

Parent revision support guide. GCSE Edexcel Combined Science

This guide is to help you support your young person in the preparation for their GCSE science exam.

What your young person is preparing for:

6 exam papers
1 hour 10 mins, 60 marks each

Foundation Tier, grades achievable 11 - 55
or
Higher Tier, grades achievable 43 - 99

Every mark your young person gains contributes to an overall score out of 360 that will be awarded as 2 GCSE grades

Biology Paper 1: Tuesday, May 12, 2026, pm

Chemistry Paper 1: Monday, May 18, 2026, am
HALF TERM

Physics Paper 1: Tuesday, June 2, 2026, am.

Biology Paper 2: Monday, June 8, 2026, am.

Chemistry Paper 2: Friday, June 12, 2026, am

Physics Paper 2: Monday, June 15, 2026, am

Every mark counts

We want to work with you to support your young person to achieve their best possible grade in GCSE Science

How can you help?

(without any science knowledge)

Encourage revision **little and often** rather than cramming

- Ask them to **explain a topic out loud** (teaching you shows their learning)
- Help them to **focus and devote time in quiet and calm** space to revise their learning
- Test using **exam questions**, not just rewriting notes
- Encourage **marking with mark schemes, noting the keywords and processes looked for by the examiners**
- Focus on **weak topics**, not favourites.
- Describe required practical's, **method, variables, equipment, graphs**.

Recommended Weekly Revision Structure

- 2 – 3 sessions per subject per week, 20 – 30 minutes each.
- A mix of learning videos/notes
- practise questions
- reviewing mistakes

Exam tips to reinforce

- Always **read the question** carefully
- Check **command** words, think what they want you to do (**describe, explain, calculate**)
- Use key scientific terms
- Show working** in calculations, ensure you get every mark
- Use the number of marks as a guide e.g. **3 marks, 3 bullet points**

Best Free Revision Resources

Sparx science

Flashcards, Schools own use Quizlet

BBC Bitesize

Great for learning + revising content, short explanations, videos + quizzes

Physics and Maths Tutor

Best for topic-by-topic exam questions, mark schemes, revision notes + Required practical summaries

Save my exams

Excellent clear notes, diagrams, exam style Q's

Seneca

Focused topic summary with targeted Q's

Free Science lessons

Ideal for visual learners and tricky topics, clear topic by topic video explanations

Ask your young person about these and other resources we have shared with them; we have given them a selection so they can pick what works best for them

Final reminder

Your young person is familiar with resources, hopefully they will take the opportunity to use them to revise

Little and often is key

Consistency beats intensity

Past paper questions are more important than rereading/rewriting notes

Confidence grows with practice

We look forward to seeing your young person experience the success their efforts deserve
Anything else we can do to help, please ask

<u>Biology Paper 1 Topics</u>	<u>Chemistry Paper 1 Topics</u>	<u>Physics Paper 1 Topics</u>
<u>Key Concepts</u> Cells, Microscopy, Enzymes, Diffusion, Osmosis, Active Transport	<u>Key Concepts</u> Writing Equations, Hazards, The Atom History/Structure, Using the Periodic Table, Isotopes, Electronic Configuration, Bonding, Types of Structure/Properties Ionic/Metallic/Giant Covalent/Simple Molecular, Calculating Empirical Formula/Concentration	<u>Motion, Forces & Conservation of Energy</u> Distance, Displacement, Speed, Velocity, Acceleration, Distance/ Time & Velocity Time Graphs, Weight, Newtons 3 Laws, Resultant Forces, Stopping Distances, Reaction Times, Energy Stores, Conservation of Energy, Energy Transfers, Kinetic/Gravitational Potential Energy Stores & Calculations, Efficiency, Energy Resources Pros and Cons
<u>Cells and Control</u> Mitosis, Cell Division/Growth, Stem Cells, Nervous System, Synapses, Reflexes	<u>States of Matter</u> Changes, Purity, Distillation, Filtration, Crystallisation, Chromatography, Potable Water	<u>Waves & the Electromagnetic Spectrum</u> Wave properties, Speed, Behaviours, Refraction, EMS spectrum, Uses and Dangers
<u>Genetics</u> Sexual Reproduction, Meiosis, DNA, Genetic Diagrams, Variations, Mutations, Genome Proj	<u>Chemical Changes - Acids</u> Neutralisation, Indicators, reactions with metals/ oxides/hydroxides/carbonates, Soluble and Insoluble Salts, Preparing Dry Sample of Crystals	<u>Radioactivity</u> Atomic Model, Isotopes, Alpha/Beta/Gamma Radiation, Nuclear Equation, Background Radiation, Half Life, Irradiation, Contamination
<u>Natural Selection and Genetic Modification</u> Natural Selection, Evidence for Evolution, Classification, Selective Breeding, Genetic Engineering	<u>Chemical Changes - Electrolysis</u> Predicting products, Electrolysis of copper sulfate	<u>Physics Paper 2 Topics</u>
<u>Health, Disease & Development of Medicines</u> Health, Disease, STI's, Fighting Disease, Immunity, Immunisation, Antibiotics, Medicines, Non-Communicable Diseases, Obesity Cardiovascular Disease	<u>Extracting Metals and Equilibria</u> Reactivity Series, Carbon Extraction, Electrolysis Extraction, Recycling, Life Cycle Assessments	<u>Forces & Energy</u> Energy Transfers & Systems, Forces, Work Done, Wasted Energy, Power
<u>Biology Paper 2 Topics</u>	<u>Chemistry Paper 2 Topics</u>	<u>Electricity & Circuits</u> Current, Potential Difference, Resistance, I-V Graphs, Devices, Series, Parallel, Energy in Circuits, Electricity in the Home, Electrical Safety, Transformers, National Grid
<u>Key Concepts</u> Cells, Microscopy, Enzymes, Diffusion, Osmosis, Active Transport	<u>Key Concepts – same as paper 1</u>	<u>Magnetic Fields</u> Magnets, Magnetic Fields, Permanent/Induced, Electromagnets/Solenoid
<u>Plant Structures & Their Functions</u> Photosynthesis, Transport, Transpiration	<u>Groups of the Periodic Table</u> Group 1 / 7 / 0 their Properties and Reactions	<u>Matter</u> Density, Kinetic Theory & States of Matter, Specific Heat Capacity, Specific Latent Heat, Particle Motion in Gases, Forces & Elasticity
<u>Animal Coordination, Control & Homeostasis</u> Hormones, The Menstrual Cycle, Contraception, Homeostasis, Diabetes	<u>Rates of Reaction & Energy Changes</u> Measuring rates, Calculating Rates, Collision Theory, Catalysts, Endothermic/Exothermic, Bond Energies, Activation Energy	
<u>Exchange & Transport in Animals</u> Specialised Exchange Surfaces, Alveoli, Blood Vessels, Heart, Respiration	<u>Fuels and Earth Science</u> Fractional Distillation, Hydrocarbons, Combustion, Pollutants, Cracking, Atmosphere, Greenhouse Effect, Climate Change	
<u>Ecosystems and Material Cycles</u> Ecosystems and the Factors Affecting, Interdependence, Human Impacts on Biodiversity, Carbon/Water/Nitrogen Cycles		

