

## iGCSE Maths Topic Checklist

iGCSE Topics				
1) 2D shapes - area and perimeter (squares, rectangles, trapezium, parallelograms and triangles)				
2) 2D shapes - area of compound shapes				
3) 3D shapes - surface area and volume of spheres and cones (including with algebra)				
4) 3D shapes - surface area and volume of prisms and cylinders (including with algebra)				
5) 3D Pythagoras				
6) Addition of integers				
7) Algebraic fractions				
8) Algebra – collecting like terms (adding and multiplying)				
9) Angles in parallel lines				
10) Angles in polygons				
11) Area of any triangle				
12) Bar charts				
13) Basic Probability– conditional probability with algebra				
14) Bearings				
15) Best buy questions				
16) BIDMAS				
17) Bounds				
18) Calculation money problems				
19) Circles – area and perimeter				
20) Circle theorems (including intersecting chord theorem)				
21) Completing the square				
22) Conversions and units				
23) Coordinates				
24) Cumulative frequency				
25) Decimals – addition, subtraction, multiplication and division				
26) Decimals - recurring decimals to fractions				
27) Differentiation				
28) Direct and inverse proportion				
29) Distance and velocity time graphs				
30) Division of integers				
31) Drawing graphs by plugging into tables and plotting the points				
32) Drawing quadratic graphs				
33) Enlargements – negative scale factor				
34) Estimating				
35) Exchange rate				
36) Expanding brackets (including triple brackets)				
37) Factorising				
38) Factors and Multiples				
39) Forming and solving equations				
40) Fractions – adding, subtracting, multiplying and dividing				
41) Fractions of an amount				
42) Fractions- writing, simplifying and ordering				
43) Fractions, decimals and percentages (converting between)				
44) Frequency Polygons				
45) Frequency tables				
46) Function machines				
47) Functions – inverse and composite (including domain and range)				
48) HCF and LCM				
49) Histograms				
50) Indices				
51) Indices – fractions and negative powers				
52) Inequalities – representing on a number line				
53) Inequalities – solving equations				
54) Inequalities on graphs – shading				
55) Inequalities - quadratics				
56) Mean and median (this doesn't include finding the class interval containing the median)				
57) Multiplication of integers				
58) Names of angles				
59) Names of Polygons				
60) Negative numbers				
61) Number Substitution				
62) Other graphs – cubic, reciprocal				
63) Other graphs – trig/exponential				
64) Percentage change				

65) Percentages - compound interest and depreciation				
66) Percentages- finding percentages of amounts				
67) Percentages – increase/decrease				
68) Percentages – repeated percentage change				
69) Percentages – reverse percentages				
70) Pictograms				
71) Pie charts				
72) Place value				
73) Plans and elevations				
74) Powers and roots				
75) Prime factor trees				
76) Probability basics				
77) Probability trees				
78) Probability tree diagrams – conditional probability with algebra				
79) Product rule for counting				
80) Proportion – recipes and ingredients				
81) Pythagoras				
82) Rates of change and tangents to curves				
83) Ratio – writing as a fraction and simplifying				
84) Ratio – writing ratios as fractions				
85) Ratio – sharing				
86) Ratio – with algebra				
87) Re-arranging formulae (changing the subject)				
88) Reading scales				
89) Real life graphs - interpreting				
90) Rounding				
91) Scale drawings				
92) Scatter graphs				
93) Sectors - area and arc length				
94) Sequences - nth term of a linear sequence (common difference)				
95) Sequences - Sum of n terms of an arithmetic series				
96) Similar shapes (lengths)				
97) Similar shapes (area and volume)				
98) Simultaneous equations - linear				
99) Simultaneous equations - quadratic				
100) Simultaneous equations graphically				
101) Sine cosine rule (including with algebra)				
102) SOHCAHTOA				
103) Solving linear equations				
104) Solving quadratics				
105) Speed and density				
106) Standard form				
107) Straight line graphs - gradient, midpoint equation etc				
108) Straight line graphs - parallel and perpendicular lines				
109) Straight line graphs – finding areas under the graph				
110) Subtraction of integers and decimals				
111) Surds				
112) Tangent equation				
113) Time				
114) Transformations of shapes (reflections, enlargements rotations and translations)				
115) Transforming curves				
116) Two way tables				
117) Using graphs to solve equations (quadratics and cubics)				
118) Vectors (including modulus)				
119) Vector - proof questions				
120) Venn diagrams				