



Year 10 – Spring term learning program

Depending on your predicted grade some lessons in this learning plan may be unsuitable.

Students should use the GCSE grade 1 – 9 filters at the top of each subject webpage, to choose the lessons appropriate to their predicted grade.

Grade filter **Off** 1 2 3 4 5 6 7 8 9 KS2 KS3

Lesson Number	Subject - Algebra	Complete	Score
	Topic - Simplifying Powers		
6	Multiplying Powers		
7	Multiplying Powers with numbers in front of the letters		
8	Multiplying negative powers		
9	Dividing powers		
10	Dividing powers with negative numbers		
11	Dividing powers with numbers in front of the letters		
12	Simplifying Powers inside brackets, raised to another power		
	Topic - Finding the n^{th} Term of a Quadratic Sequence (Higher Only)		
45	Finding the n^{th} Term Rule of simple Quadratic sequences - Part 1		
46	Finding the n^{th} Term Rule of simple Quadratic sequences - Part 2		
47	Finding the n^{th} Term Rule of simple Quadratic sequences - Exam Tip		
48	Finding the n^{th} term of a quadratic sequence Part 1		
49	Finding the n^{th} term of a quadratic sequence Part 2		
	Topic - Straight Line Graphs		
81	Introduction to straight line graphs		
82	Exam tip - completing a table of values		
83	Rearranging equations in the form of $y=mx+c$		
84	Plotting straight line graphs from a table of values		
85	Plotting straight line graphs of $x=$ number and $y=$ number		
86	Finding the gradient of a line		
87	Finding the y intercept		
88	Finding the equation of a straight line graph		
90	Finding equations of parallel lines (Higher Only)		
	Subject - Geometry and measures		
	Topic - Midpoints of Lines		
82	Finding the Midpoint of a Line Joining 2 Points		
83	Finding the Midpoint of a Line Joining 2 Points Exam Question		
	Subject - Algebra		
	Topic - Finding Gradients and Equations of Lines between 2 Points		
96	Introduction to Finding the Gradient of a Line Joining 2 Points		
97	Finding the Gradient of a Line Joining 2 Points		
98	Finding the Gradient of a Line Joining 2 Points Exam Tip		
99	Finding the Equation of a Line Joining 2 Points		

	Topic - Formula 1 Distance/time, Velocity/time Graphs		
100	Calculating average speed from a D/t graph part 1		
101	Calculating average speed from a D/t graph part 2		
102	Speed/distance/time questions - Common mistakes		
	Subject - Number, Ratio and proportion		
	Topic - Ratio		
99	Introduction to Ratios		
100	Simplifying ratios		
101	Simplifying ratios in the form 1:n		
102	Sharing amounts into ratios, part 1		
103	Sharing amounts into ratios, part 2		
104	Sharing amounts into ratios, part 3		
105	Ratio questions with ingredients		
106	Ratio Practice Exam Question		
	Subject - Algebra		
	Topic - Solving Equations		
50	Solving equations, part 1		
51	Solving equations, part 2		
52	Solving equations, part 3		
53	Solving equations with brackets		
54	Solving equations with a divide or fraction		
55	Solving equations with x's on both sides		
	Topic - Solving Equations Using Number Machines (Easier method)		
56	Solving equations, using number machines		
57	Solving equations with brackets, using number machines		
58	Solving equations with a divide in, using a number machine		
59	Solving equations with x's on both sides using number machines		
	Topic - Forming and Solving Linear Equations		
60	Forming and Solving Linear Equations Part 1		
61	Forming and Solving Linear Equations Part 2		
62	Forming and Solving Linear Equations Exam Question		
	Topic - Simultaneous Equations		
150	Solving simultaneous equations, part 1		
151	Solving simultaneous equations, part 2		
152	Solving simultaneous equations, part 3		
153	Solving simultaneous equations, part 4		
154	Solving simultaneous equations, part 5		
155	Solving quadratic simultaneous equations, part 1		
156	Solving quadratic simultaneous equations, part 2		
158	Simultaneous equations, exam tip		
	Topic - Completing the Square (Higher Only)		
119	Completing the Square Part 1a		
120	Completing the Square Part 1b		
121	Completing the Square Exam Question 1		
122	Completing the Square Exam Question 2		
123	When the x^2 term has a number in front Part 1		
124	When the x^2 term has a number in front Part 2		

	Topic - Solving Quadratic Equations (Higher Only)		
126	Solving quadratic equations by factorising part 1		
127	Solving quadratic equations by factorising part 2		
128	Solving quadratics using the quadratic formula, part 1		
129	Solving quadratics using the quadratic formula, part 2		
130	Solving Quadratics by Completing the Square Part 1		
131	Solving Quadratics by Completing the Square Part 2		
	Subject - Number, Ratio and proportion		
	Topic - Surds (Higher Only)		
113	Simplifying surds, part 1		
114	Simplifying surds, part 2		
115	Simplifying surds with brackets		
116	Simplifying surds - dividing surds		
117	Surds - adding surds, part 1		
118	Surds - adding surds, part 2		
119	Surds - rationalising the denominator		
	Topic - Rational and Irrational Numbers (Higher Only)		
112	Rational and irrational numbers		
	Subject - Statistics and probability		
	Topic - Averages		
1	Calculating the mean		
2	Calculations involving the mean		
3	Calculating the mean of grouped continuous data		
4	Using fx notation to calculate the mean of continuous data		
5	Calculating the mean of grouped discrete data		
6	Using fx notation to calculate the mean of discrete data		
7	Choosing the best average		
	Topic - Finding the median		
8	Introduction to Finding the Median		
9	Finding the location of the median		
10	Finding the Median Exam Tip		
12	Finding the Median of Grouped Data		
	Topic - Stem and Leaf		
13	Introduction to stem and leaf diagrams		
14	Making a stem and leaf diagram		
	Topic - Averages		
11	Finding the Median from a Stem and Leaf Diagram		
	Stem and Leaf		
15	Finding the median and quartiles from a stem and leaf		
	Topic - 2 way tables		
16	Completing 2 Way Tables		
17	2 Way Tables Exam Question		
	Topic - Cumulative Frequency (Higher Only)		
25	Completing a cumulative frequency table		
26	Cumulative frequency graphs of discrete data		
27	Drawing cumulative frequency graphs		
28	Finding information from cumulative frequency graphs		

29	Finding the median and quartiles from a C.F graph part 1		
30	Finding the median and quartiles from a C.F graph part 2		
	Topic - Box Plots (Higher Only)		
31	Introduction to box plots		
32	Drawing box plots from data		
33	Draw a box plot from a cumulative frequency graph		
34	Introduction to comparing box plots		
35	Comparing box plots		
	Topic - Histograms (Higher Only)		
36	Different types of histograms		
37	Drawing histograms		
38	Calculating frequency's from a histogram part 1		
39	Calculating frequency's from a histogram part 2		
	Subject - Algebra		
	Topic - Inequalities		
63	Introduction to inequalities		
64	Writing a list of integers from inequalities		
65	Showing inequalities on number lines part 1		
66	Showing inequalities on number lines, part 2		
67	Showing inequalities on number lines, part 3		
68	Writing inequalities from number lines		
	Topic - Solving Inequalities		
69	Solving inequalities, part 1		
70	Solving inequalities, part 2		
71	Solving inequalities with brackets		
72	Solving inequalities with a divide or fraction		
73	Solving inequalities with x's on both sides		
74	Solving 2 inequalities at the same time		
	Subject - Statistics and probability		
	Topic - Scatter Graphs		
18	Types of correlation		
19	Plotting scatter graphs		
20	Drawing a line of best fit (LOBF)		
21	Estimating values from scatter graphs		
	Topic - Pie Charts		
22	Calculating angles in pie charts		
23	Calculating the frequency of a sector (Higher Only)		
24	Finding the total number of items in a pie chart		
	Topic - Frequency Polygons		
40	Plotting frequency polygons		
	Topic - Moving Averages (Higher Only)		
41	Moving averages		
	Topic - Sampling (Higher Only)		
42	Introduction to stratified sampling		
43	Stratified sampling		