

Y9 & 10 INFORMATION EVENING

SCIENCE



COURSE



We cover the content from the AQA exam board. The details of the specification can be found on their website.

http://www.aqa.org.uk/subjects/science/gcse

Triple – biology (8461), chemistry (8462), physics (8463) Double – combined trilogy (8464)



GROUPINGS + PATHWAYS



For current Y9 and 10s

Students chose their long thin option of combined science or triple science in Y8.

The students are put into sets based on their option choice and their KS3 data.

This allows students to be taught at appropriate pace and those who need more support to be taught in smaller classes.

It is not possible to change between combined and triple since the lessons are different from the start of Y9.

Students have 4 hours of science per week for combined or 6 hours per week for triple science.

SCHEME OF WORK

	Y9	Y10	Y11
Biology	Cell biology	Bioenergetics	Inheritance, variation and evolution
	Organisation and the systems of the body	Biological responses and Homeostasis	Ecology
	Infection and response		
Physics	Energy and Energy resources	Electrical circuits	Magnetism and electromagnetism
	Efficiency and power	Atomic physics	Waves
	Forces in action	Mechanics	Space Physics
Chemistry	Atomic structure and the periodic table	Energy changes	Organic chemistry
		Quantitative chemistry	Atmosphere
	Structure and bonding	Analysis	Using resources
	Chemical changes	Rates	Triple only organic and resources

Students doing combined science will have one lesson of biology, chemistry and physics a week, the fourth lesson will rotate Students doing separate sciences will do all three, in parallel, 2 hours a week each.

ASSESSMENT + LEVELLING



Students complete a test at the end of each topic.

Students will be given their score, along with feedback on how to improve the sub-topics they found more challenging.

Different topics and questions may be easier or harder, so we cannot use a score on one test to give a prediction of a grade at the end of Y11.

Students will also do various assessments in class and as homework to show them and their teacher what they do not understand yet.



EXAMS



All students sit 6 science exams at the end of Y11. Two each for biology, chemistry and physics. Students are told which topics could be asked on each paper.

Combined science students sit 70 mark exams lasting 1 hour 15 minutes.

Triple science students sit 100 mark exams lasting 1 hour 45 minutes.



EXAMS



Students will be entered for higher tier or foundation tier based on the grade they obtain in the mock exams in year 11 and prior assessment data from year 9 and year 10.

Tiers of entry will be decided by teaching staff for mock exams in year 10 and year 11. This will influence the final tier of entry for the GCSE exams.

The next couple of slides have been taken from the AQA website as an example of how the exams will be structured.

ASSESSMENT – BIOLOGY - TRIPLE



Paper 1

What's assessed

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

How it's assessed

- Written exam: 1 hour 45 minutes
- Foundation and Higher Tier
- 100 marks
- 50 % of GCSE

Questions

Multiple choice, structured, closed short answer and open response.

Paper 2

What's assessed

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

How it's assessed

- Written exam: 1 hour 45 minutes
- Foundation and Higher Tier
- 100 marks
- 50 % of GCSE

Questions

Multiple choice, structured, closed short answer and open response.



ASSESSMENT – BIOLOGY- COMBINED



Biology Paper 1

What's assessed

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

How It's assessed

- Written exam: 1 hour 15 minutes
- Foundation and Higher Tier
- 70 marks
- 16.7% of GCSE

Questions

Multiple choice, structured, closed short answer, and open response.



Biology Paper 2

What's assessed

Biology topics 5-7: Homeostasis and response; Inheritance, variation and evolution; and Ecology.

How It's assessed

- Written exam: 1 hour 15 minutes
- Foundation and Higher Tier
- 70 marks
- 16.7% of GCSE

Questions

Multiple choice, structured, closed short answer, and open response.



HOW TO SUPPORT YOUR CHILD



Ask them to explain what they are doing in science and how it works.

Help them get into good routines for going back over previous topics to check they understand and help them remember, as well as checking show my homework regularly.

The next few pages list online and offline resources you may find useful.



<u>how to support</u> Your child-online



There are lots of resources on the school's G drive to support revision.

The school has subscribed to Kerboodle (see images on next slides) for science this year, which provides additional resources, including online copies of the textbooks.

We also recommend websites which include lots of quizzes:

https://www.senecalearning.com/ (also available as an app)

https://www.bbc.co.uk/bitesize/subjects/zrkw2hv (select subject and AQA or

combined science AQA trilogy, then subject)

Cognito Resources - Past Papers - GCSE > Qs by Topic > Biology > AQA





AQA GCSE Sciences (9-1)

AOA GCSE

Sciences

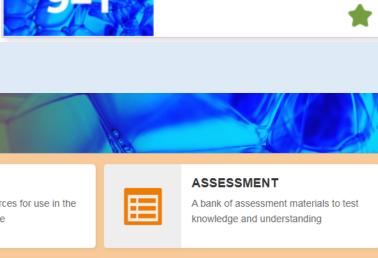
https://www.kerboodle.com/users/login

Username: e.g. Jane Smith would be jsmith

Password: same as username (jsmith)

Institution code: cru6





HOW TO SUPPORT YOUR CHILD-OFFLINE

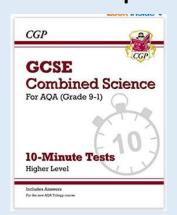


Many revision guides, workbooks and flashcards are available. Workbooks and 10 minute tests allow students to practice what they know, which helps their long term memory. Ensure any resources are for the 9-1 specification and are for either separate sciences AQA or combined science Trilogy.

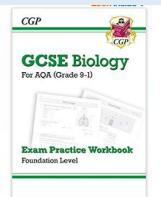
Ask your child's teacher if you need guidance on higher or foundation tier.

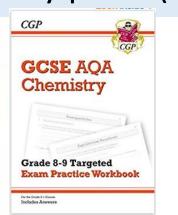
CGP are good value for money.

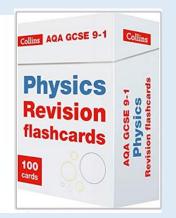
Other publishers include Oxford University press (our textbooks) and Collins

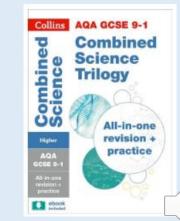












HOMEWORK



- Up to 45 minutes per week (in line with homework policy).
- All homework set through Show My Homework.
- Students are expected to log in daily.
- Show My Homework includes a calendar, with hand in dates for all homework set – Students and parents can track tasks.
- Available online and as an app.
- Students are encouraged to ask teachers for help or to let them know of any issues prior to hand in.



EXTRA CURRICULAR



- Eco club
- Astrophysics club
- Difficult and interesting physics
- Allotment club



CONTACT



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