Y11

Preparation for SKI week

Contents

General Subject support

KS3 - England - BBC Bitesize	An excellent resource for most subjects
Seneca learning	Provides resources and quizzes and has free parent and student logins

English

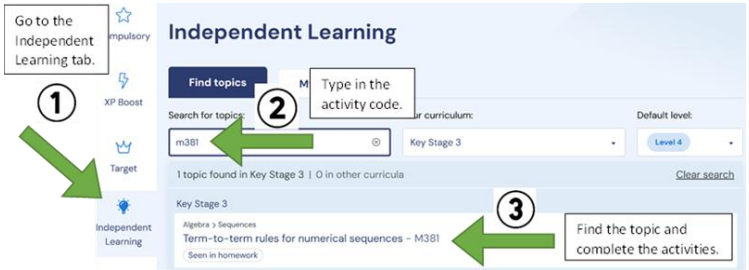
Assessment	Revision help
English Literature Paper 2: Section A - 'An Inspector Calls' Section B – Cluster Poetry Section C – Unseen Poetry	Make revision cards / posters on key characters and themes in AIC and at least 5 of your favourite poems on a range of themes from the cluster. An Inspector Calls: Study Guide | SparkNotes AQA poetry anthology - GCSE English Literature - BBC Bitesize 2025 Ultimate Guide to AQA English Literature Paper 2 Section C: Unseen Poetry Complete past papers and ask your teacher for feedback (see Arbor).

Maths

Assessment	Revision help
Paper 1: 1hour 30 minutes (non-calculator) Paper 2: 1hour 30 minutes (calculator) Paper 3: 1hour 30 minutes (calculator) Use Maths Watch to watch quick video with examples and explanations MathsWatch Username – this is your school email address Password - carringtonschool	Yr 11 Revision list Foundation Yr 11 Revision list Higher Use Maths Genie for Questions and answers - Maths Genie • Learn GCSE Maths for Free

Sparx Maths

If you want to improve upon the areas you find challenging, then use the Sparx codes from our Big Picture sheets to do some independent practice.



Science

Year	Assessment	Revision help
Core Science	**Biology** – Paper 1 **Chemistry** – Paper 2 **Physics** – Paper 3	GCSE Combined Science - Edexcel - BBC Bitesize Biology Paper 1 Quizlet Chemistry Paper 1 Quizlet FOUNDATION Revision lists Paper 1 – Biology Focus • Cell Biology: - Differences between plant and animal cells - Functions of cell organelles - DNA structure and chromosomes • Genetics & Variation: - Genes, inheritance, and variation - Selective breeding and genetic modification • Evolution & Fossils: - Human evolution timeline (Ardi, Lucy, Homo species) - Dating fossils (carbon dating, stratigraphy) • Health & Disease: - Communicable vs non-communicable diseases - Chlamydia and tuberculosis prevention - Waist-to-hip ratio and obesity risks • Cell Processes: - Mitosis and properties of daughter cells - Osmosis and diffusion (potato and agar cube experiments) Nervous System: - Reflex arc and motor neurone structure - Myelin sheath function and synapses **BBC Bitesize Biology Revision:** https://www.bbc.co.uk/bitesize/subjects/z9ddmp3 • Paper 2 – Chemistry Focus • States of Matter: - Particle arrangements in solids, liquids, gases - Changes of state (melting, boiling, sublimation) • Separation Techniques: - Chromatography and Rf values - Fractional distillation apparatus and function • Reactivity & Metals: - Reactivity series and metal extraction

		- Reactions of metals with acids - Identifying hydrogen gas (squeaky pop test) • Chemical Calculations: - Relative formula mass (e.g. $Zn(NO_3)_2$) - Percentage composition and concentration • Atomic Structure: - Subatomic particles and atomic number - Periodic table structure and electronic configuration • Ionic Compounds: - Precipitation reactions (e.g. $AgNO_3$ + KCl) - Conductivity in solids vs solutions • Hazard Symbols: - Identifying and interpreting safety symbols **BBC Bitesize Chemistry Revision:** https://www.bbc.co.uk/bitesize/subjects/zs6hvcw ⚡ Paper 3 – Physics Focus • Waves: - Electromagnetic spectrum (uses and dangers) - Refraction and wave graphs - Transverse waves (e.g. earthquake waves) • Forces & Motion: - Velocity-time graphs and acceleration - Newton's laws and resultant forces - Calculating acceleration and distance • Energy Transfers: - Gravitational potential and kinetic energy - Energy stores and conversions • Radioactivity: - Half-life and decay calculations - Identifying alpha, beta, gamma radiation - Absorber experiments and count rates • Measurements & Graphs: - Using rulers and light gates - Graph gradients and interpreting results • Wave Properties: - Amplitude, wavelength, wave speed - Practical methods to measure wave speed **BBC Bitesize Biology Revision:** https://www.bbc.co.uk/bitesize/subjects/z9ddmp3 **BBC Bitesize Physics Revision:** https://www.bbc.co.uk/bitesize/subjects/zpm6fg8 **Higher Revision list** 🧬 Paper 1 – Biology Focus

		• Communicable and non-communicable diseases • Tuberculosis transmission and prevention • Obesity and waist-to-hip ratio calculations • Cancer and mitosis • Osmosis and diffusion in cells • Agar cube diffusion experiments • Human evolution and fossil evidence • Tool use in early humans • Three-domain classification system • Structure and function of bacteria • Specific immune response • Reaction time experiments • Neurone structure and impulse speed • Genetic disorders: cystic fibrosis and Huntington's • DNA extraction and structure *BBC Bitesize:* *https://www.bbc.co.uk/bitesize/subjects/zrkw2hv* Paper 2 – Chemistry Focus • Atomic structure and isotopes • Ionic compounds and precipitation reactions • Conductivity in solutions and solids • Periodic table and electronic configuration • Boiling points and molecular structure • Separation techniques: distillation and chromatography • Metal extraction and reactivity • Calculations: relative formula mass, percentage composition • Electrolysis and ionic equations • Ammonia production: Haber process and equilibrium • Reversible reactions and dynamic equilibrium *BBC Bitesize:* *https://www.bbc.co.uk/bitesize/subjects/zs6hvcw* Paper 3 – Physics Focus • Forces and motion: acceleration, resultant force • Velocity-time and distance-time graphs • Wave properties: amplitude, wavelength, speed • Transverse waves and earthquake waves

		• Refraction and light experiments • Energy transfers: GPE, KE, dissipation • Momentum and Newton's laws • Radioactivity: alpha, beta, gamma decay • Half-life and activity units • Beta particle emission and nuclear changes *BBC Bitesize:* *https://www.bbc.co.uk/bitesize/subjects/zsxfnbk*

Triple Biology	**Biology** – Paper 1	GCSE Biology (Single Science) - Edexcel - BBC Bitesize
		
		Biology Paper 1 Quizlet
		
		Complete Tassomai questions www.tassomai.com
		
		Revision list
		1. Health and Nutrition
		• Interpreting percentile growth charts
		• Testing for fats in food
		• Products of fat digestion
		• Purpose of calorimetry
		2. Communicable and Non-Communicable Diseases
		• Preventing the spread of tuberculosis
		• Definition and examples of non-communicable diseases
		• Waist-to-hip ratio and health risks
		• Properties of cells produced by mitosis
		3. Cell Transport
		• Osmosis in plant cells (potato in distilled water)
		• Diffusion in agar cubes
		  ○ Surface area to volume ratio
		  ○ Calculating volume
		  ○ Time taken for diffusion
		4. Genetics and Reproduction
		• Mendel's experiments and conclusions
		• Dominant and recessive alleles (Punnett squares)
		• Environmental control in genetic experiments
		• Asexual vs sexual reproduction
		• Diploid nucleus definition
		5. Evolution and Classification
		• Fossil evidence of *Homo habilis* and *Australopithecus afarensis*
		• Causes of extinction
		• Differences between prokaryotes and eukaryotes
		• Three-domain classification system

		6. Disease and the Immune System • Structure and function of bacteria • Calculating magnification • Symptoms and transmission of cholera • Specific immune response **7. Brain and Medical Technologies** • CT and PET scans for tumour detection • Role of glucose in PET scans • Monoclonal antibodies: production and diagnostic use **8. Nervous System and Reaction Time** • Reaction time experiments (ruler drop test) • Median calculation • Controlling variables • Effect of caffeine on reaction time • Structure and function of sensory neurones • Neurone diameter and impulse speed **9. Genetic Disorders** • Cystic fibrosis: inheritance and symptoms • Huntington's disease: dominant allele inheritance • DNA extraction ○ Process and structure of DNA **10. Ecology and Biotechnology** • Population growth trends in Europe • Fertilisers: advantages, disadvantages, and experimental improvements • Biological control (ladybirds vs pesticides) • Tissue culture for cloning plants
Triple Chemistry	**Chemistry** – Paper 1	GCSE Chemistry (Single Science) - Edexcel - BBC Bitesize Chemistry Paper 1 Quizlet www.tassomai.com Complete Tassomai questions Detailed revision list **1. Chemical Cells and Fuel Cells** • Electrolytes and voltage in chemical cells • Reactivity series and voltage output • Dot and cross diagram for oxygen molecule • Advantages of hydrogen-oxygen fuel cells **2. Atomic Structure and Isotopes** • Subatomic particles: charge and mass • Atomic number and electrical neutrality • Calculating relative atomic mass from isotopic data **3. Ionic Compounds and Precipitation** • Reaction between silver nitrate and potassium chloride • Identifying and separating precipitates

		• Electrical conductivity in ionic solutions and metals
		4. Acids, Fertilisers, and Atom Economy
		• Litmus colour change and pH limitations
		• Uses of fertilisers in agriculture
		• Percentage yield and atom economy calculations
		• Improving atom economy in reactions
		5. Periodic Table and Properties of Gases
		• Period identification using electronic configuration
		• Boiling points and intermolecular forces
		• Energy and movement of molecules during cooling
		• Separation of gases by fractional distillation
		• Balanced equation for nitrogen and oxygen reaction
		6. Extraction of Metals
		• Thermal decomposition of malachite
		• Testing for carbon dioxide with limewater
		• Mass calculations using relative atomic masses
		• Comparing methods of copper extraction using carbon
		7. Metals and Alloys
		• Properties of transition metals
		• Sacrificial protection using zinc
		• Graphing alloy strength vs. nickel content
		• Interpreting and explaining alloy strength trends
		8. Magnesium Sulfate and Electrolysis
		• Solubility of sulfates
		• Percentage by mass and mole calculations
		• Electrolysis of magnesium sulfate
		  ○ Ion identification
		  ○ Oxidation and reduction reactions
		  ○ Ionic equations
		9. Ammonia and the Haber Process
		• Testing for ammonia gas
		• Dynamic equilibrium explanation
		• Effect of temperature and pressure on yield
		• Reversible reactions and ammonium chloride formation
		10. Titration and Neutralisation
		• Effect of dilution on pH and H^+ concentration
		• Calculating concentration in g/dm^3
		• Titration setup and errors
		• Using titration data to calculate unknown concentration

Triple Physics	**Physics** – paper 1	GCSE Physics (Single Science) - Edexcel - BBC Bitesize Complete Tassomai questions

		1. Sound Waves • Infrasound and ultrasound frequencies • Echo time calculations using speed and distance • Why humans cannot hear infrasound **2. Forces and Motion** • Resultant force and acceleration ($F = m \times a$) • Air resistance calculation • Investigating force on a sloping runway • Graph interpretation: force vs. height • Gradient calculation from a graph **3. Waves** • Amplitude and wavelength from diagrams • Measuring wave speed in water • Transverse waves and their effects (e.g. earthquake waves) • Distance calculation using wave speed and time **4. Radioactivity and Nuclear Energy** • Gamma rays and ionising radiation • Nuclear reactor components (e.g. control rods) • Fluorine-18 decay curve and positron interactions • Fission chain reactions • Power comparison between countries (ratio calculation) **5. Light and Refraction** • Refraction experiment with glass block and ray box • Wavelength and frequency changes in different media • Speed change of light using $v = f \times \lambda$ **6. Energy and Motion** • Gravitational potential energy ($\Delta GPE = m \times g \times h$) • Acceleration from velocity and distance • Energy dissipation during motion • Velocity change on curved track • Gradient from distance-time graph **7. Lenses and Electromagnetic Radiation** • Lens power and focal length • Virtual and real image examples • Critical angle and total internal reflection • Temperature balance of celestial bodies (e.g. Ceres) **8. Momentum and Newton's Laws** • Momentum calculation ($p = m \times v$) • Time of contact during a kick • Newton's third law in action • Conservation of momentum in collisions **9. Radioactive Decay**

		• Activity units (Bq) • Penetrating abilities of alpha, beta, gamma • Kinetic energy of beta particles • Beta plus decay and nuclear changes • Comparison of alpha and gamma decay **10. Astronomy and Cosmology** • Star data: mass and age • Likelihood of becoming a black hole • Nuclear fusion and mass-energy conversion ($E = m \times c^2$) • Evidence for the Big Bang Theory

MFL

Assessment	Revision help
Spanish Writing, listening and reading skills	Use the booklet provided to revise the 90 words writing Use your own notes in your book to go through the topics covered Complete vocabulary builders on Kerboodle - Sign In GCSE Spanish: Writing Paper Walkthrough (AQA Higher) GCSE Spanish Writing (Foundation): Complete Walkthrough Identity, lifestyle and free time - GCSE Spanish - BBC Bitesize Describing daily routines and future plans - GCSE Spanish - BBC Bitesize
French Baseline assessment completed on 'Reading' Foundation Writing skill, **Section A:** translation, Both Foundation and Higher (Foundation French to English, Higher English to French at (10 marks) **Section B**: 40 words foundation writing to 5 bullet points, **Section C**: 90 words including 4 bullet points Higher/Foundation (16 marks)	1. Vocab booklet festivals, celebrations and celebrities and francophone culture, healthy living, family and relationships 2. Grammar booklet 3. 90 words essay overlaps with foundation and higher. https://www.youtube.com/watch?app=desktop&v=tWUqR181Pmk 4. Grammar sheets and checklist for 90 words task and 150 words task 5. Sentence builders for 90 words 6. Star sentences for 150 words.

History

Assessment	Revision help

Students will sit a full GCSE **Paper 2 on The Cold war and Early Elizabethan England 1558-1588**. Questions will include a mix of short answer, source response and essay questions. The exam will be 90 minutes in length.	Students can access all the lesson materials via: Carrington History - Home Students will need their MS login to do so. Students and parents have also already been emailed a digest of useful online resources including Edexcel GCSE History 2024 Revision Students have hardcopy revision materials to support them.

Geography

Assessment	Revision help
Students will take a modified GCSE paper on the following Year 10 and 11 topics: • Weather and Climate • Coasts and Rivers • Fieldwork • Development dynamics	Students can access all the lesson materials via: Carrington Geography - Home Students will need their MS login to do so. Students and parents have also already been emailed a digest of useful online resources including Edexcel GCSE Geography Revision

Psychology

Assessment	Revision help
1 hour 30 mins SKI1 Assessment covering the following topics: -Social Influence -Criminal Psychology -Development -Sleep and Dreaming (all that we've covered to the end of Autumn Term 1) - Research Methods	Ensure you've revised all of your case studies. Very important: Use PPQs, PPQs, PPQs and mark schemes please: GCSE - Psychology (9-1) - J203!

PE

Assessment	Revision help
Ongoing PSA assessment.	Ongoing PSA assessment.

Economics

Assessment	Revision help
Paper 1 Mock Exam	Revision guides (Section 1 and 2) https://studyrocket.co.uk/revision/gcse-economics-ocr Mr Goff - You Tube https://www.savemyexams.com/gcse/economics/ocr/past-papers/ (Past Papers – Use Paper 1)

Computing and Computer Science

Assessment	Revision help
Edexcel Computer Science Paper 1 & Paper 2 **Paper 1** Computational thinking • understanding of what algorithms are, what they are used for and how they work • ability to follow, amend and write algorithms; ability to construct truth tables. Data • understanding of binary, data representation, data storage and compression. Computers • understanding of hardware and software components of computer systems and characteristics of programming languages. Networks • understanding of computer networks and network security.	**Seneca Revision** Computational Thinking Revision Data, Binary and Compression Revision Computers Revision Networks Revision Issues and Impact Revision **BBC Bitesize** Edexcel Computer Science For both Paper 1 and Paper 2.

Issues and impact • awareness of emerging trends in computing technologies, and the impact of computing on individuals, society and the environment, including ethical, legal and ownership issues. **Paper 2** Problem solving with programming. • understanding what algorithms are, what they are used for and how they work in relation to creating programs. • understanding how to decompose and analyse problems. • ability to read, write, refine and evaluate programs.	