

## SCIENCE TRILOGY – DOUBLE AWARD

Exam	Duration	Marks available	% of GCSE	Topics/ content
Biology Paper 1	75 minutes	70	16.7%	Biology topics 1–4: Cell Biology; Organisation; Infection and response; and Bioenergetics.
Biology paper 2	75 minutes	70	16.7%	Biology topics 5–7: Homeostasis and response; Inheritance, variation and evolution; and Ecology.
Chemistry paper 1	75 Minutes	70	16.7%	Chemistry topics 8–12: Atomic structure and the periodic table; Bonding, structure, and the properties of matter; Quantitative chemistry; Chemical changes; and Energy changes.
Chemistry paper 2	75 minutes	70	16.7%	Chemistry topics 13–17: The rate and extent of chemical change; Organic chemistry; Chemical analysis; Chemistry of the atmosphere; and Using resources.
Physics paper 1	75 minutes	70	16.7%	Physics topics 18–21: Energy; Electricity; Particle model of matter; and Atomic structure.
Physics paper 2	75 minutes	70	16.7%	Physics topics 22–24: Forces; Waves; and Magnetism and electromagnetism.

Before revising, students should complete personal learning checklists for their subjects. These ask students to RAG rate both the topics/ content of their exams and also the skills they are required to use. Doing this will help them to identify priorities and make effective use of their revision time.

### Personal Learning Checklists

Topic (what I need to know)	R	A	G
1. Cell biology			
2. Organisation			
3. Infection and response			
4. Bioenergetics			
5. Homeostasis and response			
6. Inheritance, variation and evolution			
7. Ecology			
8. Atomic structure and the periodic table			
9. Bonding, structure, and the properties of matter			
10. Quantitative chemistry			
11. Chemical changes			
12. Energy changes			

13. The rate and extent of chemical change			
14. Organic chemistry			
15. Chemical analysis			
16. Chemistry of the atmosphere			
17. Using resources			
18. Energy			
19. Electricity			
20. Particle model of matter			
21. Atomic structure			
22. Forces			
23. Waves			
24. Magnetism and electromagnetism			

Skill	R	A	G
Be able to extract data from a table or graph to support a conclusion or suggestion.			
Structure longer questions to gain the maximum number of marks.			
Name scientific equipment and be able to describe how to use it safely.			
Use scientific terms to explain your ideas.			
Use concept diagrams to express an idea.			
Find and explain patterns in data and observations.			
Know required practical methods and the questions that might be applied to them.			

# TOP REVISION TIPS FOR SCIENCE TRILOGY

You can find the GCSE specification at <http://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464>

## On-line resources

**YouTube** is a good place to look for videos of scientific methods and experiments that you might not remember or have missed in class. Make sure you have a thorough understanding of each **required practical** and how it can be performed safely. You can find a complete list of all required practical's and their requirements at <http://www.aqa.org.uk/resources/science/gcse/teach/practicals>

Biology	Chemistry	Physics
Microscopy	Making salts	Specific heat capacity
Osmosis	Electrolysis	Resistance
Enzymes	Temperature changes	I-V characteristics
Food tests	Rates of reaction	Density
Photosynthesis	Chromatography	Force and extension
Reaction time	Water purification	Acceleration
Field investigations	Electrolysis	Waves
	Temperature changes	Radiation and absorption

There are also some helpful apps and websites that are free to visit;

- KS4 GCSE bitesize website <http://www.bbc.co.uk/education/subjects/zrkw2hv>
- My GCSEscience website <https://www.youtube.com/user/myGCSEscience>
- General KS4 science revision <http://www.gcsescience.com/>

## CGP Test & Learn Science Apps



Test your knowledge of GCSE Biology, Chemistry, Physics with these brilliant Test & Learn apps from CGP! They are perfect for a bit of quick-fire revision whenever you've got a few minutes' spare. Test yourself on an individual science using the single science apps or if you are a higher tier student buy and download the GCSE Core & Add Science Apps for harder questions. What if I can't afford to shell out £1.49 per app, I hear you say. Well, luckily there is a GCSE Science LITE app which gives you a sample of all the questions in the full app.

Price: £1.49 per app (free for the Lite app) App Store, Play Store