

KS5 Maths Revision Guidance

Website for resources and videos

1. [Physics and Maths Tutor](#) - The best for past exam papers
2. [Dr Frost Maths](#) - The best for questions with answers
3. [Resourceaholic](#) - The best for a range of resources
4. [Revisely](#) – The best for questions by topic
5. [Maths Genie](#) - The best for revision resources
6. [MadasMaths](#) - The best for stretch and challenge

DO practise the easy things.

- There may be lots of questions on an exam paper testing topics you understand well. It's important to get lots of practice at these questions and minimise the risk of making silly mistakes and losing marks unnecessarily.

DO break down longer questions when revising

- When practising longer problems it may be a good idea to ignore the question for a minute or two and simply work out everything you can from the information presented. Then look at the question to see what it's asking for.

DO get to know your calculator

- You need to be able to use your calculator whenever you can and there's no extra credit for using a handwritten method.
- For example, you can find the roots of a quadratic formula on your calculator - so using the quadratic formula risks wasting time and making a mistake.
- Make sure you know what the answer is telling you. Often the interpretation of the answer is important.
- You can use calculators to solve equations, find derivatives and integrals where the values are known, solve iterative functions, get values for statistical distributions and much more besides.

DO lots of practice. Then do some more. And then practise some more

- There's very little in maths that you can learn from reading. You need to get on and do some questions.
- This might be past papers or groups of questions on a topic you know you need to work on, or material you can find online. Just do lots of maths!
- Go back over papers you've already done and have another go. You'll see yourself improving and build your confidence.

DO make sure you read the question properly... then read it again

- We see lots of examples every year where students have done some accurate work but haven't answered the question asked.
- If an answer is asked for in particular units, give your response in those units - otherwise you'll lose out on marks.
- Similarly, if an answer must be to a number of decimal places or significant figures, make sure you give the answer in the requested format. In mechanics questions the number of significant figures is implied by the value given for g .

DO show your working. Well-structured answers with clear explanations will help you answer questions

- You need to be able to communicate mathematically. Sometimes this involves writing in sentences so don't be afraid to do that.
- Have a go – there are often marks available for getting started on a problem, so you can pick up credit at the beginning even if you're unable to make much progress.
- “Show that”, “fully justify” and “prove” are all phrases we use that mean you should show your working in full.
- Using the appropriate processes to answer the question could still earn you marks, even if you get the final answer wrong.

DO keep going right to the end of a paper

- You'll be able to pick up lots of marks for partly answering questions even if you can't get to the end.
- Attempt to do something on every question – both in the exam and when you're revising.
- You're not expected to get everything correct – getting 100% would be a huge achievement. Our questions are designed to help you show off the maths you can do, but we can only mark what we see – so write it down, even if you're not sure.

DON'T assume the answer to “what assumption” is air resistance

- You need to be able to comment on mathematical models and, last summer, a lot of students would have done better if they'd been able to answer those questions.
- But don't assume that the answer is standard. If the question says “total force” or “total resistance” that means all the forces have been accounted for, including air resistance and friction.
- Look to the question and read the description carefully – try to find what you're having to assume is true in order for the model to work.

DON'T assume the answer your calculator gives is always correct

- You can still make mistakes on a calculator. It's easy to make slips, so always think whether the answer you have makes sense.
- Watch out for questions that require an "exact answer" – your calculator can help here but usually your answer will involve surds or constants like Pi and e.

DON'T just guess an answer on multiple choice questions or jump to the first answer that may be right

- Take a little time to look at the options, scribble down some working if it helps, and come to a decision on the right answer.
- Remember that often the 'wrong' options are chosen because they're common mistakes.
- Some people cover up the choices while they work out the right answer – it's a trick that might work for you.

DON'T forget about standard formulae and proofs

- Make sure you're familiar with the standard proofs required on the specification.
- Make sure you know the standard formulae and methods.
- Make sure you know what's on the formulae sheet and what it's used for.