

GCSE Biology- Revision

What content do I need to revise?

Subject content

- 1. Cell biology
- 2. Organisation
- 3. Infection and response
- 4. Bioenergetics
- 5. Homeostasis and response
- 6. Inheritance, variation and evolution
- 7. Ecology
- 8. Key ideas

THERE IS A REASON BEHIND EXAMS...

The learning opportunities that schools offer you will last a lifetime. The amazing skills you are learning now will have a lasting impact on your life, leading you to a bright future ahead.

Your exams are your opportunity to demonstrate your true ability and your full potential. To achieve your very best, you must prepare.

Paper 1

What's assessed

Topics 1–4: Cell biology; Organisation; Infection and response; and Bioenergetics.

Paper 2

What's assessed

Topics 5–7: Homeostasis and response; Inheritance, variation and evolution; and Ecology.

Useful Websites for Revision

For all the content you should need that contains podcasts you can listen to, easy to understand reading, videos to watch and mini-quizzes to access what you have learned use BBC Bite-size below (make sure you select the course you are doing):

- AQA Biology- Triple: <https://www.bbc.co.uk/bitesize/examspecs/zpgcbk7>
- AQA Biology- Combined Science:
<https://www.bbc.co.uk/bitesize/examspecs/z8r997h>
- For lots of exam questions visit Cognito: <https://cognitoresources.org/>
- For videos: <https://www.freesciencelessons.co.uk/videos/>

RETRIEVAL PRACTICE



Retrieval practice is a learning technique that involves actively recalling information from memory. It focuses on retrieving information rather than simply reviewing or re-reading it. Practicing retrieval means that your memories are stronger, longer lasting and also easy to access under the pressure of exams.

INSTEAD OF PASSIVELY ABSORBING CONTENT, RETRIEVAL PRACTICE INVOLVES ACTIVELY ATTEMPTING TO RECALL INFORMATION WITHOUT RELYING ON EXTERNAL CUES OR PROMPTS.

This technique has been shown to enhance long-term retention and promote deeper learning by strengthening memory retrieval pathways and identifying gaps in knowledge.

EXAMPLES OF RETRIEVAL PRACTICE INCLUDE SELF-QUIZZING, FLASHCARDS, AND ANSWERING QUESTIONS RELATED TO THE MATERIAL BEING STUDIED.

FLASHCARDS

Write key questions on the front of a flash card and put the perfect answer on the back. Answer without looking then check the back. How accurately did you do?

Evaporation



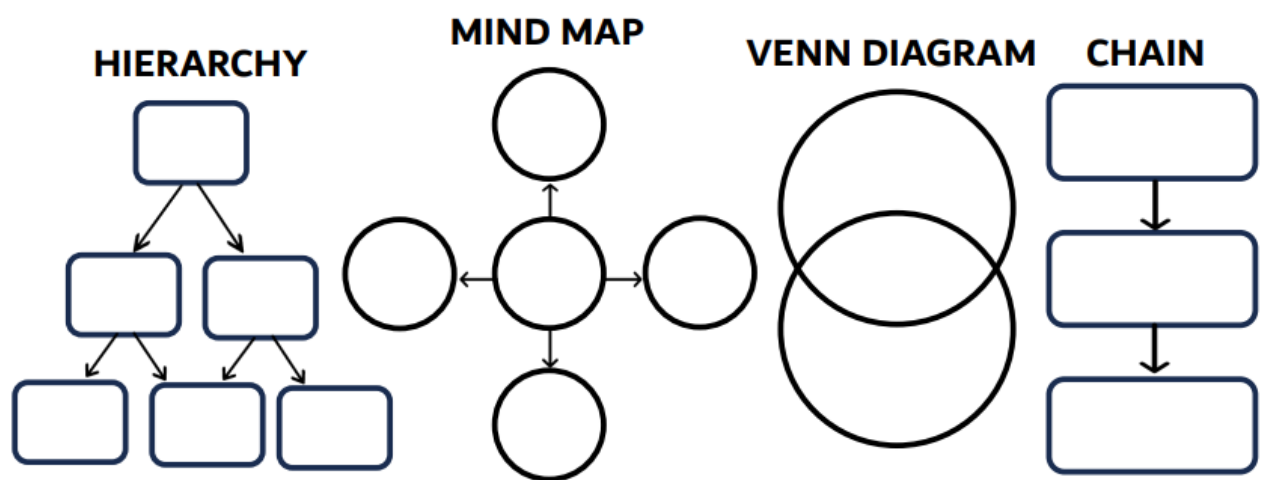
The process of
converting
liquid to gas.

*Example of a
good flashcard*

TRANSFORM IT!

Graphic organizers are a great way of transforming your notes into visually clear ideas. They can be used to create links, show a narrative, identify the causes, compare ideas, or show hierarchy.

Use color and take pride in these notes. If you care about your notes, you will look after them and use them for a long time. This will help your memory!



The best way to practice for an exam, is to do a practice exam. Timer on. Pen at the ready. Ready? Go for it, complete as much as you can and check your answers thoroughly. Then once finished, self-mark and self-reflect. Try to match the experience as closely as possible to the real exam. If you're not ready for this, there are plenty of smaller scale self-testing exercises you can do. Online quizzes or practice questions are a great way to build up confidence for actual exams.

Lots and lots of exam practice will lead to you getting better at exams!

DUAL CODING

Dual coding is a method of putting your knowledge into visual form alongside words. It increases the chances of your remembering it. A good example of this is making a comic strip showing the timeline of events in a topic in history. Dual coding means that your brain will process both the images and the words together, leading to stronger memories and better understanding.

COMMON PITFALLS TO AVOID

1
CRAMMING: It doesn't work. You need to revise for months before the test to achieve your full potential. Last minute revision has far less impact on your memory than spaced, and regular revision.

2
READING, READING AND READING: Any revision is better than no revision, however just reading a textbook isn't going to help you remember and master the knowledge and skills. Use the techniques and strategies discussed earlier to support deeper learning.

3

WRITING THE SAME NOTES OVER AND OVER AGAIN: If you've learnt it, it's now time to do practice questions or practice tests. Re-writing the same thing isn't going to help much.

4

WRITING OUT ESSAYS AND MEMORISING THEM BY HEART: This is time consuming and counter-productive. It is unlikely exact same question will come up on the test, and it is even less likely that you will remember hundreds of words in the right order.

5

PROCRASTINATION: This means putting off work. Face up to reality and just sit down to focus and study. Wasting time is unhelpful.

6

"I CAN'T FORCE MYSELF TO STUDY": Rather than forcing yourself to study, encourage yourself. Set short term achievable goals to work towards. Find the motivation of achievement early on.

7

PANICKING: Don't panic. Just relax, take a breath and do what you can.

8

MAKING EXCUSES: Anyone can make excuses to avoid doing something. This is negative thinking. Try to move to positive mindset which focuses happy thoughts.

**PREPARATION AND READINESS ARE
THE KEYS TO ACING YOUR EXAMS**