



Year 10 – Autumn 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 - Number, Ratio and proportion	Complete	Score
	Topic - Long addition and subtraction		
1	Long addition		
2	Long subtraction		
	Topic - Long Multiplication and Division		
4	Long multiplication part 2		
5	Long multiplication part 3		
7	Long multiplication of decimals		
9	Long division		
10	Long division with decimal answers		
	Topic - Rounding		
13	Rounding to decimal places (D.P)		
14	Rounding to Significant Figures part 1		
15	Rounding to Significant Figures part 2		
	Topic - Fractions		
67	Ordering fractions		
	Topic - Factors and Multiples		
22	Finding factors		
23	Finding the HCF - Highest Common Factor		
24	Finding the HCF - Highest Common Factor (higher only)		
25	Finding multiples		
26	Finding the lowest common multiple (LCM)		
27	Finding the lowest common multiple (higher only)		
28	Writing a number as a product of it Prime Factors		
	Subject - Algebra		
	Topic - Simplifying Expressions		
3	Simplifying Expressions Part 1		
4	Simplifying Expressions Part 2		
5	Simplifying Expressions Part 3		
	Topic - Multiplying Out Brackets		
13	Multiplying out brackets		
14	Multiplying out brackets with negative numbers or letters		
15	Expand and Simplify Common Mistakes (Higher Only)		
16	Expand and Simplify Common Mistakes (Higher Only) - Exam Question		
	Topic - Multiplying Out Double and Triple Brackets		

17	Multiplying out double brackets (Higher Only)		
18	Multiplying out double brackets with negative numbers or letters (Higher Only)		
19	Expand and Simplify brackets that are squared		
20	Expand and Simplify brackets that are squared Exam Question		
	Topic - Factorising into Single Brackets		
22	Factorising expressions into single brackets part 1		
23	Factorising expressions into single brackets part 2		
24	Factorising expressions with mixed letters in the terms		
	Topic - Factorising Quadratics		
112	Factorising quadratics with positive terms only		
113	Factorising quadratics with a negative number term and/or negative x term		
114	Factorising quadratics with a negative xx term and positive number term		
115	Factorising quadratics - the difference of 2 squares, $x^2 - 16$		
116	Factorising quadratics with a number in front of the x^2 term part 1		
117	Factorising quadratics with a number in front of the x^2 term part 2		
118	Factorising quadratics with a number in front of the x^2 term part 3		
	Topic - Simplifying Algebraic Fractions (Higher Only)		
159	Introduction to Simplifying Algebraic Fractions		
160	Simplifying Algebraic Fractions Part 1		
161	Simplifying Algebraic Fractions Part 2		
162	Simplifying Algebraic Fractions Part 3		
163	Multiplying Algebraic Fractions and Simplifying Part 1		
164	Multiplying Algebraic Fractions and Simplifying Part 2		
165	Dividing Algebraic Fractions and Simplifying		
166	Adding Algebraic Fractions and Simplifying Part 1		
167	Adding Algebraic Fractions and Simplifying Part 2		
168	Adding Algebraic Fractions and Simplifying Exam Question		
169	Subtracting Algebraic Fractions and Simplifying		
	Topic - Substituting Numbers into Formula		
25	Substituting numbers into formula, part 1		
26	Substituting numbers into formula, part 2		
27	Substituting numbers into formula, part 3		
	Topic - Rearranging Formula		
28	Rearranging formula part 1		
29	Rearranging formula part 2		
30	Rearranging formula Higher only		
31	Rearranging formula when the subject is on the bottom of a divide line (Higher Only)		
	Topic - Sequences		
37	Introduction to sequences		
38	Finding the Terms of a Sequence when you're given the n^{th} term rule - Part 1		
39	Finding the Terms of a Sequence when you're given the n^{th} term rule - Part 2		
40	Finding the n^{th} term		
41	Finding a number in the sequence using the n^{th} term rule		
42	Finding the Next Term in a Sequence that has a Changing Difference		
43	Triangle numbers		
44	Finding triangle numbers using the n^{th} term rule		

	Subject - Number, Ratio and proportion		
	Topic - Fractions		
56	Simplifying fractions		
57	Adding fractions, part 1		
58	Adding fractions, part 2		
59	Adding fractions, part 3		
60	Subtracting fractions, part 1		
61	Subtracting fractions, part 2		
62	Multiplying fractions		
63	Dividing fractions		
64	Equivalent fractions, part 1		
65	Equivalent fractions, part 2		
66	Finding a fraction of an amount		
	Topic - Mixed Numbers		
68	Simplifying top heavy fractions into mixed numbers		
69	Changing mixed numbers into top heavy fractions		
70	Top heavy fractions into mixed numbers, exam tip		
71	Adding mixed numbers		
72	Subtracting mixed numbers		
	Topic - Percentages		
79	Finding percentages - non calculator, part 1		
80	Finding percentages - non calculator, part 2		
81	Finding decimal percentages, non-calculator		
82	Finding percentages using a calculator		
83	Increasing a number by a percentage (non-calculator)		
84	Increasing a number by a percentage (calculator)		
85	Decreasing a number by a percentage (non-calculator)		
86	Decreasing a number by a percentage (calculator)		
87	Writing a number as a percentage of another number		
88	Finding the percentage a number increases by		
89	Finding the percentage a number decreases by		
	Topic - Fractions, Percentages and Decimals		
75	Changing between fractions, decimals and percentages		
	Topic - Reverse Percentages		
95	Reverse Percentage, part 1		
96	Reverse Percentage, part 2		
97	Reverse Percentage, part 3		
98	VAT percentage problems (Sales tax in other countries)		
	Topic - Powers		
29	Expanding Powers		
30	Simplifying Powers		
31	Simplifying powers - multiplying positive powers		
32	Simplifying powers - dividing positive powers		
33	Simplifying powers raised to another power		
34	Simplifying powers - multiplying negative powers		
35	Simplifying powers - dividing negative powers		

36	The power of zero - exam tip		
	Topic - Standard Form		
45	Introduction to standard form		
46	Converting standard form to ordinary numbers, part 1		
47	Converting standard form to ordinary numbers, part 2		
48	Changing numbers into standard form		
49	Changing numbers less than 1 into standard form		
50	Converting non-standard form numbers into standard form		
51	Entering standard form into a calculator		
52	Adding and subtracting standard form numbers		
53	Multiplying standard form numbers (non-calculator)		
54	Multiplying standard form numbers exam question		
55	Dividing standard form numbers (non-calculator)		