MATHEMATICS: Year 11 Revision Timetable 2024 FOUNDATION TIER

Pupil Name:

BEST WAYS TO REVISE IN YOUR SUBJECT

- The only effective way to revise Maths is to DO MATHS – lots of practice questions
- Use the topic lists to select key skills that you need to practice
- Revise key points using the Corbett maths videos
- Answer practice questions from Corbett maths to make sure that you can apply your knowledge

USEFUL RESOURCES: As well as Corbett maths, you could use www.mathsgenie.co.uk, revision guides and your own notes in exercise books to support your revision.

Date	Topics	Tick when practised	What am I finding difficult
7/10/24	Key skills number Key skills algebra Angles		
14/10/24	Pythagoras Quadratics Probability		
21/10/24	Formulas and Equations Circles Units		
28/10/24 Half Term	Percentages Ratio and Proportion Straight Line Graphs		
04/11/24	Transformations Sequences Statistics		
07/11/24	Exam practice using past papers		

7/10/24

Key Skills Number	Video number
Order positive and negative integers	221
Add, subtract, multiply and divide negative numbers	205,206,207
Add, subtract, multiply and divide fractions	133,142,134
Add, subtract, multiply and divide mixed numbers	133,142,134
Understand place value including decimals	222
Use BIDMAS for the order of operations	211
Understand the terms prime number, factor, multiple, square number, cube number, square root and cube root	225,216,220,226, 228 212,214
Calculate powers and roots	172.228
Find the prime factor decomposition of a number	223
Use this to find LCM's and HCF's	224
Round to decimal places and significant figures	279a, 278
Approximate the answer to a calculation by rounding to 1 significant figure	215
Change a terminating decimal to a fraction and vice versa	123
Change a recurring decimal to a fraction and vice versa	96

Key Skills - Algebra	Video number
Use algebraic notation	19
Substitute values into expressions and formulae	20
Simplify an expression by collecting like terms	9
Expand a bracket	13.14
Factorise an expression into a bracket	117
Apply the laws of indices to simplify expressions	174
Solve linear equations where the unknown appears on one side	110

Angles	Video number
Understand the terms vertices, edges, planes, parallel lines, perpendicular lines, right angles	5
Find missing angles around a point, on a straight line, in a triangle and using vertically opposite angles	30,34,35
Find missing angles using alternate and corresponding angles on parallel lines	25
Calculate the sum of interior angles in a polygon	32
Know the names of polygons: pentagon, hexagon, octagon and decagon	1
Find interior or exterior angles in a polygon	32
Know the names and properties of a square, rectangle, parallelogram, trapezium, kite and rhombus	2
Know the names and properties of isosceles, equilateral, scalene, right angled, acute angled and obtuse angled triangles.	327

14/10/24

Pythagoras' Theorem	Video number
Know the formula for Pythagoras' Theorem	257
Use Pythagoras' Theorem to find the length of a hypotenuse	257
Use Pythagoras' Theorem to find missing lengths in a right angled triangle	257

Quadratics	Video number
Expand double brackets	14
Factorise a quadratic expression into double brackets	118
Factorise a difference of 2 squares	120
Solve quadratic equations by factorising	266
Solve quadratic equations which need rearranging, by factorising	266
Plot graphs of quadratic functions	264
Find the approximate solutions of a quadratic equation using a graph	267c

Probability	Video number
Systematically list items using lists, tables and diagrams	253
Use tables, two-way tables or frequency trees to calculate probabilities	319,376
Calculated expected outcomes of future events	248
Relate relative frequency to theoretical probability, using appropriate language and the 0 to 1 probability scale	248
Understand that probabilities add to 1 (for exhaustive mutually exclusive events)	245
Understand that increasing the number of trials of an experiment will give a better approximation to the theoretical probability value	
Construct sample space diagrams (possibility spaces) for two events and use it to calculate theoretical probabilities	246

21/10/24

Formulae and Equations	Video number
Substitute both positive and negative numbers into formulae including scientific formulae	20
Rearrange formulae to change the subject	7
Solve linear equations in one unknown algebraically, including brackets and unknowns on both sides	113
Solve simultaneous equations algebraically	295
Construct two simultaneous equations, solve them and interpret them	295
Find approximate solutions from a graph	297

Circles	Video number
Identify circle definitions and properties	61
Know the formulae for circumference and area of a circle	59, 60
Calculate the perimeter of shapes, including circles	62

Units	Video number
Use standard units of mass, length, time, money and other measures	349a,b,c
Use standard units and related concepts to include length area, volume/capacity, mass	349
Use compound units including density, pressure, speed, rates of pay and unit pricing	384,385

28/10/24

Percentages	Video number
Interpret percentages as an operation, solve percentage problems using multipliers	239
Define percentages as parts of one hundred	
Apply percentages as a fraction or a decimal using as a multiplier	239
Express one quantity as a percentage of another	237
Compare two quantities using percentages	234
Work with percentages greater than 100	
Solve problems including percentage increase/decrease and simple interest	238
Solve reverse percentage problems	240
Solve growth and decay problems including compound interest	236

Ratio and Proportion	Video number
Understand how fractions relate to ratio	269a
Express one quantity as a fraction of another	136
Write and simplify given ratios	269
Work out a missing amount given one quantity and a ratio	271
Split an amount by a given ratio	270
Apply ratios to real contexts and problems	270
Work out best buy problems	210
Solve problems involving direct proportion	255a,255c,256
Solve problems involving reverse proportion	255
Understand and use proportion as equality in ratios	
Interpret equations that describe direct and inverse proportion	
Recognise and interpret graphs that describe direct and inverse proportion	255b

Straight Line Graphs	Video number
Work with coordinates in all four quadrants	84
Plot graphs of equations that correspond to straight lines	186,187
Solve geometrical problems on coordinate axes	
Find the equation of a line through two given points	195
Find the equation of a line through one point given the gradient	194
Use the form y=mx = c to identify perpendicular lines	197
Identify and interpret gradients and intercepts of straight lines, both graphically and algebraically	189,191

04/11/24

Sequences	Video number
Continue a sequence	286
Generate terms of a sequence using the nth term	288
Continue a picture pattern	290
Recognise and use sequences of triangular, square and cube numbers and arithmetic progressions	287a
Recognise and use Fibonacci-type sequences, quadratic sequences and geometric progressions	
Find the nth term of linear sequences	288

Transformations	Video number
Be able to reflect shapes	272
Be able to describe a reflection	273
Be able to rotate shapes	275
Be able to describe a rotation	275
Be able to translate shapes and describe a given translation using a vector	325,326
Be able to enlarge a shape using integer scale factors	104
Be able to enlarge a shape using a fractional scale factor	107
Identify and construct congruent and similar shapes	66,291

Key Skills Statistics	Video number
Interpret and construct frequency tables	54
Interpret and construct bar charts, pictograms, and vertical line charts	147,148,161,162
Calculate the median, mean, mode and modal class	50-55
Infer properties of populations from a sample whilst knowing the limitations of sampling	282
Use statistics to describe a population	
Use and interpret scatter graphs	165,166
Recognise correlation and understand that it does not indicate causation	168
Draw lines of best fit and use them to make predictions	167