

Year 11 Science - Revision Plan Autumn 2 PPE

Below are some suggestions for revision that you can complete over the next six weeks – Please also make sure you are using the topic lists to ensure that you have covered everything needed for your exams. Any questions please speak to your science teacher. You also have Sparx Science that you can use to support your revision.

Week	Topic Area	Video Link	Activity	Exam question: EXTENSION
1 Biology	<u>Classification</u>	Classification Lesson GCSE Biology AQA Higher Combined Cognito	Can you remember the order of classification? Think of a rhyme or saying?	<p>Potatoes are a food crop.</p> <p>(a) Potato plants are classified as <u>eukaryota</u>. What type of classification group is <u>eukaryota</u>? Tick (✓) one box.</p> <p>Class <input type="checkbox"/></p> <p>Domain <input type="checkbox"/></p> <p>Kingdom <input type="checkbox"/></p> <p>Phylum <input type="checkbox"/></p> <p>Plants in the same genus as potatoes have been studied by scientists. Describe one way a new plant species could be identified as being in the same genus as potatoes.</p> <hr/> <hr/> <p>(1)</p> <p>Scientists have collected and stored seeds from species in the same genus as potatoes. In the future, these seeds may be used for genetic modification of potato plants. Genetically modified potato plants could help supply food to the human population as the climate changes. Explain why genetic modification of crop plants may be important for the human population to survive climate change.</p>
1 Chem	Organic Chemistry	Alkanes & Alkenes Organic Chemistry FuseSchool	Mind map Post it notes for key words	7.1 Carbon Compounds as Fuels & Feedstock (F) QP.pdf 7.1 Carbon Compounds as Fuels & Feedstock (F) MS.pdf
1 Phys	Forces	Contact & Non-contact Forces Lesson GCSE Physics AQA Higher Combined Cognito	Watch the videos and make quick recall questions of each of the video.	Answer the questions on the cognito videos to secure understanding

		Scalar & Vector Quantities Lesson GCSE Physics AQA Higher Combined Cognito		
WEEK 2				
2 Biology	Variation and evolution	Variation & Evolution Lesson GCSE Biology AQA Higher Combined Cognito	Use revision cards Post it notes around the house with key terms	Variation & Evolution Exam-style Questions GCSE Biology AQA Higher Combined Cognito
2 Chem	Climate change	GCSE Chemistry Revision "Climate Change"	Revision cards	9.2 Carbon Dioxide & Methane as Greenhouse Gases (F) QP.pdf 9.2 Carbon Dioxide & Methane as Greenhouse Gases (F) MS.pdf
2	Forces	Newton's 1st & 2nd Laws Lesson GCSE Physics AQA Higher Combined Cognito	Can you mind map all of Newtons Law of Motion? Give examples Equations?	Forces and Motion (F) QP.pdf Forces and Motion (F) MS.pdf Forces and Motion (H) QP.pdf Forces and Motion (H) MS.pdf
Week 3				
3 Biology	Required Practical - Quadrats	Field Investigations Lesson GCSE Biology AQA Higher Combined Cognito	Bullet point the practical Revision cards	Investigating Distribution & Abundance Exam-style Questions GCSE Biology AQA Higher Combined Cognito
3 Chem	Rates	GCSE Chemistry - Rates of Reaction - How to Measure it How to Show it on Graphs (2026/27 exams)		6.1 Rate of Reaction (H) QP - AQA Chemistry GCSE 6.1 Rate of Reaction (H) MS - AQA Chemistry GCSE 6.1 Rate of Reaction (F) QP - AQA Chemistry GCSE 6.1 Rate of Reaction (F) MS - AQA Chemistry GCSE
3	Waves	Longitudinal & Transverse Waves Lesson GCSE Physics AQA Higher Combined Cognito	Flash card what longitudinal and transverse waves are Draw and label with definitions	Waves 1 QP.pdf Waves 1 MS.pdf
Week 4				
4 Biology	Punnett squares	Genetic Diagrams & Punnet Squares Lesson GCSE Biology AQA Higher Combined Cognito	Revision cards – make flash cards with the key terms.	Biology Exam Qs by Topic GCSE Biology AQA Higher Combined Cognito Combined Trilogy papers Genetic inheritance and response module

		DNA 2 - Key Terms Lesson GCSE Biology AQA Higher Combined Cognito		
4 Chem	Waste water treatment	GCSE Chemistry - Potable Water - Treating Freshwater Desalinating Seawater (2026/27 exams)	Mind map	10.1 Using the Earth's Resources and Potable Water (H) QP - AQA Chemistry GCSE 10.1 Using the Earth's Resources and Potable Water (H) MS - AQA Chemistry GCSE 10.1 Using the Earth's Resources and Potable Water (F) QP - AQA Chemistry GCSE 10.1 Using the Earth's Resources and Potable Water (F) MS - AQA Chemistry GCSE
4 Physics	Electromagnetism	Electromagnetism Lesson GCSE Physics AQA Higher Combined Cognito	Answer the questions from the cognito video to secure understanding	Magnetism and Electromagnetism (F) QP - AQA Physics GCSE Magnetism and Electromagnetism (F) MS - AQA Physics GCSE Magnetism and Electromagnetism (H) QP - AQA Physics GCSE Magnetism and Electromagnetism (H) MS - AQA Physics GCSE
Week 5				
5 Biology	Biodiversity	Maintaining Biodiversity Lesson GCSE Biology AQA Higher Combined Cognito How Humans Reduce Biodiversity Lesson GCSE Biology AQA Higher Combined Cognito	Mind map What is biodiversity Uses and factors reducing Biodiversity	Biodiversity & Human Impact on the Environment Exam-style Questions GCSE Biology AQA Higher Combined Cognito
5 Chem	Early atmosphere	GCSE Chemistry – Earth's Early Atmosphere Explained	Create a timeline on the changes of earth's early atmosphere to now	9.1 Composition & Evolution of the Earth's Atmosphere (F) QP - AQA Chemistry GCSE 9.1 Composition & Evolution of the Earth's Atmosphere (F) MS - AQA Chemistry GCSE 9.1 Composition & Evolution of the Earth's Atmosphere (H) QP - AQA Chemistry GCSE 9.1 Composition & Evolution of the Earth's Atmosphere (H) MS - AQA Chemistry GCSE

5	Motor Effect	Motor Effect Lesson GCSE Physics AQA Higher Combined Cognito	Revision cards	The Motor Effect (H) QP.pdf The Motor Effect (H) MS.pdf The Motor Effect (F) QP.pdf The Motor Effect (F) QP.pdf
Week 6				
6 Biology	Diabetes	Regulating Glucose Lesson GCSE Biology AQA Higher Combined Cognito Diabetes Lesson GCSE Biology AQA Higher Combined Cognito	Mind map Write the feedback loop for how the body responds to increased insulin	Biology Lessons GCSE Biology AQA Higher Combined Cognito Cognito – past papers – by topic – homeostasis and response – hormonal control in humans
6 Chem	Crude oil	GCSE Chemistry - Cracking Crude Oil & Alkenes	Revision cards	7.1 Carbon Compounds as Fuels & Feedstock (H) QP - AQA Chemistry GCSE 7.1 Carbon Compounds as Fuels & Feedstock (H) MS - AQA Chemistry GCSE 7.1 Carbon Compounds as Fuels & Feedstock (F) QP - AQA Chemistry GCSE 7.1 Carbon Compounds as Fuels & Feedstock (F) MS - AQA Chemistry GCSE
6	Forces - Stopping distances Velocity and distance time graphs	Stopping Distances Lesson GCSE Physics AQA Higher Combined Cognito Distance-time Graphs Lesson GCSE Physics AQA Higher Combined Cognito Velocity-time Graphs Lesson GCSE Physics AQA Higher Combined Cognito	Revision cards	Forces and Their Interactions (H) QP.pdf Forces and Their Interactions (H) MS.pdf

TRIPLE Biology

All the above, plus:

Plant hormones and required practical	<p>Plant Hormones 1 - Auxins Lesson GCSE Biology AQA Higher Triple Cognito</p> <p>Plant Hormones 2 - Commercial Uses Lesson GCSE Biology AQA Higher Triple Cognito</p> <p>Plant Responses Lesson GCSE Biology AQA Higher Triple Cognito</p> <p>GCSE Biology Revision "Required Practical 8: Plant Responses" (Triple)</p>	Revision cards.	<p>Clear use of key terms, IV, DV and CV for the Required practical</p> <p>Can you think of the uses for these hormones?</p> <p>Plant Hormones Exam-style Questions GCSE Biology AQA Higher Triple Cognito</p>
Hormones in animals	<p>Thyroxine and adrenaline – Higher - Coordination and control - The human</p>	Write the feedback loops and how these work.	<p>(c) Explain how ADH affects the production and concentration of urine by the kidneys.</p>

	endocrine system - AQA - GCSE Biology (Single Science) Revision - AQA - BBC Bitesize		
Reaction time practical	Reaction Time Lesson GCSE Biology AQA Higher Triple Cognito	Revision cards for the IV, DV and CV	<p>Q1. Many human actions are reflexes. (a) Which statement describes a reflex action? Tick (✓) one box.</p> <p>A reflex action does not need a sense organ. <input type="checkbox"/></p> <p>A reflex action is a slow action. <input type="checkbox"/></p> <p>A reflex action is automatic. <input type="checkbox"/></p>

TRIPLE Chem

All the above, plus:

Testing for negative ions	GCSE Chemistry - Tests for Anions - Carbonate, Sulfate and Halide Ions (2026/27 exams)	Make flash cards as you watch the video	8.3 Identification of Ions by Chemical & Spectroscopic Means (H) QP.pdf 8.3 Identification of Ions by Chemical & Spectroscopic Means (H) MS.pdf 8.3 Identification of Ions by Chemical & Spectroscopic Means (F) QP.pdf 8.3 Identification of Ions by Chemical & Spectroscopic Means (F) MS.pdf
Haber process	GCSE Chemistry - The Haber Process Explained (2026/27 exams)	Create a flow diagram for the haber process and bullet point 5 facts about optimising conditions.	10.4 The Haber Process and the Use of NPK Fertilisers (H) QP.pdf 10.4 The Haber Process and the Use of NPK Fertilisers (F) MS.pdf

			10.4 The Haber Process and the Use of NPK Fertilisers (H) MS.pdf 10.4 The Haber Process and the Use of NPK Fertilisers (F) QP.pdf
HIGHER: Polymers	GCSE Chemistry - Naturally Occurring Polymers - Polypeptides, DNA, and Carbohydrates (2026/27 exams) GCSE Chemistry - Addition Polymers & Polymerisation (2026/27 exams) GCSE Chemistry - Condensation Polymers (Polyesters) (2026/27 exams)	Watch the videos and draw some labelled diagrams showing different polymers and how they are formed.	7.3 Synthetic & Naturally Occurring Polymers (H) MS.pdf 7.3 Synthetic & Naturally Occurring Polymers (H) QP.pdf

TRIPLE Physics

All the above, plus:

Red shift	GCSE Physics - What is Red Shift? (2026/27 exams)	Produce revision questions from the video	Red Shift (F) QP.pdf Red Shift (F) MS.pdf
Lenses	GCSE Physics Revision "Concave Lenses" (Triple) GCSE Physics Revision "Convex Lenses" (Triple) - YouTube GCSE Physics Revision "Magnifying Glasses" (Triple) - YouTube	Construct and label ray diagrams through a concave and a convex lens. The 3 rd video produces a useful summary and calculations	GCSE AQA Physics Topic 6 – Lenses - ExamQA

Errors in investigations	<u>GCSE Science Revision "Random Errors"</u> <u>GCSE Science Revision "Systematic Errors"</u>	Create a key word sheet explaining the different types of errors in science.	<u>Random errors - Obtaining, analysing and evaluating results – WJEC - GCSE Physics (Single Science) Revision - WJEC - BBC Bitesize</u>