

Pathways

Combined science

Preparing for science mocks and GCSE exams

Year 11 | AQA Combined Science | Students + Parents / Carers

The aim: calm, organised, active revision

Mocks are a rehearsal. They show students exactly what to fix before the real exams.

For students

- Know what to revise
- Use KayScience properly
- Practise exam questions
- Correct mistakes

For parents / carers

- Help set a routine
- Ask for evidence of revision
- Keep it manageable
- Encourage sleep and breaks

For the exam

- Six papers
- Recall + application
- Required practicals
- Maths and graph skills

Tonight's message: don't just "read over notes" — revise by doing.

AQA Combined Science: what students are preparing for

There are six equally important science papers. Marks across all papers combine into a double grade.

Biology 1

B1 Cells • B2 Organisation • B3 Infection • B4 Bioenergetics

Biology 2

B5 Homeostasis • B6 Inheritance • B7 Ecology

Chemistry 1

C1 Atomic structure • C2 Bonding • C3 Quantitative • C4 Chemical changes • C5 Energy

Chemistry 2

C6 Rates • C7 Organic • C8 Analysis • C9 Atmosphere • C10 Resources

Physics 1

P1 Energy • P2 Electricity • P3 Particles • P4 Atomic structure

Physics 2

P5 Forces • P6 Waves • P7 Magnetism

**Every
paper:**

1 hour 15 minutes

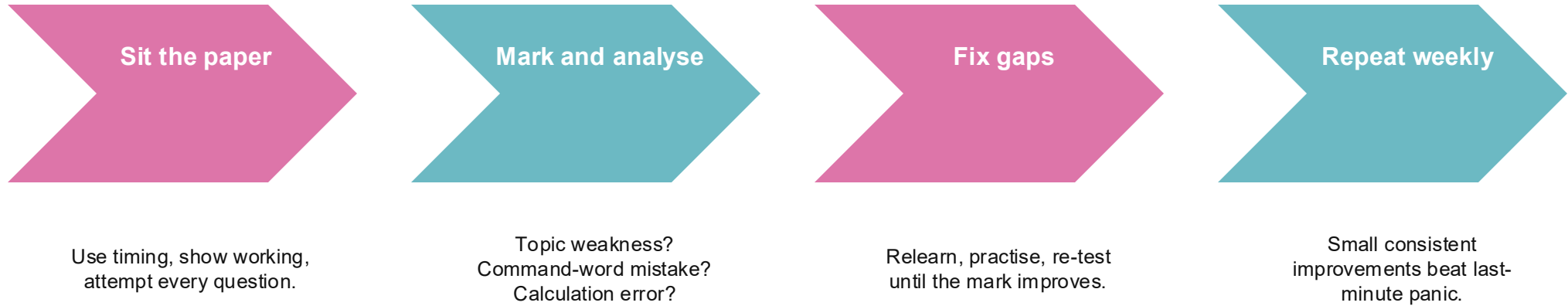
70 marks

**Foundation or
Higher**

**Multiple choice, short answer and
longer open-response questions**

Mocks are a diagnostic, not a final judgement

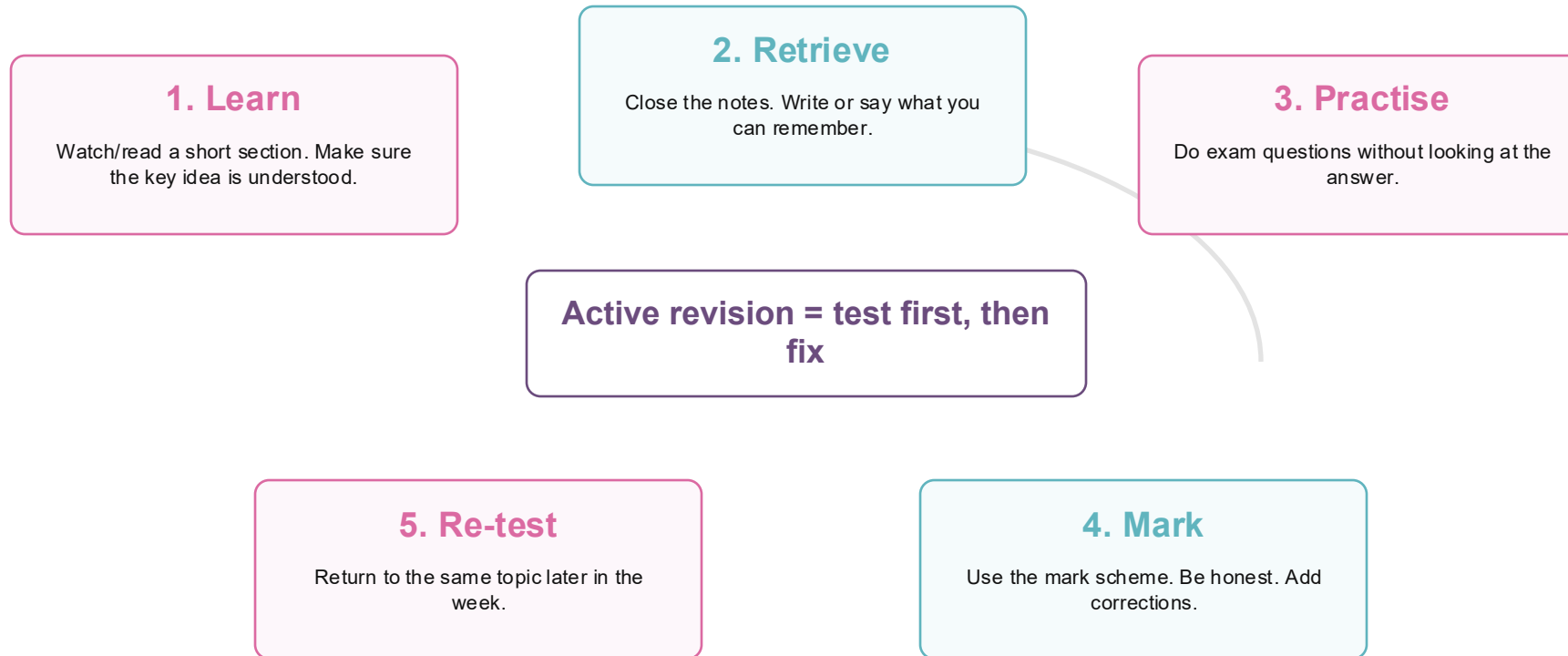
The mock score matters — but the most valuable part is knowing what to improve.



After each mock, students need a “fix list”: 6–10 precise targets, not a vague promise to revise more.

The revision cycle that works

Students improve when every session produces evidence: questions answered, marks checked, errors corrected.



KayScience: use the whole system, not just the videos

Best use: video → quiz → exam questions → flashcards → progress check.



Videos

Short explanations to fill knowledge gaps.



Quizzes

Quick checks after each section.



Exam questions

Practise applying knowledge in AQA-style answers.



Flashcards

Recall definitions, equations and key facts.



Past papers

Build stamina and timing.



Progress tracking

Spot weak topics and celebrate improvement.



AI support

Ask for help when stuck.



Live tuition / lessons

Guided support and feedback.

[Click: KayScience](#)

A simple weekly KayScience routine

This turns online revision into something measurable.

1

Monday

Pick one weak topic from the PLC / mock feedback.

2

Tuesday

Watch the KayScience video and make a 5-line summary.

3

Wednesday

Do the quiz. Rewatch only the bits that were wrong.

4

Thursday

Complete 15–20 minutes of exam questions.

5

Friday

Mark answers and write 3 corrections in green pen.

6

Weekend

Flashcards + 20-minute mixed retrieval from older topics.

Parent check: “Show me what you got wrong and what you changed.”

Revision methods students should be using

A mix is better than doing the same thing every night.

Blurting

Read a topic, close the book, write everything remembered, then fill gaps.

Flashcards

Question on one side, answer on the other. Hard cards come back sooner.

Past-paper questions

Practise the mark scheme language and common question styles.

Interleaving

Mix Biology, Chemistry and Physics across the week.

Spaced practice

Short sessions repeated over weeks beat one long cramming night.

Teach it aloud

Explain a process to someone else without notes.

Mistake log

Write the error, the correct answer, and how to avoid it next time.

Dual coding

Turn a process into a labelled diagram plus keywords.

The key test: can the student answer questions without looking at notes?

What looks like revision but usually does not work

These feel comfortable, but they do not train the brain to retrieve or apply knowledge.

X Reading notes for an hour

Replace with: 15 minutes reading + 25 minutes questions.

X Highlighting whole pages

Replace with: 10 keywords and a closed-book recall test.

X Watching videos passively

Replace with: pause, predict, answer, then check.

X Copying out revision guides

Replace with: flashcards, diagrams and exam questions.

X Only revising favourite topics

Replace with: red/amber/green topic list.

X Ignoring the mark scheme

Replace with: learn the wording examiners accept.

Comfort is not the same as progress. Students need productive struggle.

Marks are won by technique as well as knowledge

Science exams reward clear working, precise words and applying ideas to unfamiliar contexts.

Command words

Describe = what happens. Explain = why it happens. Compare = similarities and differences.

Required practicals

Know variables, method, risk, graph, conclusion and evaluation.

Maths and units

Write the equation, substitute numbers, calculate, add units.

Graphs

Label axes, use scales, plot accurately, draw best-fit lines, describe patterns.

Six-mark questions

Plan 3–4 points first. Use paragraphs or bullet points. Stay scientific.

Never leave blanks

Write what you know. Formula, definition, diagram or sensible attempt may gain marks.

Mock improvement target: fewer silly marks lost through units, wording and incomplete answers.

A 4-week plan before mocks

Adjust the dates, but keep the order: diagnose → learn → practise → polish.

Week 1

Build the red/amber/green topic list. Start with weakest Paper 1 topics.

Week 2

Complete KayScience videos + quizzes for red topics. Begin exam questions.

Week 3

Timed paper sections. Mark carefully. Start a mistake log.

Week 4

Mixed practice across all sciences. Focus on required practicals and equations.

Weekly minimum:



3 × 30 min science sessions



1 × longer exam-question session



1 × correction / re-test session

Interactive HTML workbook: Chemistry C1

Use this for independent practice, self-checking and targeted support.

What is inside?

- Interactive tabs and progress bar
- Knowledge checks and MCQs
- Exam-style questions and mark schemes
- Printable / screen-friendly support

Click below in slideshow mode

[Open workbook](#)

Keep the HTML file in the same folder as this PowerPoint so the link opens reliably.

Other useful revision websites

Use these as targeted tools — not as a reason to spend hours browsing.

[AQA Science 8464](#)

Specification, assessment resources and past papers

[BBC Bitesize](#)

Clear explanations and quick quizzes

[Cognito](#)

Free lessons, notes, questions and flashcards

[FreeScienceLessons](#)

Short GCSE science videos by paper/topic

[Physics & Maths Tutor](#)

Past papers, mark schemes and topic questions

[Seneca](#)

Bitesize online revision courses and quizzes

[Save My Exams](#)

Notes, questions, flashcards and past papers

[Revisely](#)

AQA Combined Science questions by topic

[Quizlet AQA Combined Science](#)

Flashcards and textbook-style sets

How parents and carers can help

You do not need to know the science — you can support the routine and ask the right questions.

“

What are your red topics this week?

Ask them to show the list.

“

What did the mark scheme want?

This builds exam language.

“

Show me your corrected question.

Correction matters more than the first attempt.

“

When is your next re-test?

Spacing stops forgetting.

Best support: a regular space, a visible timetable, praise for effort, and calm follow-up when something is missed.

Before the next mock: the checklist

Students should be able to tick these off honestly.

- ☐ I know which paper and topics I am revising first.
- ☐ I have used KayScience video + quiz + exam questions.
- ☐ I have completed at least one timed section without notes.
- ☐ I have marked the work and corrected it properly.
- ☐ I have practised required practicals and key equations.
- ☐ I have re-tested my weakest topics later in the week.

Do less passively. Do more questions. Correct more carefully.

Reference links used in this presentation

Useful if you want to check exact exam details or access resources directly.

AQA specification at a glance

<https://www.aqa.org.uk/subjects/science/gcse/science-8464/specification/specification-at-a-glance>

AQA assessment resources

<https://www.aqa.org.uk/subjects/science/gcse/science-8464/assessment-resources>

KayScience

<https://www.kayscience.com/>

KayScience exam questions

<https://www.kayscience.com/exam-questions>

Attached interactive workbook

[VISTA_AQA_Chemistry_C1_Interactive_Workbook\(1\).html](#)

Tip: save the PowerPoint and HTML workbook in the same folder before presenting.