How to Revise Science

DIXONS BROOKLANDS ACADEMY

Year 10 exams

You will sit 3 full paper 1 science papers. Each paper is worth 70 marks and is 1hr15min long.

- Biology topics 1–4: Cell Biology; Organisation; Infection and response; and Bioenergetics.

- Chemistry topics 1–5: Atomic structure and the periodic table; Bonding, structure, and the properties of matter; Quantitative chemistry; Chemical changes; and Energy changes.

- Physics topics 1–4: Energy; Electricity; Particle model of matter; and Atomic structure.

What to prepare for

The papers are a mixture of different question styles, including

- Multiple-choice questions
- Short answer questions
- Calculations
- Extended open-response questions

Q6. Acids react with alkalis to form salts and water.

Complete the table below by writing in the name and formula of the salt formed in each reaction.

The first one has been done for you.

Acid	Alkali	Salt
Hydrochloric acid	Sodium hydroxide	Sodium chloride
Nitric acid	Sodium hydroxide	
Sulphuric acid	Potassium hydroxide	

(2)

(b) Sodium chloride solution contains two types of positive ions, sodium ions (Na^+) and hydrogen ions (H^+).

Tick (✓) the reason why hydrogen is produced at the negative electrode and **not** sodium.

Reason	Tick (✓)
Hydrogen is a gas.	
Hydrogen is less reactive than sodium.	
Hydrogen is a non-metal.	
Hydrogen ions travel faster than sodium ions.	

(1)

Q9. Magnesium is added to dilute hydrochloric acid.

An exothermic reaction takes place.

(b) A student investigates how the mass of magnesium used affects the temperature change during the reaction.

Plan a method the student could use.

You should include:
- the apparatus needed
- the measurements to be taken.

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Prepare for exams

- **Plan out your time**

- Revise keywords/ command words
- Practice past papers
- Create revision flash cards
- Read Cover Write Check – KO homework

- Ask for help
- Ask your teacher where you gaps are

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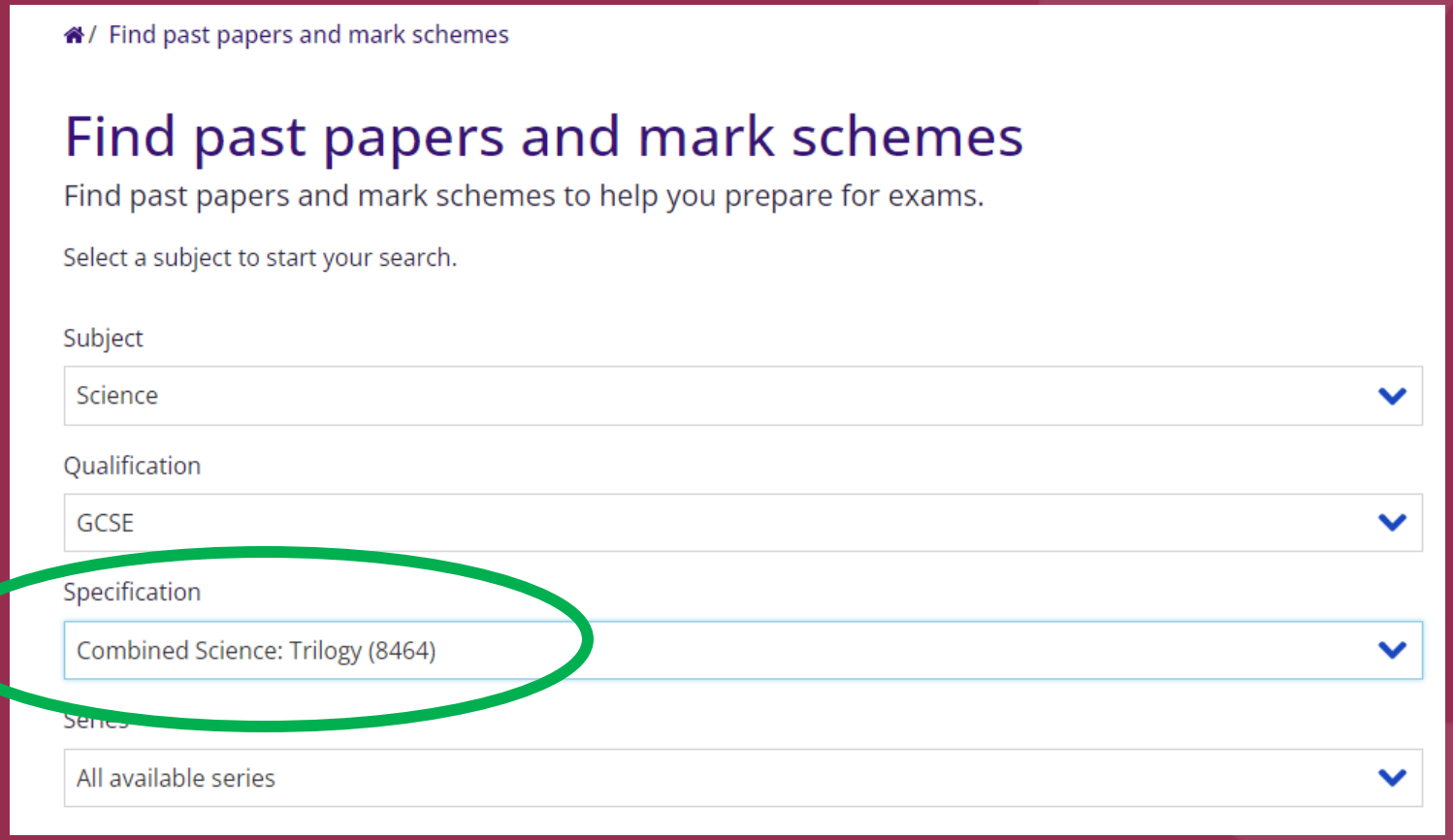
Past Papers

- AQA | Find past papers and mark schemes

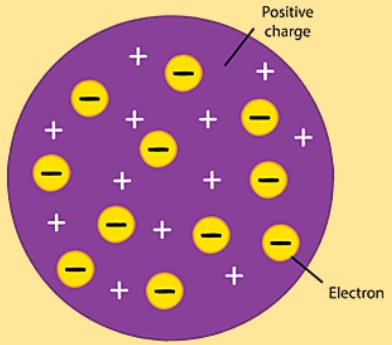


Once you have revised the topics through self testing and flash cards etc. Past papers are the best way to check your own knowledge.

Using the mark schemes allows you to see what the exam board are expecting you to give for answers, and this will help when you attempt future assessments.

Flashcards

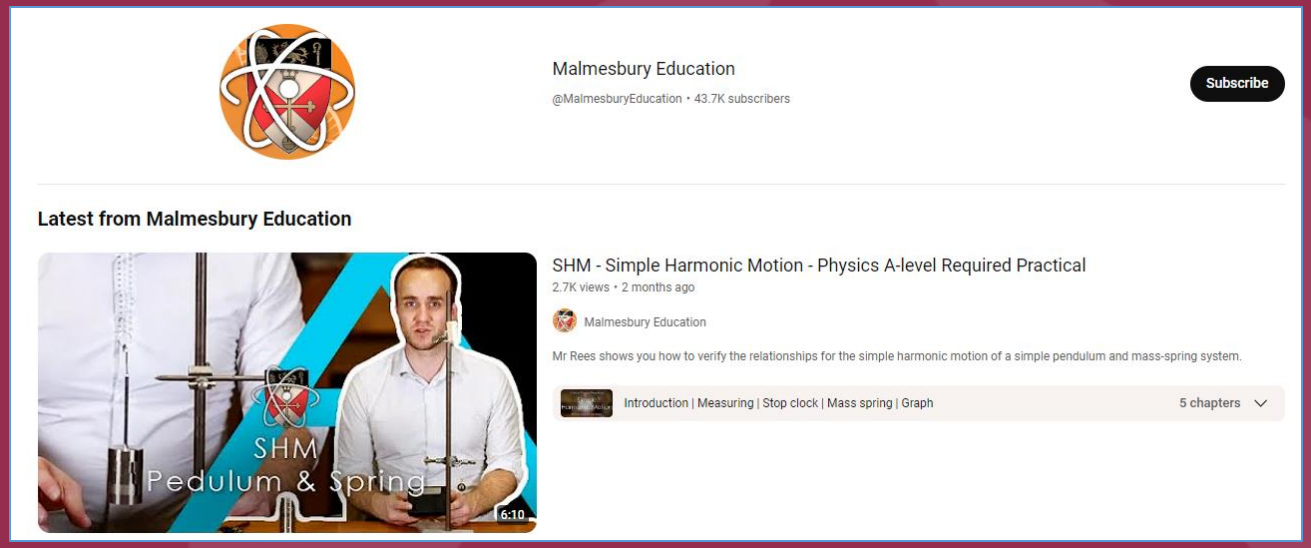
- As you revise for Y10 mocks, you can build up a large set of flash cards that will see you through Y11.
- Flashcards allow you to self test, and you can ask for others to test you (they have the answers)

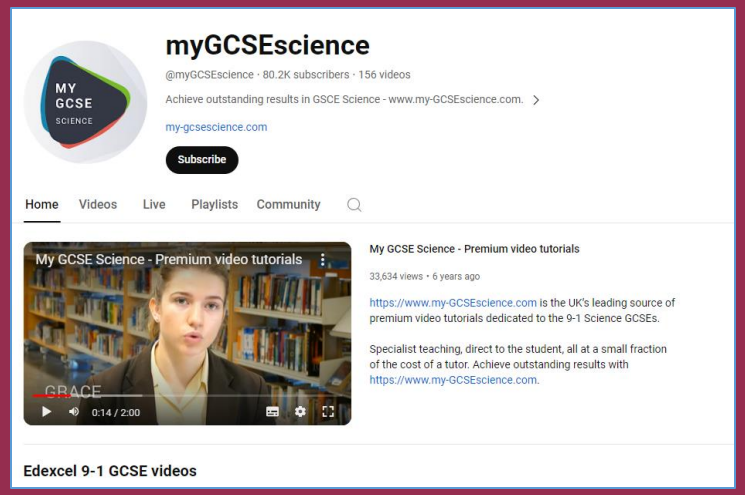
Front	Back
What is the Plum Pudding model of the atom?	 A ball of positive charge with electrons distributed throughout

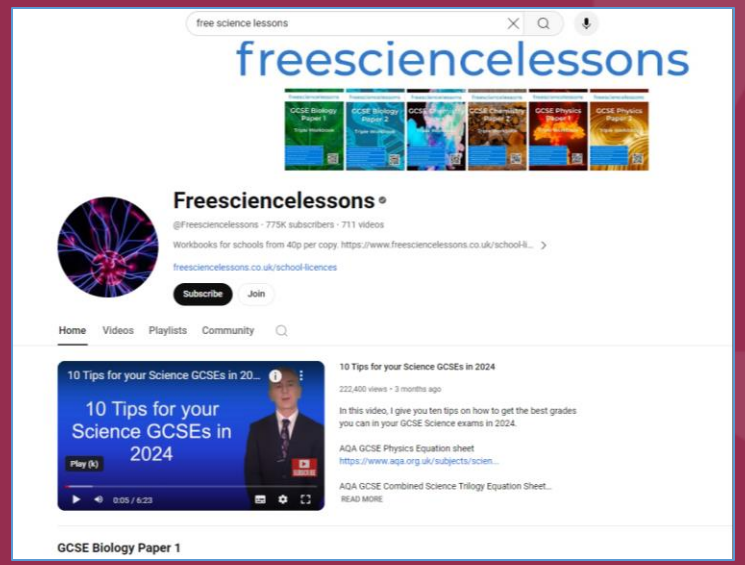
There are some excellent YouTube channels dedicated to GCSE revision.

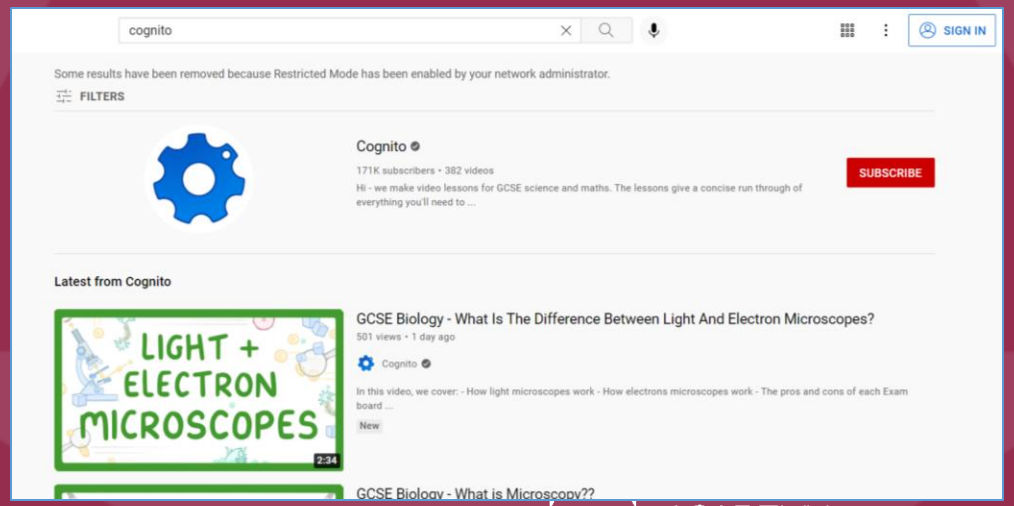
Some that I recommend are…

- Cognito Science
- Free science lessons
- myGCSEscience
- Marlmsbury Education (for required practicals)









Science Exam Tips

- Read the questions…

  Sometimes you can be correct in what you say, but it does not answer the question asked.

- Show your working out

  There is a lot of maths in the science papers. By showing your working you are better positioned to pick up the marks if you make a mistake at any point.

  Use uFIFA when doing calculations (units, Formula, Insert, Fine tune, Answer)

- In multiple choice questions eliminate the wrong answers to give you a better chance of picking the correct answer **(and always tick the correct number of boxes)**

- **Always check through at the end… make sure you haven't missed any hidden questions.**