

## Science – AQA GCSE Combined Science: Trilogy

*Remember this qualification is two GCSEs, you will need to spend more time revising to cover content. Remember to cover paper 2 topics in this time as well as time diminishes once the exams start.*

	<b>Biology– 1.5 hours</b>	<b>Chemistry – 1.5 hours</b>	<b>Physics 1.5 hours</b>
<b>w/c</b> <b>27/01/2025</b> 14 weeks to go...	Cells (paper 1) Eukaryotic, Prokaryotic, organelles and their function, *size and scale*, magnification equation, how to use a microscope, specialised cells, stem cells and ethics of using these in therapy. Osmosis (+osmosis practical), active transport and diffusion <a href="https://www.youtube.com/watch?v=sdpmVQooYS4&amp;feature=youtu.be">https://www.youtube.com/watch?v=sdpmVQooYS4&amp;feature=youtu.be</a>	Atomic structure and Periodic table (paper 1) Properties of elements, compounds, mixtures, separation techniques, history of the periodic table, atomic structure, electron configuration, history of the atom <a href="https://www.youtube.com/watch?v=bgyuXU97jal">https://www.youtube.com/watch?v=bgyuXU97jal</a>	Energy (paper 1)- energy types, sources and energy demands. Look at calculations needed, SHC practicals, conduction, convection and radiation.  <a href="https://www.youtube.com/watch?v=tDkBhy-Y1Z8">https://www.youtube.com/watch?v=tDkBhy-Y1Z8</a>
<b>w/c</b> <b>03/02/2025</b> 13 weeks to go...	Organisation (paper 1) Hierachy (cells-tissues-organ size), digestive system, enzymes, digestive enzymes, *food tests*, the heart and lungs, exchange surfaces, transport in plants (xylem and phloem) <a href="https://www.youtube.com/watch?v=DJ0IZGkDx6A&amp;feature=youtu.be">https://www.youtube.com/watch?v=DJ0IZGkDx6A&amp;feature=youtu.be</a>	Bonding types & quantitative chemistry (paper 1) Electron configuration, metallic, covalent and ionic bonding, properties of each bonding type, giant structures and their properties. Relative atomic and molecular mass. Moles and Avogadro's number. Reacting masses <a href="https://www.youtube.com/watch?v=YpEQ-NWxKBc">https://www.youtube.com/watch?v=YpEQ-NWxKBc</a>	Forces (paper 2)- vector and scalar differences, parallelograms of forces, weight and mass, speed-time, distance time graphs, work done, velocity, acceleration <a href="https://www.youtube.com/watch?v=Rz4XBSKNGXg">https://www.youtube.com/watch?v=Rz4XBSKNGXg</a>
<b>w/c</b> <b>10/02/2025</b> 12 weeks to go...	Homeostasis (paper 2) Nervous system, reflexes, hormones and endocrine system, *menstrual cycle*, contraception, *IVF <a href="https://www.youtube.com/watch?v=xOfqw7MbU8k&amp;feature=youtu.be">https://www.youtube.com/watch?v=xOfqw7MbU8k&amp;feature=youtu.be</a>	Chemical and energy changes (paper 1) Reactivity series, displacement, pH scales, electrolysis, testing for gases. Endo and exothermic reactions reaction profiles, bond enthalpies. <a href="https://www.youtube.com/watch?v=KTmXEliU_Go">https://www.youtube.com/watch?v=KTmXEliU_Go</a>	Electricity (paper 1)- circuit diagrams and rules, rules of series and parallel, components and component graphs and uses, power, plugs, AC/DC, national grid <a href="https://www.youtube.com/watch?v=jSA4WlaLSVEA">https://www.youtube.com/watch?v=jSA4WlaLSVEA</a>
<b>w/c</b> <b>17/02/2025</b> 11 weeks to go...	Diseases (paper 1) Communicable and non communicable diseases, our defence system, human diseases and treatment, developing	Rate of Chemical reactions (paper 2) Measuring rates of reaction using graphs. Investigating rates of reaction by experiment. Factors affecting rate and the	Particles- density, changes of state, particle theory, irregular density experiment, pressure, radiation types, half lives, radiation equations

	<p>drugs (timeline), risk factors for non-comm drugs, cancer, smoking and drug misuse</p> <p><a href="https://www.youtube.com/watch?v=m7pxdTJ9NPI&amp;feature=youtu.be">https://www.youtube.com/watch?v=m7pxdTJ9NPI&amp;feature=youtu.be</a></p>	<p>collision theory. Reversible reactions. Equilibrium and Le Chatelier's principle. Effects of changing concentration, pressure and temperature.</p> <p><a href="https://www.youtube.com/watch?v=7i90fiz9SmY">https://www.youtube.com/watch?v=7i90fiz9SmY</a></p>	<p><a href="https://www.youtube.com/watch?v=cZz9oGgJOLO&amp;t=2s">https://www.youtube.com/watch?v=cZz9oGgJOLO&amp;t=2s</a></p> <p><a href="https://www.youtube.com/watch?v=YFVYUSvUBoo">https://www.youtube.com/watch?v=YFVYUSvUBoo</a></p>
<p><b>w/c</b> <b>24/02/2025</b> 10 weeks to go...</p>	<p>Bioenergetics (paper 1) Photosynthesis, limiting factors, required practicals, equation, uses of glucose, aerobic and anaerobic respiration, effects of exercise</p> <p><a href="https://www.youtube.com/watch?v=1KIAWHQ4sM&amp;feature=youtu.be">https://www.youtube.com/watch?v=1KIAWHQ4sM&amp;feature=youtu.be</a></p>	<p>Organic Chemistry (paper 2) Fractional distillation of crude oil including viscosity, flammability and boiling point changes. Complete and incomplete combustion. Cracking using steam or a catalyst. Testing for alkenes using bromine water.</p> <p>Chemical analysis (paper 2) Pure substances and mixtures. Formulations. Separating mixtures using chromatography. Tests for gases.</p> <p><a href="https://www.youtube.com/watch?v=YyUQiUddBA4">https://www.youtube.com/watch?v=YyUQiUddBA4</a></p>	<p>Waves- types, ripple tank and string wave practicals, electromagnetic spectrum types of waves and uses, reflection and refraction, refraction index</p> <p><a href="https://www.youtube.com/watch?v=9JPNVJLC3E">https://www.youtube.com/watch?v=9JPNVJLC3E</a></p>
<p><b>w/c</b> <b>03/03/2025</b> 9 weeks to go...</p>	<p>Reproduction (paper 2) Punnett squares, chromosomes, genes, alleles, inherited disorders, genetic screening</p> <p><a href="https://www.youtube.com/watch?v=npl10a6p8jQ&amp;feature=youtu.be">https://www.youtube.com/watch?v=npl10a6p8jQ&amp;feature=youtu.be</a></p>	<p>Chemistry of the atmosphere (paper 2) Gases in the atmosphere, how they have changed over time, greenhouse gases, global warming, atmospheric pollution and the carbon footprint.</p> <p><a href="https://www.youtube.com/watch?v=gxCrsqXZzeU&amp;feature=youtu.be">https://www.youtube.com/watch?v=gxCrsqXZzeU&amp;feature=youtu.be</a></p>	<p>Energy Recap your notes and questions, answer quick fire questions on PK workbook 156</p> <p><a href="https://www.youtube.com/watch?v=q5CwATii6OA">https://www.youtube.com/watch?v=q5CwATii6OA</a></p>
<p><b>w/c</b> <b>10/03/2025</b> 8 weeks to go...</p>	<p>Full paper 1 practise (either on Microsoft teams or from AQA website below)</p> <p><a href="https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources?f.Resource+type%7C6=Mark+schemes&amp;f.Resource+type%7C6=Question+papers&amp;sort=date&amp;num_ranks=20">https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources?f.Resource+type%7C6=Mark+schemes&amp;f.Resource+type%7C6=Question+papers&amp;sort=date&amp;num_ranks=20</a></p>	<p>Using resources (paper 2) Finite and renewable resources, potable water, purifying water, waste water treatment, extracting metals using bioleaching and phytomining. Life cycle assessments. Reduce, reuse and recycle.</p> <p><a href="https://www.youtube.com/watch?v=KyVf2bVLI08&amp;feature=youtu.be">https://www.youtube.com/watch?v=KyVf2bVLI08&amp;feature=youtu.be</a></p>	<p>Full paper 1 practise (either on Microsoft teams or from AQA website below)</p> <p><a href="https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources?f.Resource+type%7C6=Mark+schemes&amp;f.Resource+type%7C6=Question+papers&amp;sort=date&amp;num_ranks=20">https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources?f.Resource+type%7C6=Mark+schemes&amp;f.Resource+type%7C6=Question+papers&amp;sort=date&amp;num_ranks=20</a></p>

<b>w/c</b> <b>17/03/2025</b> 7 weeks to go...	Ecology (paper 2) Uses of natural resources, deforestation, decay, biomass, sustainable farming <a href="https://www.youtube.com/watch?v=SKDn90HK98Q&amp;feature=youtu.be">https://www.youtube.com/watch?v=SKDn90HK98Q&amp;feature=youtu.be</a>	Atomic structure, periodic table and bonding types recap (paper 1) Recap your notes and questions, answer quick fire questions in Primrose Kitten workbook <a href="https://www.youtube.com/watch?v=mjllPJc018&amp;feature=youtu.be">https://www.youtube.com/watch?v=mjllPJc018&amp;feature=youtu.be</a> <a href="https://www.youtube.com/watch?v=9bbCFUyIuWg&amp;feature=youtu.be">https://www.youtube.com/watch?v=9bbCFUyIuWg&amp;feature=youtu.be</a>	Forces Recap your notes and questions, answer quick fire questions in Primrose Kitten workbook <a href="https://www.youtube.com/watch?v=ifjb1pnH8zw">https://www.youtube.com/watch?v=ifjb1pnH8zw</a>
<b>w/c</b> <b>24/03/2025</b> 6 weeks to go...	Evolution (paper 2) Classification, Darwin's theories, fossils, extinction <a href="https://www.youtube.com/watch?v=npl10a6p8jQ&amp;feature=youtu.be">https://www.youtube.com/watch?v=npl10a6p8jQ&amp;feature=youtu.be</a>	Bonding & quantitative Chemistry (paper 1) Recap your notes and questions, answer quick fire questions in Primrose Kitten workbook <a href="https://www.youtube.com/watch?v=9bbCFUyIuWg&amp;feature=youtu.be">https://www.youtube.com/watch?v=9bbCFUyIuWg&amp;feature=youtu.be</a>	Electricity Recap your notes and questions, answer quick fire questions in Primrose Kitten workbook <a href="https://www.youtube.com/watch?v=62RyyfKZoYg">https://www.youtube.com/watch?v=62RyyfKZoYg</a>
<b>w/c</b> <b>31/03/2025</b> 5 weeks to go...	Organisation (paper 1) Recap your notes and questions, answer quick fire questions in Primrose Kitten workbook <a href="https://www.youtube.com/watch?v=QnsRz0Xhup8&amp;feature=youtu.be">https://www.youtube.com/watch?v=QnsRz0Xhup8&amp;feature=youtu.be</a>	Chemical and energy changes (paper 1) Recap your notes and questions, answer quick fire questions in Primrose Kitten workbook <a href="https://www.youtube.com/watch?v=L7829UGifpM">https://www.youtube.com/watch?v=L7829UGifpM</a>	Particles Recap your notes and questions, answer quick fire questions in Primrose Kitten workbook <a href="https://www.youtube.com/watch?v=bRzRjfoU-E">https://www.youtube.com/watch?v=bRzRjfoU-E</a>
<b>w/c</b> <b>07/04/2025</b> 4 weeks to go...	Cells (paper 1) Recap your notes and questions, answer quick fire questions in Primrose Kitten workbook <a href="https://www.youtube.com/watch?v=E9ZITAaRC-E&amp;feature=youtu.be">https://www.youtube.com/watch?v=E9ZITAaRC-E&amp;feature=youtu.be</a>	Rates of reaction and Organic Chemistry (paper 2) Recap your notes and questions, answer quick fire questions in Primrose Kitten workbook <a href="https://www.youtube.com/watch?v=OyXq2HYCKL0&amp;t=423s">https://www.youtube.com/watch?v=OyXq2HYCKL0&amp;t=423s</a>	Waves Recap your notes and questions, answer quick fire questions in Primrose Kitten workbook <a href="https://www.youtube.com/watch?v=AEFwEDC6DkQ">https://www.youtube.com/watch?v=AEFwEDC6DkQ</a>
<b>w/c</b> <b>14/04/2025</b> 3 weeks to go...	Bioenergetics (paper 1) (**ideally go over diseases as well**)	Chemical Analysis, Chemistry of the atmosphere and Using Resources (paper 2)	Electromagnetism Electromagnets, motor effect, generators

	<p>Recap your notes and questions, answer quick fire questions in Primrose Kitten workbook</p> <p><a href="https://www.youtube.com/watch?v=1nuYpKaQ3jA&amp;feature=youtu.be">https://www.youtube.com/watch?v=1nuYpKaQ3jA&amp;feature=youtu.be</a></p> <p><a href="https://www.youtube.com/watch?v=pq3B_sozPKo&amp;feature=youtu.be">https://www.youtube.com/watch?v=pq3B_sozPKo&amp;feature=youtu.be</a></p>	<p>Recap your notes and questions, answer quick fire questions in Primrose Kitten workbook</p> <p><a href="https://www.youtube.com/watch?v=DznhhA2QHUG">https://www.youtube.com/watch?v=DznhhA2QHUG</a></p> <p><a href="https://www.youtube.com/watch?v=vMKAHdoc-g0">https://www.youtube.com/watch?v=vMKAHdoc-g0</a></p> <p><a href="https://www.youtube.com/watch?v=xBUXqfa2gHo">https://www.youtube.com/watch?v=xBUXqfa2gHo</a></p>	<p>Recap your notes and questions, answer quick fire questions in Primrose Kitten workbook</p> <p><a href="https://www.youtube.com/watch?v=mnigg3MGsIY">https://www.youtube.com/watch?v=mnigg3MGsIY</a></p> <p><a href="https://www.youtube.com/watch?v=AEFWEDC6DkQ">https://www.youtube.com/watch?v=AEFWEDC6DkQ</a></p>
<p><b>w/c</b> <b>21/04/2025</b> 2 weeks to go...</p>	<p>Full paper 2 practise (either on Microsoft teams or from AQA website below)</p> <p><a href="https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources?f.Resource+type%7C6=Mark+schemes&amp;f.Resource+type%7C6=Question+papers&amp;sort=date&amp;num_ranks=20">https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources?f.Resource+type%7C6=Mark+schemes&amp;f.Resource+type%7C6=Question+papers&amp;sort=date&amp;num_ranks=20</a></p>	<p>Full paper 2 practise (either on Microsoft teams or from AQA website below)</p> <p><a href="https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources?f.Resource+type%7C6=Mark+schemes&amp;f.Resource+type%7C6=Question+papers&amp;sort=date&amp;num_ranks=20">https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources?f.Resource+type%7C6=Mark+schemes&amp;f.Resource+type%7C6=Question+papers&amp;sort=date&amp;num_ranks=20</a></p>	<p>Full paper 2 practise (either on Microsoft teams or from AQA website below)</p> <p><a href="https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources?f.Resource+type%7C6=Mark+schemes&amp;f.Resource+type%7C6=Question+papers&amp;sort=date&amp;num_ranks=20">https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources?f.Resource+type%7C6=Mark+schemes&amp;f.Resource+type%7C6=Question+papers&amp;sort=date&amp;num_ranks=20</a></p>
<p><b>w/c</b> <b>28/04/2025</b> 1 weeks to go...</p>	<p>Full paper 1 practise (either on Microsoft teams or from AQA website below)</p> <p><a href="https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources?f.Resource+type%7C6=Mark+schemes&amp;f.Resource+type%7C6=Question+papers&amp;sort=date&amp;num_ranks=20">https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources?f.Resource+type%7C6=Mark+schemes&amp;f.Resource+type%7C6=Question+papers&amp;sort=date&amp;num_ranks=20</a></p> <p><b>Paper 1 whole video</b></p> <p><a href="https://www.youtube.com/watch?v=mKYQ-K23Mr4">https://www.youtube.com/watch?v=mKYQ-K23Mr4</a></p> <p><b>Quick fire questions paper 1</b></p> <p><a href="https://www.youtube.com/watch?v=Oq-79mTaHHw">https://www.youtube.com/watch?v=Oq-79mTaHHw</a></p> <p><b>Paper 2 whole video</b></p> <p><a href="https://www.youtube.com/watch?v=Uqti-xPnT-8">https://www.youtube.com/watch?v=Uqti-xPnT-8</a></p> <p><b>Quick fire questions paper 2</b></p>	<p>Full paper 1 practise (either on Microsoft teams or from AQA website below)</p> <p><a href="https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources?f.Resource+type%7C6=Mark+schemes&amp;f.Resource+type%7C6=Question+papers&amp;sort=date&amp;num_ranks=20">https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources?f.Resource+type%7C6=Mark+schemes&amp;f.Resource+type%7C6=Question+papers&amp;sort=date&amp;num_ranks=20</a></p> <p>Chemistry paper 1 (whole)</p> <p><a href="https://www.youtube.com/watch?v=MpQ-3YAwNhl">https://www.youtube.com/watch?v=MpQ-3YAwNhl</a></p> <p>Quick fire Questions</p> <p><a href="https://www.youtube.com/watch?v=jrxM1Jdv2LM">https://www.youtube.com/watch?v=jrxM1Jdv2LM</a></p> <p>Chemistry paper 2 (whole)</p> <p><a href="https://www.youtube.com/watch?v=HJu8WtTzJU">https://www.youtube.com/watch?v=HJu8WtTzJU</a></p> <p>Quick fire Questions</p>	<p>Full paper 1 practise (either on Microsoft teams or from AQA website below)</p> <p><a href="https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources?f.Resource+type%7C6=Mark+schemes&amp;f.Resource+type%7C6=Question+papers&amp;sort=date&amp;num_ranks=20">https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources?f.Resource+type%7C6=Mark+schemes&amp;f.Resource+type%7C6=Question+papers&amp;sort=date&amp;num_ranks=20</a></p> <p><b>Paper 1 whole video</b></p> <p><a href="https://www.youtube.com/watch?v=xtw-Z0nIIA4">https://www.youtube.com/watch?v=xtw-Z0nIIA4</a></p> <p><b>Paper 1 quick fire questions</b></p> <p><a href="https://www.youtube.com/watch?v=FosCAjZTIWs">https://www.youtube.com/watch?v=FosCAjZTIWs</a></p> <p><b>Paper 2 whole video</b></p> <p><a href="https://www.youtube.com/watch?v=X1aMXCr75Kw">https://www.youtube.com/watch?v=X1aMXCr75Kw</a></p>

	<a href="https://www.youtube.com/watch?v=pPqVf5N2dT0">https://www.youtube.com/watch?v=pPqVf5N2dT0</a>	<a href="https://www.youtube.com/watch?v=RgeaVWnZ4fo">https://www.youtube.com/watch?v=RgeaVWnZ4fo</a>	<b>Paper 2 quick fire questions</b> <a href="https://www.youtube.com/watch?v=8aZPlgnX-2w">https://www.youtube.com/watch?v=8aZPlgnX-2w</a>
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