3 Cones	<ul style="list-style-type: none"> calculate the volume and surface area of a cone
			20.4 Spheres	<ul style="list-style-type: none"> calculate the volume and surface area of a sphere
13	3	Revision and review		
14–15	7	Mock Exams and Revision		
16–17		CHRISTMAS HOLIDAY		

Term 2	18–19	7	F:21: Algebra: Number and Sequences	21.1 Patterns in number	<ul style="list-style-type: none"> recognise patterns in number sequences
				21.2 Number sequences	<ul style="list-style-type: none"> recognise how number sequences are built up generate sequences, given the nth term
				21.3 Finding the n th term of a linear sequence	<ul style="list-style-type: none"> find the nth term of a linear sequence
				21.4 Special sequences	<ul style="list-style-type: none"> recognise and continue some special number sequences understand how prime, odd and even numbers interact in addition, subtraction and multiplication problems
				2.5 General rules from given patterns	<ul style="list-style-type: none"> find the nth term from practical problems involving sequences.
	20–22	10	F:22: Geometry and measures: Right-angled triangles	22.1 Pythagoras' theorem	<ul style="list-style-type: none"> know what Pythagoras' theorem is calculate the length of the hypotenuse in a right-angled triangle
				22.2 Calculating the length of the shorter side	<ul style="list-style-type: none"> calculate the length of a shorter side in a right-angled triangle
				22.3 Applying Pythagoras' theorem in real-life situations	<ul style="list-style-type: none"> solve problems using Pythagoras' theorem
				22.4 Pythagoras' theorem and isosceles triangles	<ul style="list-style-type: none"> use Pythagoras' theorem in isosceles triangles
				22.5 Trigonometric ratios	<ul style="list-style-type: none"> define, understand and use the three trigonometric ratios
				22.6 Calculating lengths using trigonometry	<ul style="list-style-type: none"> use trigonometric ratios calculate a length in a right-angled triangle
				22.7 Calculating angles using trigonometry	<ul style="list-style-type: none"> use the trigonometric ratios calculate an angle
				22.8 Trigonometry without a calculator	<ul style="list-style-type: none"> work out and remember trigonometric values for angles of 30°, 45°, 60° and 90°
				22.9 Solving problems using trigonometry	<ul style="list-style-type: none"> solve practical problems using trigonometry solve problems using an angle of elevation or an angle of depression
				22.10 Trigonometry and bearings	<ul style="list-style-type: none"> solve bearing problems using trigonometry
				22.11 Trigonometry and isosceles triangles	<ul style="list-style-type: none"> use trigonometry solve problems involving isosceles triangles
	23	HALF TERM			
	24–25	7	F:23: Geometry and measures: Congruency and similarity	23.1 Congruent triangles	<ul style="list-style-type: none"> demonstrate that two triangles are congruent
				23.2 Similarity	<ul style="list-style-type: none"> recognise similarity in any two shapes show that two shapes are similar work out the scale factor between similar shapes
	26–27	7	F:24: Probability: Combined events	24.1 Combined events	<ul style="list-style-type: none"> work out the probabilities when two or more events occur at the same time
				24.2 Two-way tables	<ul style="list-style-type: none"> read two-way tables and use them work out probabilities
				24.3 Probability and Venn diagrams	<ul style="list-style-type: none"> use Venn diagrams solve probability questions

Term 3				24.2 Tree diagrams	<ul style="list-style-type: none">understand frequency tree diagrams and probability tree diagramsuse probability tree diagrams work out the probabilities involved in combined events	
	28–29	7	F:25: Number: Powers and standard form	25.1 Powers (indices)	<ul style="list-style-type: none">write a number as a power of another numberuse powers (also known as indices)multiply and divide by powers of 10.	
				25.2 Rules for multiplying and dividing powers	<ul style="list-style-type: none">use rules for multiplying and dividing powersmultiply and divide numbers by powers of 10.	
	30–31	EASTER HOLIDAY				
	32	4	F:25: Number: Powers and standard form	25.3 Standard form	<ul style="list-style-type: none">write a number in standard formcalculate with numbers in standard form	
	33–35	11	F:26: Algebra: Simultaneous equations and linear inequalities	26.1 Elimination method for simultaneous equations	<ul style="list-style-type: none">solve simultaneous linear equations in two variables using the elimination method	
				26.2 Substitution method for simultaneous equations	<ul style="list-style-type: none">solve simultaneous linear equations in two variables using the substitution method	
				26.3 Balancing coefficients solve simultaneous equations	<ul style="list-style-type: none">solve simultaneous linear equations by balancing coefficients	
				26.4 Using simultaneous equations solve problems	<ul style="list-style-type: none">solve problems using simultaneous linear equations	
				26.5 Linear inequalities	<ul style="list-style-type: none">solve a simple linear inequality and represent it on a number line	
	36–37	7	F:27: Algebra: Non-linear graphs	27.1 Distance-time graphs	<ul style="list-style-type: none">interpret distance–time graphsdraw a graph of the depth of liquid as a container is filled	
				27.2 Plotting quadratic graphs	<ul style="list-style-type: none">draw and read values from quadratic graphs	
				27.3 Solving quadratic equations by factorisation	<ul style="list-style-type: none">solve a quadratic equation by factorisation	
				27.4 The significant points of a quadratic curve	<ul style="list-style-type: none">identify the significant points of a quadratic function graphicallyidentify the roots of a quadratic function by solving a quadratic equationidentify the turning point of a quadratic function	
				27.5 Cubic and reciprocal graphs	<ul style="list-style-type: none">recognise and plot cubic and reciprocal graphs	
	38	HALF-TERM HOLIDAY				
	39–40	Revision				
	41–42	June Examinations				
	SUMMER HOLIDAY / END OF COURSE					