

Year 8	Worksheets and videos	Tick when complete
8aMa2 and 8bMa2 Revision List*		
7.15 Calculate using areas and volumes		
Calculate the perimeter of a 2D shape	241	
Calculate the area of a		
rectangle	45	
triangle	49	
parallelogram	44	
trapezium	48	
composite shape	41	
Calculate the surface area of a cuboid	310	
Find missing lengths when the volume is known		
7.17 Presentation of Data		
Construct frequency tables using inequality symbols		
Construct and interpret pictograms and bar charts	162	
Draw and interpret pie charts	163	
7.18 Measuring Data		
Calculate the mode from a list of numbers	56	
Calculate the median from an odd or even amount of numbers		
Calculate the mean from a list of numbers		
Calculate the range of a set of data		
Use the mean to find a missing number in a list		
Estimate the mean from a frequency table	54	
Find the modal class from a frequency table	video	
Work out the class containing the median	51	
Analyse and compare sets of data using an average and the range	bitesize	
8.1 The number system		
Know the definition of a prime number	225	
Be able to calculate whether a number up to 100 is prime		
Write a number as a product of prime factors	223	
Find the Highest Common Factor of two numbers	224	
Find the Lowest Common Multiple of two numbers		
Round numbers to a determined number of significant figures	279a	
Use rounding to estimate answers to questions	215	
Write numbers in standard form with positive and negative powers of 10	300	
8.2 Number operations		
Perform addition and subtraction calculations when dealing with negative numbers	205	
Perform multiplication and division calculations when dealing with negative numbers	206	
	207	
Be able to accurately square or cube negative numbers	Video	
Substitute negative numbers into algebraic expressions	20	
Know that powers and roots fall under the "Indices" within BIDMAS	211	
Complete BIDMAS calculations accurately with powers and roots		
8.3 Enlargement & Accurate drawings		
Enlarge a shape using either an integer or fractional scale factor	104	
	107	
Find the centre of enlargement when a shape has been enlarged	106	
Find the scale factor when a shape has been enlarged	105	
Draw accurate plans and elevations from a 3D drawing	354	
Measure angles accurately and interpret the answer when it is a bearing	26	

Interpret diagrams that involve a scale (eg 1cm = 5km)	283	
Construct an scale drawing involving bearings		
8.4 Introductory Probability		
Know that probability is measured on a scale of 0-1	251	
Know that probabilities can be fractions, decimals or percentages	245	
List all outcomes for events	253	
Work out the probability for equally likely events	Video	
Know that the sum of probabilities for all outcomes is 1	250	
Find missing probabilities using the sum of all probabilities equalling 1		
8.5 Introductory Algebra		
Know that in algebra $a \times b$ is written ab	18	
Factorise expressions by taking out a common factor (single bracket)	117	
Simplify expressions by collecting like terms	10	
Simplify expressions with a combination of variables (e.g. $3a^2b + 4ab^2 + 2a^2 - a^2b$)		
Know that $a^m \times a^n = a^{(m+n)}$	17	
Know that $a^m / a^n = a^{(m-n)}$		
Know that $a^0 = 1$ for any value of a	Video	
Change the subject of a formula when one or two steps are required	7	
8.6 Fractions, Decimals & Percentages		
Identify if a fraction is recurring	Video	
Write a decimal as a fraction	123	
Simplify fractions into simplest form	146	
Convert fractions to decimals	127	
Convert decimals to percentages	125	
Convert fractions to percentages	125	
8.7 Ratio & Proportion		
Write a ratio from a given situation		
Write a ratio as a fraction	269a	
Write a fraction as a ratio		
Use scalers/multipliers to solve proportion problems	255	
	256	
Use fractions in the context of ratio and proportion		
Know that a compound unit is a combination of two or more units	Video	
Calculate speed, distance and time from given information	299	
Convert quantities to change units	349	
8.8 Linear Sequences		
Generate a sequence given a first term and a rule	286	
Generate a sequence from a position-to-term (nth term) rule	Video	
Find the position-to-term (nth term) for a linear sequence	288	
Use the nth term to ascertain whether or not a number is in a sequence		
8.9 Angles in parallel lines and polygons		
Know the meaning of alternate and corresponding angles	25	
Identify alternate and corresponding angles between parallel lines		
Know that alternate angles are equal		
Know that corresponding angles are equal		
Find missing angles in diagrams using alternate and corresponding angles		
Know how to work out the total of the angles in any polygon	32	
Establish the size of interior angles in any regular polygon		
Establish the size of exterior angles in any regular polygon		
8.10 Percentage Change		
Identify the percentage multiplier for carrying out a percentage increase or decrease	220	

Use percentage multipliers when carrying out percentage increases or decreases	433	
Calculate the original value when a number has had a percentage change (reverse percentages)	240	
Calculate simple interest for a number of years	Video	
Understand that an exact value fraction is different to a rounded answer		
Use exact value fractions in calculations		