

From 2017 GCSE maths has a new syllabus with new-style exams and a numeric grading structure. The new GCSE puts more emphasis on **problem-solving skills** and longer, **multi-stage questions**.

- ⇒ **Exam Board:** AQA, Syllabus: 8300
- ⇒ **Grades:** 1 to 9 (Highest)
- ⇒ **Tiers of entry:** Foundation or Higher

Foundation (Grades 1 to 5)	Higher (Grades 4 to 9)
<b>Paper 1:</b> 1hr 30mins ( <b>Non-calc</b> )	<b>Paper 1:</b> 1hr 30mins ( <b>Non-calc</b> )
<b>Paper 2:</b> 1hr 30mins ( <b>Calc</b> )	<b>Paper 2:</b> 1hr 30mins ( <b>Calc</b> )
<b>Paper 3:</b> 1hr 30mins ( <b>Calc</b> )	<b>Paper 3:</b> 1hr 30mins ( <b>Calc</b> )

New grading structure	Current grading structure
9	
8	A*
7	A
6	B
5	
4	C
3	D
2	E
1	F
	G
U	U

**GOOD PASS (DfE)**  
5 and above = top of C and above

**AWARDING**  
4 and above = bottom of C and above

### Typical GCSE maths requirements for courses

- ⇒ **A Level maths:** 6
- ⇒ **Further maths:** 7
- ⇒ **A levels (Non-maths):** 4/5\*
- ⇒ **College L1 course:** 2\*\*
- ⇒ **College L2 course:** 3\*\*
- ⇒ **College L3 course:** 4\*\*

\*Check Sixth Form prospectus for specific course requirements

\*\*Check specific requirements with course provider

# FOUNDATION Tier Checklist

Click on each link to take you to the video or questions associated with each topic within the GCSE syllabus.

Angle Facts	Video <a href="#">35</a> , <a href="#">30</a> , <a href="#">34</a> , <a href="#">39</a>	Multiplication	Video <a href="#">199</a> , <a href="#">200</a>
Types of Angle	Video <a href="#">38</a>	Division	Video <a href="#">98</a>
Angles in Parallel Lines	Video <a href="#">25</a>	Addition	Video <a href="#">6</a>
Angles in a Triangle	Video <a href="#">37</a>	Subtraction	Video <a href="#">304</a>
Angles in a Quadrilateral	Video <a href="#">33</a>	Rounding	Video <a href="#">276</a> , <a href="#">277a</a> , <a href="#">277b</a> , <a href="#">278</a>
Angles in Polygons	Video <a href="#">32</a>	Estimation	Video <a href="#">215</a>
Bearings	Video <a href="#">26</a> , <a href="#">27</a>	BODMAS	Video <a href="#">211</a>
Perimeter	Video <a href="#">241</a>	Ordering Decimals	Video <a href="#">95</a>
Area of Rectangles/ Triangles	Video <a href="#">45</a> , <a href="#">49</a>	Arithmetic with Decimals	Video <a href="#">90</a> , <a href="#">91</a> , <a href="#">92</a> , <a href="#">93</a> , <a href="#">94</a>
Area of a Trapezium	Video <a href="#">48</a>	Multiples and Factors	Video <a href="#">220</a> , <a href="#">216</a>
Metric and Imperial Units	Video <a href="#">347</a> , <a href="#">348</a> , <a href="#">349</a>	Prime Numbers	Video <a href="#">225</a>
Line Symmetry	Video <a href="#">316</a>	Square Numbers and Square Roots	Video <a href="#">226</a> , <a href="#">228</a>
Rotational Symmetry	Video <a href="#">317</a>	Cube Numbers and Cube Roots	Video <a href="#">212</a> , <a href="#">214</a>
Constructions	Video <a href="#">72</a> , <a href="#">78</a> , <a href="#">83</a>	Product of Primes	Video <a href="#">223</a>
Loci	Video <a href="#">75</a> , <a href="#">76</a> , <a href="#">77</a>	LCM/HCF	Video <a href="#">218</a> , <a href="#">219</a> , <a href="#">224</a>
Faces, Edges and Vertices	Video <a href="#">5</a> , <a href="#">3</a>	Indices	Video <a href="#">172</a> , <a href="#">174</a>
Views and Elevations	Video <a href="#">354</a>	Fractions of Amounts	Video <a href="#">137</a>
Surface Area	Video <a href="#">310</a>	Adding Fractions	Video <a href="#">133</a>
Speed, Distance, Time	Video <a href="#">299</a>	Multiplying Fractions	Video <a href="#">142</a>
Timetables	Video <a href="#">320</a>	Dividing Fractions	Video <a href="#">134</a>
Distance Charts	Video <a href="#">318</a>	Fractions, Decimals, %s	Video <a href="#">121</a> , <a href="#">122</a> , <a href="#">123</a> , <a href="#">124</a> , <a href="#">125</a> , <a href="#">126</a> , <a href="#">127</a> , <a href="#">128</a> , <a href="#">129</a>
Volume of a cuboid	Video <a href="#">355</a>	Percentage of Amounts	Video <a href="#">234</a> , <a href="#">235</a>
Volume of a Prism	Video <a href="#">356</a>	Ratio	Video <a href="#">269</a> , <a href="#">270</a> , <a href="#">271</a>
Tessellations	Video <a href="#">36</a>	Currency	Video <a href="#">214a</a>
Translations	Video <a href="#">325</a> , <a href="#">326</a>	Recipes	Video <a href="#">256</a>
Reflections	Video <a href="#">272</a> , <a href="#">273</a>		
Rotations	Video <a href="#">275</a>		
Enlargements	Video <a href="#">104</a> , <a href="#">105</a>		
Parts of the Circle	Video <a href="#">61</a>		
Circumference	Video <a href="#">60</a>		
Area of a Circle	Video <a href="#">59</a>		
Volume of a Cylinder	Video <a href="#">357</a>		
Pythagoras and basic trigonometry	Video <a href="#">257</a> , <a href="#">329</a> , <a href="#">330</a> , <a href="#">331</a>		

## NOTE:

Some Higher material is now also covered in Foundation tier– check and make sure you cover the highlighted topics on the Higher checklist, too!

# FOUNDATION Tier Checklist

Click on each link to take you to the video or questions associated with each topic within the GCSE syllabus.

Questionnaires	Video <a href="#">268</a>
Two-Way Tables	Video <a href="#">319</a>
Pictograms	Video <a href="#">161</a> , <a href="#">162</a>
Bar Charts	Video <a href="#">147</a> , <a href="#">148</a>
Frequency Polygons	Video <a href="#">155</a> , <a href="#">156</a>
Line Graphs	Video <a href="#">160</a>
Pie Charts	Video <a href="#">163</a> , <a href="#">164</a>
Probability	Video <a href="#">245</a> , <a href="#">246</a> , <a href="#">248</a>
Listing Outcomes	Video <a href="#">253</a>
Scatter Graphs	Video <a href="#">165</a> , <a href="#">166</a> , <a href="#">167</a> , <a href="#">168</a>
Stem and Leaf	Video <a href="#">169</a> , <a href="#">170</a>
Mode	Video <a href="#">56</a>
Median	Video <a href="#">50</a>
Mean	Video <a href="#">53</a>
Range	Video <a href="#">57</a>
Estimated Mean	Video <a href="#">55</a>
Coordinates	Video <a href="#">84</a>
Writing Expressions	Video <a href="#">16</a>
Collecting Like Terms	Video <a href="#">9</a>
Multiplying Terms	Video <a href="#">18</a>
Sequences	Video <a href="#">286</a> , <a href="#">287</a> , <a href="#">290</a>
Nth Term	Video <a href="#">288</a>
Expanding Brackets	Video <a href="#">13</a> , <a href="#">14</a>
Factorising	Video <a href="#">117</a>
Solving Equations	Video <a href="#">110</a> , <a href="#">113</a>
Forming Equations	Video <a href="#">114</a> , <a href="#">115</a>
Trial and Improvement	Video <a href="#">116</a>
Inequalities	Video <a href="#">177</a> , <a href="#">178</a> , <a href="#">179</a>
Conversion Graphs	Video <a href="#">151</a>
Graphs	Video <a href="#">186</a>
Substitution	Video <a href="#">20</a>
Changing the Subject	Video <a href="#">7</a>

# HIGHER Tier Checklist

Click on each link to take you to the video or questions associated with each topic within the GCSE syllabus.

Adding Fractions	Video <a href="#">133</a>
Multiplying Fractions	Video <a href="#">142</a>
Dividing Fractions	Video <a href="#">134</a>
Estimation	Video <a href="#">215</a>
Best Buys	Video <a href="#">210</a>
Product of Primes	Video <a href="#">223</a> , <a href="#">224</a>
Indices	Video <a href="#">172</a> , <a href="#">174</a>
Indices (Fractional/ Negative)	Video <a href="#">173</a> , <a href="#">175</a>
Standard Form:	Video <a href="#">300</a> , <a href="#">301</a> , <a href="#">302</a> , <a href="#">303</a>
Percentage of Amounts	Video <a href="#">234</a> , <a href="#">235</a>
Compound Interest	Video <a href="#">236</a>
Reverse Percentages	Video <a href="#">240</a>
Recurring Decimals to Fractions	Video <a href="#">96</a>
Ratio	Video <a href="#">270</a> , <a href="#">271</a>
Direct Proportion	Video <a href="#">254</a>
Inverse Proportion	Video <a href="#">255</a>
Limits of Accuracy	Video <a href="#">183</a> , <a href="#">184</a>
Surds	Video <a href="#">305</a> , <a href="#">306</a> , <a href="#">307</a> , <a href="#">308</a>
Stratified Sampling	Video <a href="#">281</a>
Two-Way Tables	Video <a href="#">319</a>
Pie Charts	Video <a href="#">163</a> , <a href="#">164</a>
Scatter Graphs	Video <a href="#">165</a> , <a href="#">166</a>
Histograms	Video <a href="#">157</a> , <a href="#">158</a> , <a href="#">159</a>
Frequency Polygons	Video <a href="#">155</a> , <a href="#">156</a>
Stem and Leaf	Video <a href="#">169</a> , <a href="#">170</a>
Cumulative Frequency	Video <a href="#">153</a> , <a href="#">154</a>
Box Plots	Video <a href="#">149</a>
Estimated Mean	Video <a href="#">55</a>
Tree Diagrams	Video <a href="#">252</a>
Conditional Probability	Video <a href="#">247</a>
Questionnaires	Video <a href="#">268</a>

Collecting Like Terms	Video <a href="#">9</a>
Expanding a Bracket	Video <a href="#">13</a>
Expanding Brackets	Video <a href="#">13</a> , <a href="#">14</a>
Factorising	Video <a href="#">117</a>
Factorising Quadratics	Video <a href="#">118</a> , <a href="#">119</a> ,
Algebraic Fractions	Video <a href="#">21</a> , <a href="#">22</a> , <a href="#">23</a> , <a href="#">24</a>
Sequences (Nth Term)	Video <a href="#">288</a> , <a href="#">289</a>
Substitution	Video <a href="#">20</a>
Equations	Video <a href="#">110</a> , <a href="#">113</a> , <a href="#">115</a>
Changing the Subject	Video <a href="#">7</a> , <a href="#">8</a>
Inequalities	Video <a href="#">177</a> , <a href="#">178</a> , <a href="#">179</a>
Inequalities (Regions)	Video <a href="#">182</a>
Linear Graphs	Video <a href="#">191</a> , <a href="#">186</a> , <a href="#">189</a> , <a href="#">194</a>
Parallel or Perpendicular Lines	Video <a href="#">196</a> , <a href="#">197</a>
Simultaneous Equations	Video <a href="#">295</a>
Simultaneous Equations (Harder)	Video <a href="#">298</a>
Trial and Improvement	Video <a href="#">116</a>
Quadratic Formula	Video <a href="#">267</a>
Quadratic Graphs	Video <a href="#">264</a>
Trigonometric Graphs	Video <a href="#">338</a> , <a href="#">339</a>

# HIGHER Tier Checklist

Click on each link to take you to the video or questions associated with each topic within the GCSE syllabus.

Angles in Parallel Lines	Video <a href="#">25</a> , <a href="#">39</a>
Bearings	Video <a href="#">26</a> , <a href="#">27</a>
Angles in Polygons	Video <a href="#">32</a>
Constructions	Video <a href="#">78</a> , <a href="#">72</a> , <a href="#">79</a> , <a href="#">80</a> , <a href="#">70</a>
Loci	Video <a href="#">75</a> , <a href="#">76</a> , <a href="#">77</a>
Area of a Trapezium	Video <a href="#">48</a>
Circumference	Video <a href="#">60</a>
Area of a Circle	Video <a href="#">40</a>
Arc Length	Video <a href="#">58</a>
Area of a Sector	Video <a href="#">48</a>
Volume of a Cylinder	Video <a href="#">357</a>
Pythagoras	Video <a href="#">257</a> , <a href="#">259</a>
Trigonometry	Video <a href="#">329</a> , <a href="#">330</a> , <a href="#">331</a>
Volume of a Prism	Video <a href="#">356</a>
Volume of a cone/pyramid/ sphere	Video <a href="#">359</a> , <a href="#">360</a> , <a href="#">361</a>
Surface Area of a Prism	Video <a href="#">311</a>
Surface Area of a Cone/ Sphere	Video <a href="#">314</a> , <a href="#">313</a>
Translations	Video <a href="#">325</a>
Reflections	Video <a href="#">272</a>
Rotations	Video <a href="#">275</a>
Enlargements	Video <a href="#">104</a> , <a href="#">106</a> , <a href="#">107</a> , <a href="#">108</a>
Similar Shapes	Video <a href="#">292</a> , <a href="#">293a</a> , <a href="#">293b</a>
Circle Theorems	Video <a href="#">64</a> , <a href="#">65</a>
Sine Rule	Video <a href="#">333</a>
Cosine Rule	Video <a href="#">335</a> , <a href="#">336</a>
1/2absinc	Video <a href="#">337</a>
Vectors	Video <a href="#">353</a>
Travel Graphs	Video <a href="#">171</a>
Speed, Distance, Time	Video <a href="#">299</a>

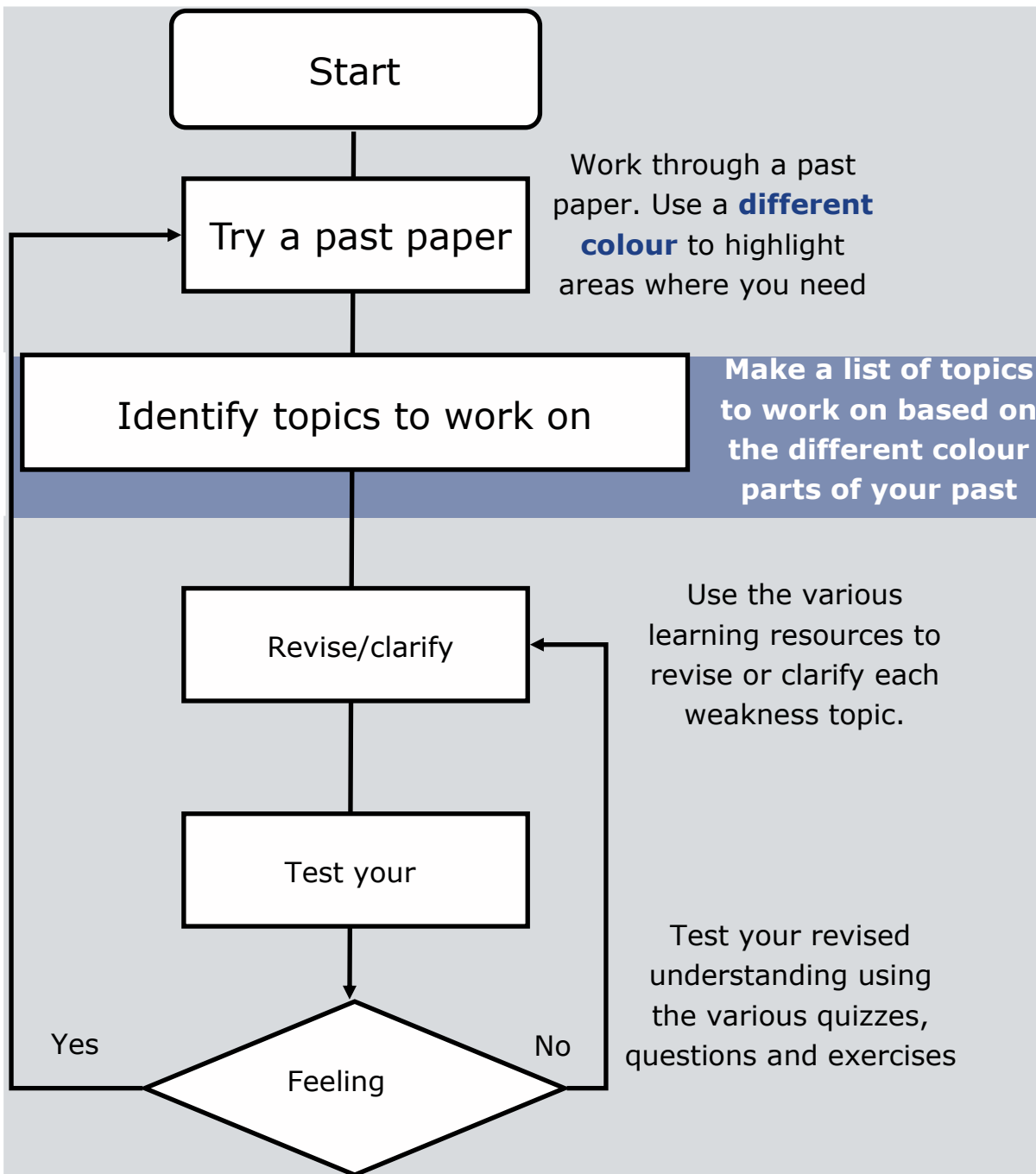
## When you get stuck...

Don't panic! Getting stuck is a healthy and **essential** part of learning. Try some of these ideas to help you move on...

- ⇒ **Read** the question *carefully*. What is it asking you to do?  
Try putting it into your own words.
- ⇒ **Underline** the key words and facts in the question to help you work out what you need to do.
- ⇒ Would it help to **draw a diagram** with all the information on?
- ⇒ **Break** the question down. Is there **any part** you can do?  
What **formulae** or rules might be useful here?
- ⇒ **Check** in your exercise book or the text book for any **notes** or **worked examples**.
- ⇒ **Take a risk!** Try something you think might work.  
It could help you crack the problem!

## Top Tips for Exam Success

- ⇒ Start your revision now. Create an exam timetable. Take regular breaks.
- ⇒ Always mark your solutions and **correct any mistakes you make**.
- ⇒ As you get near to the exam, start timing yourself when doing past papers. Aim to finish in the 90 minutes allowed.
- ⇒ Have all your equipment ready. Make friends with your calculator. The better you know how to use it, the more help it will be.
- ⇒ In the exam, if you get stuck, move on to the next question. If you finish



## Revision resources

- ⇒ From *Sept-March* concentrate on legacy **practice examination papers** from [AQA](#) to identify topics to work on.
- ⇒ From *April-June* concentrate on **AQA 8300 (New syllabus)** to practise on problem-solving skills
- ⇒ [Link to AQA 8300 website](#)
- ⇒ [Other exam board papers](#)
- ⇒ Past paper attempts– use different colours
- ⇒ Teach advice & feedback on areas for improvement
- ⇒ Use questions on specific topics (Corbett Maths)
- ⇒ [Corbett Maths](#) videos
- ⇒ Revision guides (E.g. CGP)
- ⇒ Your own notes and worked examples
- ⇒ Your teacher
- ⇒ [Corbett Maths](#) videos and questions (As above)
- ⇒ [Maths Genie](#)
- ⇒ Revision guide workbook or textbook exercises
- ⇒ The different coloured ink questions from