

Course Title: GCSE Combined Science

Awarding Body: Edexcel

Further information available from: Mr. Whitley (swhitley@ramseyacademy.com)

Why study Combined Science?

The Combined Science course is compulsory. Science helps pupils understand the world around them and the role that science has in society. It helps develop planning, teamwork, problem solving and practical skills as well as generating curiosity about their surroundings. This enables pupils to develop the confidence to question the workings of the biological, chemical, physical and technological world and become better informed citizens. There are several links between Science and other subjects, this includes the use of numeracy and literacy skills.

Course Outline

There are two tiers of entry: Foundation and Higher. The grade awarded is dependent on the tier of exam completed, these are listed below.

Foundation	1	2	3	4	5				
Higher				4	5	6	7	8	9

Year 10	Year 11
Biology 1 Key biological concepts Cells and control Genetics Natural selection and genetic modification Ecosystems and materials cycles	Biology 2 Key biological concepts Plant structures and their functions Animal coordination, control and homeostasis Exchange and transport in animals Health, disease and development of medicines
Chemistry 1 Key concepts in Chemistry States of matter Methods in separating and purifying substances Acids Obtaining and using metals Electrolytic processes Reversible reactions and equilibria	Chemistry 2 Key concepts in Chemistry Group 1, 7 and 0 Rates of reaction Fuels Heat energy changes in chemical reactions Earth and atmospheric science
Physics 1 Motion and forces Waves Light and electromagnetic spectrum Particle model 1 Radioactivity	Physics 2 Motion and forces Energy-forces doing work Forces and their effects Electricity and circuits Static electricity Magnetism and the motor effect Conservation and energy Particle model 2 Forces and matter



Timetable

GCSE Science is taught by specialist teachers for 10 hours over a two-week period.

<https://qualifications.pearson.com/en/qualifications/edexcel-gcses/sciences-2016.html>

Assessment Format

Edexcel (1-9) Combined Science 1SC0

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Skills addressed in exam paper

	Objective	Weighting
AO1	Demonstrate knowledge and understanding of: <ul style="list-style-type: none">• Scientific ideas• Scientific techniques and procedures	40%
AO2	Apply knowledge and understanding of: <ul style="list-style-type: none">• Scientific ideas• Scientific enquiry, techniques and procedures	40%
AO3	Analyse information and ideas to: <ul style="list-style-type: none">• Interpret and evaluate• Make judgments and draw conclusions• Develop and improve experimental procedures	20%

AO1 questions are based on knowledge and understanding of both theory from the specification and from the core practical tasks.

AO2 questions are based on application of knowledge and understanding in new theoretical and practical contexts.

AO3 questions are likely to be (but not exclusively) more challenging questions. They require the pupils to analyse information and use that to interpret and evaluate or draw conclusions using their knowledge of the underlying science.

27% of marks will overlap between the Foundation and Higher tiers. These will be towards the end of the Foundation paper and the beginning of the Higher paper.

Subject content of exam papers

Students will be examined externally through 6 terminal examinations in May/June of year 11 with the first certification being in 2018. Each exam is 1 hour and 10 minutes.

The terminal examinations will contain content linked to the core practical tasks which students will be taught in class. Students will keep a separate record of this work and will be expected to apply their knowledge of these in an exam situation.

All examinations will also include questions of a mathematical nature.

What skills will I need to be successful in this subject?

The content covered in the course is vast, but it is broken down into smaller topics and provided you are methodical in your approach, you will be successful. You will need to have an inquisitive mind and, if relevant, use your previous experiences to help you process the new information given during the course. Organisation will help you keep notes clear and concise so that revision is easier. Being willing to make mistakes and learn from them is important.



Possible Careers and Future Education

Science education develops a wide range of skills and opportunities that will prepare students for almost every career path.

Apart from the obvious science-based careers, you may be surprised to hear that the skills you gain from studying science will open opportunities in areas that are not obviously science related. For example: Finance; Teaching; Marketing; Patent Law; Photography; Art Restoration; Media and Film Production; Food Technology.

