

How to Revise GCSE Maths

The method that actually works: active recall, spaced practice and past papers done properly.

 For Years 9 to 11

 Foundation and Higher

 AQA, Edexcel and OCR

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Hey,

Most students revise maths by reading their notes. You picked up a guide on how to revise. That already puts you ahead.

Here's the problem nobody tells you about. Revision that **feels** productive often isn't. Reading, highlighting and watching videos feel good because everything looks familiar. Then the exam asks you to do the maths with nothing in front of you, and familiar isn't enough.

This guide shows you what to do instead. It isn't clever and it isn't secret. It's the stuff the research keeps pointing to, turned into a plan you can follow from tonight.

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Read it once, then keep it open while you plan your week.

I'm rooting for you.

Matt ⚡



SECTION 01

Why rereading your notes doesn't work

It feels like revision. Your brain disagrees.

When you reread a page of notes, it gets easier to read. That ease feels like learning. It isn't. It's recognition: you know you've seen it before. The exam doesn't test recognition. It tests whether you can **produce** the method yourself, on a blank page, under time pressure.

In 2013 a group of psychologists led by John Dunlosky reviewed ten common study techniques. Rereading and highlighting came out near the bottom. Practice testing and spaced practice came out on top.

Maths makes this worse. You can follow a worked example perfectly and still freeze when the numbers change. Following isn't doing.

Swap this for that

INSTEAD OF	DO THIS
Rereading notes	Close the book and write out what you remember
Highlighting	Turn each heading into a question and answer it
Watching a video all the way through	Pause before each step and try it yourself
Copying out a worked example	Cover it, attempt the question, then check
Doing the topics you like	Start with the topic you'd most like to skip



RULE OF THUMB

If it feels easy, you're probably not learning much. A bit of struggle is the point.



SECTION 02

Active recall: make your brain do the work

Pulling something out of your memory is what makes it stick.

Every time you force yourself to remember a method, you make it easier to remember next time. That's active recall. Three ways to do it:

1 The blank page

Pick a topic. Close everything. Write down every formula, method and example you can remember. Then open your notes and fill the gaps in a different colour. The gaps are your revision list.

2 Flashcards

Question on the front, answer on the back. For maths, put a **question** on the front, not just a formula. "Find the n th term of 5, 8, 11, 14" beats "nth term formula".

Sort cards into three piles: **Got it** **Slow** **Didn't know** Do the "didn't know" pile again tomorrow.

3 Self-quizzing

Do questions before you feel ready. Five questions on a topic, no notes, then mark them. If you got three wrong, that's useful. Now you know exactly what to fix.



TRY THIS TONIGHT

Pick one topic from your last maths lesson. Ten minutes, blank page, everything you remember. Check it. Done.



SECTION 03

Spaced practice: a simple schedule

A little often beats a lot once.

Cramming a topic in one long session works until the next day, then fades fast. Coming back to it after a gap, just as you start to forget, makes it last. That's spaced practice.

You don't need an app. Use this:

WHEN	WHAT TO DO
Day 1	Learn or relearn the topic. Do questions with your notes.
Day 2	Five questions, no notes. Mark them.
Day 7	Five more questions, no notes, harder ones if you can.
Day 21	Mixed questions or a past paper question on it.
Then monthly	It comes up in your mixed practice and past papers.

HOW TO KEEP TRACK

Write the topic and the dates on a sticky note, or log them in your Topic Tracker. Each day, check what's due before you pick anything new.

GOT ONE WRONG ON A REVIEW DAY?

That topic goes back to Day 1. That's not a failure. It just means you haven't seen it enough times yet.



SECTION 04

Interleaving: mix your topics

The exam doesn't tell you which topic is coming next. Your revision shouldn't either.

If you do twenty fraction questions in a row, by question five you're on autopilot. You know it's fractions, so you never practise the hardest part: working out **which** method a question needs.

Interleaving means mixing topics in one session. Studies of maths practice have found it feels harder and works better.

What it looks like

BLOCKED · FEELS EASIER

Angles × 10

Ratio × 10

Probability × 10

INTERLEAVED · WORKS BETTER

Angles × 2

Ratio × 2

Probability × 2

Angles × 2

Ratio × 2

Probability × 2

and so on, mixed

How to use it

- Learn a new topic in a block first. That's fine.
- Once you've learnt it, stop practising it on its own. Mix it in.
- Past papers are interleaved already. That's one reason they work so well.

SECTION 05



Past papers, done properly

The single best revision resource you have. Most students waste them.

Doing a past paper with your notes open, then glancing at the answers, is barely revision. Here's how to do one properly.

1 Timed

Sit the whole paper in one go, in exam time, no notes. Use a calculator only on calculator papers. If you run out of time, draw a line and keep going in a different colour, so you can see what time cost you.

2 Marked with the mark scheme

Mark it yourself with the official mark scheme. Look at **how** the marks are given: method marks count even when the final answer is wrong. Write your score on the front.

3 Error log

For every mark you dropped, write one line:

QUESTION	TOPIC	WHAT WENT WRONG	FIX
Q7	Simultaneous equations	Sign error when subtracting	Redo 5 questions, check signs
Q12	Bounds	Didn't know the method	Relearn, add to spaced schedule
Q15	Vectors	Ran out of time	Practise timing on long questions

4 Redo

A week later, redo every question you got wrong, without looking at your first attempt. If you get it right, it comes off the log.



WHY IT WORKS

The log turns a score into a to-do list. Most marks are lost in the same few places, over and over. The log shows you where.



SECTION 06

Three free tools that work together

Plan, rate and track, without starting from scratch.

RAG Sheet: what to revise

Every GCSE Maths topic on one page. Rate each one **Red** can't do it, **Amber** sort of, or **Green** confident. Stick it on your wall. Your job is to turn the reds amber and the ambers green.

Topic Tracker

How you're doing on each topic. Log what you've practised and when, so your spaced practice and your weakest topics are always in front of you.

Past Paper Tracker

How your marks are moving. Log every paper you sit and your score. See your marks climb and spot the topics that keep costing you.

HOW THEY FIT TOGETHER

1. Start with the RAG Sheet. Pick two reds for this week.
2. Practise them and log it in the Topic Tracker. Review on the spaced schedule.
3. Sit a past paper every week or two. Log it in the Past Paper Tracker.
4. Use your error log to update the RAG Sheet. New reds go into next week's plan.

Get the trackers free at mygcsemaths.com/past-paper-tracker and mygcsemaths.com/single-topic-tracker.



SECTION 07

A sample week for Year 11

About five hours of maths across the week. Adjust it to your timetable.

DAY	SESSION (AROUND 45 MINUTES)
Monday	Red topic 1: relearn it, then 10 questions with notes
Tuesday	Red topic 2: relearn it, then 10 questions with notes
Wednesday	Spaced reviews due today (no notes) + 15 minutes of flashcards
Thursday	Mixed practice: 10 questions from different topics
Friday	Rest, or a short blank-page recall on this week's reds
Saturday	Past paper, timed, in one sitting
Sunday	Mark it, fill in the error log, update your RAG Sheet, plan next week

Keep it working

- Short and often beats long and rare. Forty-five minutes of focused work is plenty.
- Phone in another room. Not face down. Another room.
- Start each session with five minutes of recall on something from last week.
- If you miss a day, don't try to catch up by doubling up. Just do the next day.



YEAR 10?

Halve it. Two or three sessions a week and a past paper every few weeks puts you way ahead.



SECTION 08

The week before, and exam day

No new topics. Sharpen what you've got.

THE WEEK BEFORE

- ✓ Do one timed past paper every other day, not every day
- ✓ Redo everything in your error log
- ✓ Blank-page every formula you need to know, then check
- ✓ Check which formulae your board gives you in the exam, and learn the rest
- ✓ Go to bed at a normal time. Sleep is when memory sets.

THE NIGHT BEFORE

- ✓ Light review only: flashcards or your formula list
- ✓ Pack your bag: black pens, pencil, ruler, protractor, compasses, eraser, calculator (check the battery)
- ✓ Check the time and the room

ON THE DAY

- ✓ Eat something
- ✓ Read every question twice. Underline what it's asking for.
- ✓ Show your working. Method marks are real marks.
- ✓ Stuck? Leave it, mark it, come back. Don't let one question eat ten minutes.
- ✓ Check units, rounding and that you answered the actual question
- ✓ Use every minute. If you finish early, check your answers.



AFTER EACH PAPER

Don't pick it apart with your friends. It's done. Get ready for the next one.



SECTION 09

Where to go next

You don't have to do this on your own.

Hey,

That's the method. Active recall, spaced practice, mixed topics and past papers done properly. Nothing clever. It just works if you do it. If you want someone to go through it with you, two ways:



Come to a free live lesson

An hour with me, live on YouTube, working through a real past paper step by step. Free. Bring a friend.

mygcsemaths.com/free-lesson-signup



Try Group Tutoring free for 7 days

Three hours of live classes with me every week, and every session recorded so you can rewatch it any time. After the trial it's £59 a month. Cancel any time.

Claim your free 7-day trial for Group Tutoring:
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Good luck with the revision. I'm rooting for you.

Matt ⚡

Founder, MyGCSEMaths