Year 9 **9aMa1 and 9bMa1 Revision List***	Questions and Videos	RAG	Tick when revision is complete
9.1 Calculating			
Use rules of indices for multiplying and dividing (for standard form)	174		
Convert between normal numbers and those in standard form			
Add/Subtract numbers written in standard form	300, 301, 302, 303		
Multiply/Divide numbers written in standard form			
Correct a number that is not in standard form			
Truncate numbers to a designated point			
Round numbers to a designated degree of accuracy (decimal places)	278		
Round numbers to a designated degree of accuracy (significant figures)	279a		
Round numbers to a designated degree of accuracy (highest/Lowest values)	280		
Use inequalties to show the range of values for a rounded number	377		
Create error intervals for rounded values			
9.2 Construction			
Construct a perpendicular to a specific point on a line	79		
Construct angle and perpendicular bisectors	72, 78		
Understand the meaning of loci			
Construct the locus…	video 1		
	video 2		
Of a point			
Between two points	video 3		
Around a shape			
Between two lines			
Draw a 3D shape from its plan view and elevations	Video		
Draw the plan view and elevations from a drawing of a 3D shape			
9.3 Simplifying algebraic expressions			
Multiply any two linear expressions	18		
Expand a set of square brackets	14		
Simplify algebraic expressions	9		
Create an expression or a formula to describe a situation			
Factorise quadratics by taking out a single factor	117		
Factorise quadratics by writing it in double brackets	118		
Show that two algebraic expressions are equivalent	365		
9.4 Proportion			
Direct proportion	video		
Inverse proportion	video		
Know the key features of the graphs for direct and inverse proportion			
Know the key features for formulae that represent direct or inverse proportion			
Know the meaning of congruent (in shapes)	66		
Know the meaning of similarity (in shapes)	291		
Work out missing lengths in similar shapes	292		
Know the definition of a compound unit			
Calculate speed	299		
Calculate pressure	385		
Calculate density	384		
Convert units of density, pressure or speed			
9.5 Fibonacci and quadratic sequences			
Know the Fibonacci sequence			
Generate Fibonacci-type sequences	287a		
Find missing terms in Fibonacci-type sequences			
Substitute numbers into formulae	20		
Generate terms of a quadratic sequence from a rule or nth term			
Calculate first and second differences for quadratic sequences	388		
Continue quadratic sequences			
9.6 Linear inequalities			
Know the definition for the four inequality symbols			
Use the correct inequality symbol for a situation			
Find a set of integers that are solutions to an inequality	176, 177		
Use correct set notation to list a set of integers			
Show inequalities on a number line			
Use a number line to find a set of values for inequalities			
Solve linear inequalities, including where the unknown is on both sides and where brackets are present	178, 179		
9.7 Sectors, arcs and cylinders			
Label a circle with a…			
Radius			
Diameter			
Chord	61		
Sector			
Segment			
Tangent			
Calculate arc lengths	58		
Calculate sector areas	46		

Calculate an angle from either an arc length or a sector area			
Calculate the surface area of a cylinder	315		
Calculate with multiples of pi			
Find missing sides in Right Angled Triangles using Pythagoras' theorem	257, 260, 261		
Explain the meaning of Pythagorean Triples			
9.8 Proof			
Know the tests for congruency… SSS SAS ASA (AAS) RHS	67		
Use geometrical knowledge to prove two triangles are congruent			
Explain why the base angles in an isosceles triangle must be equal			
9.9 Straight lines and non-linear graphs			
Know the meaning of each part of y = mx + c to describe a straight line	191, 194, 195		
Rearrange equations to the form y = mx + c			
Find the equation of a line from… One point and a gradient Between two points			
Find parallel lines in the form y = mx + c	196		
Plot graphs of quadratic functions	264		
Plot graphs of cubic functions	344		
Plot graphs of reciprocal functions	346		
Recognise and sketch graphs of quadratic, cubic and reciprocal functions			
9.10 Simultaneous equations			
Understand that two equations are needed to solve equations with two unknowns	295		
Solve pairs of linear simultaneous equations			
Find approximate solutions to simultaneous equations using a graph	297		
Derive two simultaneous equations for solving	BBC Bitesize page		
9.11 Tree diagrams			
List probability outcomes using a tree diagram	252		
Fill in probabilities on a tree diagram for independent and dependent events			
Know when to add and when to multiply probabilities			
Use a tree diagram to calculate combined probabilities			
Understand that relative frequency tends towards a theoretical probability if the sample is large enough	248		
9.12 Presentating data			
Construct and interpret graphs of time series	video		
Construct and interpret compound bar charts (Composite)	video		
Construct and interpret compound bar charts (Comparative)	video		
Construct and interpret scatter graphs	165 - 168		
Recognise correclation in a scatter graph			
Use a line of best fit to estimate missing values			