



# THE ECCLESBOURNE SCHOOL

*'Learning Together For The Future'*

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Dear Parents/carers,

We hope you are well, and that your child is enjoying their lessons back with us in science labs.

We are writing to give you information about the mock assessments that your child will be sitting in January. Students will be assessed on content taught in Y10 and what has been covered so far in Y11.

For separate science students this will consist of the following papers:

- Paper 1 (1 hour 45 minutes)
- Paper 2 (1 hour)

For trilogy science students:

- Paper 1 (1 hour 15 minutes)
- Paper 2 (45 minutes)

To support revision, in the table below are the themes that will and will not be assessed in the mocks for separate and trilogy students. If there is a required practical activity (RPA) within the topic, this has been highlighted in the table below.

There is also a list of resources we recommend using to help support your child's revision at the end of this letter. This information, along with science specific resources will be added to show my homework.

Students will also be provided with glossary lists for their science topics. This is to emphasise the specialist tier 3 terminology that they must learn to be able to access the examination questions.

Separate Science:

Science	Paper 1	Paper 2
Biology	B1 Cell structure (including RPA 1 Microscopy, RPA 3 Osmosis) B2 Cell division B3 Cell organisation and digestion (including RPA 4 Food tests, RPA 5 Enzymes) B4 Animal and Plant organisation B5 Communicable disease (including RPA 2 Microbiology) B6 Preventing and treating disease B7 Non-communicable B8 Respiration B9 Photosynthesis (including RPA 6 Photosynthesis)	B10 The human nervous system (including RPA 7 Reaction time) B11 Hormonal control (including RPA 8 Plant responses) B12 Homeostasis in action B13 Reproduction  <b><u>DO NOT REVISE:</u></b> B14 Variation and evolution B15 Genetics and evolution B16 Adaptation and interdependence B17 Organisation of an ecosystem B18 The effect of human interactions on ecosystems and biodiversity RPA 9 Field investigations and RPA 10 Decay

Chemistry	<p>C1 Atomic Structure  C2 The Periodic Table  C3 Bonding, structure and properties of matter  C4 Chemical calculations (including RPA2 Using titrations)  C5 Chemical changes (including RP1 preparing a salt)  C6 Electrolysis (Including RPA3 Investigating electrolysis)  C7 Energy changes (including RPA4 investigating temperature changes)</p>	<p>C8 Rates and Equilibrium (including RPA5 investigating concentration on reaction rate)  C9 Crude oil and fuels  C10 Organic chemistry  C11 Polymers</p> <p><b><u>DO NOT REVISE:</u></b>  C12 Chemical analysis  C13 Earth's atmosphere  C14 Earth's resources  C15 Using resources</p>
Physics	<p>P1 Conservation and dissipation of energy  P2 Energy transfer by heating (including RPA1 determining specific heat capacity and RPA2 Investigating thermal insulators)  P3 Energy resources  P4 Electric circuits (including RPA3 Investigating resistance and RPA4 investigating electrical components)  P5 Electricity in the home  P6 Molecules and matter (including RPA5 Calculating densities)  P7 Radioactivity</p>	<p>P1 Conservation and dissipation of energy  P2 Energy transfer by heating  P8 Forces in balance  P9 Motion  P10 Force and motion (including RPA6 Investigating the relationship between forces and extension of a spring and RPA7 Investigating the relationship between force and acceleration)  P11 Force and pressure  P16 Space</p> <p><b><u>DO NOT REVISE:</u></b>  P12 Waves  P13 Electromagnetic waves  P14 light  P15 Electromagnetism</p>

Trilogy Science:

Science	Paper 1	Paper 2
Biology	<p>B1 Cell structure (including RPA 1 Microscopy, RPA 2 Osmosis)  B2 Cell division  B3 Cell organisation and digestion (including RPA 3 Food tests, RPA 4 Enzymes)  B4 Animal and Plant organisation  B5 Communicable disease  B6 Preventing and treating disease  B7 Non-communicable  B8 Respiration  B9 Photosynthesis (including RPA 5 Photosynthesis)</p>	<p>B10 The human nervous system (including RPA 5 Reaction time)  B11 Hormonal control  B12 Homeostasis in action  B13.1-B13.4 (Types of reproduction; Cell division in sexual reproduction; DNA and the genome)  <b><u>DO NOT REVISE:</u></b>  B13.5-B13.10 Reproduction  B14 Variation and evolution  B15 Genetics and evolution  B16 Adaptation and interdependence  B17 Organisation of an ecosystem  B18 The effect of human interactions on ecosystems and biodiversity  RPA 7 Field investigations and RPA 10 Decay</p>
Chemistry	<p>C1 Atomic Structure  C2 The Periodic Table  C3 Bonding, structure and properties of matter  C4 Chemical calculations  C5 Chemical changes (including RP1 preparing a salt)  C6 Electrolysis (Including RPA3 Investigating electrolysis)</p>	<p>C8 Rates and Equilibrium (including RPA5 investigating concentration on reaction rate)  C9 Crude oil and fuels</p> <p><b><u>DO NOT REVISE:</u></b>  C10 Organic chemistry  C11 Polymers  C12 Chemical analysis</p>

	C7 Energy changes (including RPA4 investigating temperature changes)	C13 Earth's atmosphere C14 Earth's resources C15 Using resources
Physics	P1 Conservation and dissipation of energy P2 Energy transfer by heating (including RPA1 determining specific heat capacity) P3 Energy resources P4 Electric circuits (including RPA2 Investigating resistance and RPA3 investigating electrical components) P5 Electricity in the home P6 Molecules and matter (including RPA4 Calculating densities) P7 Radioactivity	P1 Conservation and dissipation of energy P2 Energy transfer by heating P8 Forces in balance P9 Motion P10 Force and motion (including RPA5 Investigating the relationship between forces and extension of a spring and RPA6 Investigating the relationship between force and acceleration) <b>DO NOT REVISE:</b> P12 Waves P13 Electromagnetic waves P14 light P15 Electromagnetism

**Recommended resources:**

- The AQA GCSE textbooks (access via [www.Kerboodle.com](http://www.Kerboodle.com))
- BBC bitesize (GCSE AQA): <https://www.bbc.co.uk/bitesize>
- Free science lesson videos on YouTube: <https://www.youtube.com/c/Freesciencelessons>
- Cognito videos on YouTube: <https://www.youtube.com/c/Cognitoedu>
- Required practical videos on YouTube: [Malmesbury Education - YouTube](https://www.youtube.com/c/MalmesburyEducation)

If you have any questions regarding this, please do not hesitate to contact me.

Yours faithfully

Hayley Piper (HEP)  
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KS4 Co-ordinator