Year 11 – 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.

Lesson Number	Subject - Geometry and measures	Complete	Score
	Topic - Area		
5	The formula of the Area of a Parallelogram		
6	Calculating the Area of a Parallelogram		
7	Calculating the Area of a Trapezium		
	Topic - Compound Areas		
8	Calculating Compound Areas		
9	Compound Areas Involving Different Shapes Part 1		
10	Compound Areas Involving Different Shapes Part 2		
11	Compound Area where you're not given all the lengths		
	Topic - Surface Area		
12	Surface area of a cuboid		
13	Surface area of a triangular prism		
14	Surface area of a cylinder		
15	Surface area of a sphere (Higher Only)		
16	Surface area of a hemisphere exam question (Higher Only)		
17	Curved surface area of a cone (Higher Only)		
18	Calculating the surface area of a frustum (Higher Only)		
	Topic - Volume		
19	Volume of a cuboid		
20	Calculating the volume of any prism		
21	Volume of triangular prism		
22	Volume of a cylinder		
23	Finding the height of a cylinder using its volume		
24	Volume of a sphere (Higher Only)		
25	Volume of a cone (Higher Only)		
26	Volume of a cone exam question (Higher Only)		
27	Volume of a frustum (Higher Only)		
28	Volume of a square based pyramid		
	Topic - Circles		
29	Circumference of a circle		
30	Circumference of a circle leaving your answer in terms of Pi		
31	Perimeter of a semi-circle		
32	Length of an arc (Higher Only)		
33	Area of a circle		
34	Area of a semi-circle		

35	Area of a circle, leaving your answer in terms of Pi		
36	Area of a sector (Higher Only)		
	Topic - Similar Triangles and Similar Shapes (Higher Only)		
89	Similar triangles introduction		
90	Similar triangles part 1		
91	Similar triangles part 2		
92	Similar triangles part 3		
93	Proving that triangles are similar using lengths		
94	Proving that triangles are similar using angles		
95	Scale factors for area's of similar shapes		
96	Scale factors for volume's of similar shapes		
97	Similar Shapes exam question		
	Topic - Converting Units of Length, Area and Volume		
86	Converting units of area		
87	Converting units of volume part 1		
88	Converting units of volume part 2		
	Topic - Polygons		
74	Introduction to polygons		
75	Introduction to interior angles and notation		
76	Finding interior angles		
77	Finding external angles		
78	Polygons exam question		
	Topic - Translations		
172	Translations		
173	Translations exam question		
	Topic - Reflection		
174	Reflecting shapes in the x and y axis		
175	Reflecting shapes in the line y=5 x=6		
176	Reflecting shapes in the line y=x		
	Topic - Rotation		
177	Rotation about a centre part 1		
178	Rotation about a centre part 2		
179	Finding the direction and angle of rotation		
180	Finding the COR (centre of rotation) (Higher Only)		
	Topic - Enlargements		
181	Enlarging shapes		
182	Enlarging shapes exam tip		
183	Enlargement with a centre of enlargement		
184	Enlargement with a fractional scale factor (Higher Only)		
185	Enlargements with a negative scale factor (Higher Only)		
186	Finding the centre of enlargement		
187	Finding the scale factor of enlargement		
188	Finding the scale factor of an inverted enlargement (Higher Only)		
189	Describing single transformations - How to score full marks		
190	Describing single transformations - Exam Tip		
	Topic - Congruence		
165	Congruent Shapes		

166	Proving congruence SSS		
167	Proving congruence RHS		
168	Proving congruence SAS		
169	Proving congruence AAS		
170	Proving congruence exam style question 1		
171	Proving congruence exam style question 2		
	Topic - Density		
161	The different units of density		
162	Simple Density Questions Part 1		
163	Simple Density Questions part 2		
164	Questions involving mixing 2 different liquids		
	Topic - Converting Metric Units		
116	Converting metric units of length part 1		
117	Converting metric units of length part 2		
118	Converting units exam question (length)		
119	Converting metric units of mass part 1		
120	Converting metric units of mass part 2		
121	Converting metric units of volume and capacity part 1		
122	Converting metric units of volume and capacity part 2		
123	Converting units exam question (capacity)		
124	Converting speeds 1 step problems		
125	Converting speeds 2 step problems		
	Topic - Converting Imperial Units		
126	Converting imperial units of length		
127	Converting lengths 1 step problems		
128	Converting lengths 2 step problems		
129	Converting imperial units of mass		
130	Converting mass 1 step problems		
131	Converting mass 2 step problems		
132	Converting imperial units of capacity		
133	Converting capacity 1 step problems		
134	Converting volume and capacity 2 step problems		
	Subject - Algebra		
	Topic - Formula 1 Distance/time, Velocity/time Graphs		
103	Calculating the acceleration from a V/t graph part 1		
104	Calculating acceleration from a V/t graph part 2		
105	Calculating the deceleration from a V/t graph		
106	Calculating total distance travelled from a V/t graph		
107	Estimating distance travelled under a curved V/t graph		
	Subject – Geometry and measures		
	Topic - Loci and Constructions		
98	Perpendicular Bisector		
99	Perpendicular line from a point on a line		
100	Perpendicular line from a point to a line		
101	Angle bisector		
102	Drawing an equilateral triangle		
103	Drawing an isosceles triangle		

104	Drawing a scalene triangle		
105	Drawing a 60° angle		
106	Drawing a 45° and 30° angle		
107	The rules of Loci		
108	Drawing boundaries around shapes		
109	Shading boundaries inside shapes		
	Topic - Geometry (Higher Only)		
37	Angle in a semi-circle is 90 degrees		
38	Sneaky isosceles		
39	Angle at centre is twice angle at circumference part 1		
40	Angle at centre is twice angle at circumference part 2		
41	Angle at centre is twice angle at circumference part 3		
42	Cyclic quadrilateral		
43	Angles in the same segment are equal		
44	Tangent meets radius at 90 degrees		
45	Tangents that meet at a point are equal in length		
46	Alternate segment theorem part 1		
47	Alternate segment theorem part 2		
48	3 letter angle notation in circle geometry		
	Topic - Pythagoras Theorem		
135	Pythagoras theorem finding the longest side		
136	Pythagoras theorem finding the shorter side		
137	Pythagoras theorem problems (exam question)		
	Topic - Right-angled Trigonometry		
138	How to label a triangle		
139	Finding a length		
140	Finding an angle		