# Y10 Mock revision

Subject	Topics covered in mock papers	Revision links
English	Paper 1 English Language Reading fiction texts - writing about language, structure and evaluating texts. Creative writing telling a story using a range of descriptive writing techniques.  Paper 1 English Literature Macbeth - analysing a passage and the text as a whole.	https://www.bbc.co.uk/bitesize/subjects/zr9d7ty https://www.bbc.co.uk/bitesize/subjects/zckw2hv https://www.sparknotes.com/shakespeare/macbeth/ GCSE Pod Seneca SCENE for creative writing Setting Character Explain scenario Narrow to detail Exciting ending
Maths	Paper 2 FOUNDATION (non calc)  Lines and order of symmetry, Multiplying and subtracting fractions, Properties of triangles, quadrilaterals and 3D shapes, Mean, median, rage and interpretation, Conversion graphs - using to interpret, Time series graphs, Conversion between FDP, Understanding roots and powers including negative indices, Solving money problems, Rearranging formula, Equation of straight lines, Drawing quadratic graphs, Double ratio problems, Decimal division, Estimation - rounding, Standard form, Fibonacci sequences, Expanding single and double brackets, Factorising quadratics and solving them, Probability and sample space, decimal addition and problem solving, Reverse percentages, Transformations - enlagement, rotation, translation, Time series graphs and trends	

/ interpretation

## Paper 3 FOUNDATION (calc)

Drawing and interpreting pictograms, BIDMAS, Converting between FDP, Interpreting wordy algebra questions, Outcomes for probability. Ordering decimals. Showing inequalities on a number line, Grouping like terms simplifying expressions, Solving multi step equations, Wordy money problems, Percentage increase, Combinations and probability, Triangle and quadrilateral properties. Substitution into a formula. Understand and interpret indices, Find angles in pie charts, Construct the perpendicular bisector of a line, Draw and interpret pie charts, Evaluate graphs, Calculate an estimate of a mean from grouped data, Interior and exterior angles of polygons, Straight line graphs gradient and y-intercept, Speed distance time calculations, Trigonometry, Estimation and standard form, Scale drawing and estimation, Proportional and inverse proportion graphs, Problem solving involving area and algebra.

### Paper 5 HIGHER (non calc)

Calculate with roots and integer powers, Standard form calculation, Find estimate of calculation using significant figures, Complete table, Calculate probability from table, Calculate density, Proportion problem, Evaluate results obtained, Number problem involving fractions, Calculate with reverse percentages. Complete time series graph. Interpret time series graph, Interpret time series graph, Evaluate assumption, Rearrange formula, Draw rotation, Translate by vector, Describe fully single transformation. Percentage change calculation, Find area of sector of a circle, Trigonometry in rightangled triangles, Trigonometry in rightangled triangles, Identify region on graph that satisfies inequalities, Find interquartile range from cumulative

frequency graph, Interpret cumulative frequency graph, Work out next term in sequence, Find nth term in sequence, Ratio and geometry problem, Complete the square on a quadratic equation, Solve quadratic equation, Sketch graph and identify turning point, Find angle using circle theorems, Find angle using circle theorems, Algebraic proof, Algebraic proof

## Paper 6 HIGHER (calc)

Complete scatter diagram, Calculate ratio and simplify, Misrepresenting data, Calculate estimate of mean speed, Evaluate results, Problem involving standard form, Truncation and inequality symbols. Use scale of a map, Use scale of a map, Express scale of map in the form 1: n, Ratio problem, Probability calculation, Complete tree diagram, Calculate probability using tree diagram, Interpret velocity-time graph, Interpret velocity-time graph, Work out distance travelled from velocity-time graph, Identify graph showing direct proportion, Identify graph showing inverse proportion, Sketch graph showing direct proportionality, Problems involving angles in polygons, Algebraic area problem, Calculate exact perimeter of a shape, Recurring decimals, Use subscript notation for term-to-term rules, Bounds problem, Find intersections of line and a circle, Sketch trigonometric graph, Interpret trigonometric graph, Calculate area of triangle, Parallel vectors. Vector arithmetic. Simplify algebraic fractions

## Science

## Paper 1 - Biology

## **B1** Cell Structures:

What happens in cells.

Microscopes, Parts of a cell,DNA

structure, enzymes

Respiration. Aerobic and

https://www.bbc.co.uk/bitesize/examspecs/z2dqqhv

Seneca learning (select GCSE Science OCR Gateway) https://www.senecalearning.c om/ anaerobic respiration, monomers of carbohydrates, proteins and lipids.

Photosynthesis: equation, experiments to test rates, variables that affect rate

## B2 Scaling Up:

Supplying the cell. diffusion, active transport, osmosis, mitosis, stem cells

The challenge of size exchange surfaces, circulatory system, heart and blood, plant transport including xylem, phloes, transpiration, translocation, potometers.

## B3 Organism level systems:

The nervous system. structure of nervous system, types of neurone, how responses happen, reflex arcs.

The endocrine system. hormones in control systems, hormones in reproduction and contraception.

Maintaining internal environments. Homeostasis, insulin and diabetes

## Paper 2 Chemistry and Physics

## C1 Particles

The particle model. *physical and* chemical change, states of matter, state changes

Atomic structure. atom scientists and their ideas, numbers of protons, neutrons, electrons and their sizes and charges

# C2 Elements, Compounds, Mixtures

Purity and separation. Formula masses, empirical formulae, mixtures and

pure substances, filtration, crystallisation, distillation, chromatography (paper, TLC, gas)

Bonding. metals/non metals, periodic table (arrangement) groups and periods affecting electron configuration, ionic, covalent, metallic, giant covalent bonding, polymers, dot cross diagrams

Properties of materials. Carbon allotropes, effect of bonds on melting point, the effect of bonds on physical properties,

## P1 Matter

The particle model.as C1 particles, measuring density, mass and volume

Changes of state. Specific heat capacity, specific latent heat, energy change on heating/cooling/changing state, gas temperature and pressure relationships.

### P2 Forces

Motion. Measuring speed, distance, time, convert units, vectors and scalars, distance/time and velocity/time graphs (H: using areas under graphs), acceleration, average speed for multi-part journeys.

Newton's Laws. describe interactions between objects, force diagrams, Newton's 1st and 3rd laws, calculating work and power (H: vector diagrams of forces, terminal velocity, show balanced/unbalanced forces on diagrams and their effects, inertia,

	momentum, circular movement)  Forces in action.elastic/plastic distortions, hooke's law, linear and non linear extension, calculate spring constant, work done in stretching, define weight, mass and gravity, acceleration in free fall.	
History	<ul> <li>Life in Nazi Germany (youth, women, family life, standards of living)</li> <li>Hitler's rise to power (How he became chancellor, his control over the Nazi party, Reichstag Fire, Night of the Long Knives, Enabling Act)</li> <li>Support for the Nazi party (Great Depression, the lean years, Munich Putsch, Hitler's leadership)</li> <li>Remember to focus on source analysis skills and the ability to read and compare interpretations.</li> </ul>	GCSEPod - search Weimar and Nazi Germany  Quizlet - search Weimar and Nazi Germany  Youtube - https://www.youtube.com/watch?v=YjF_xTkCi7w&list=PL6in0laKnp63Y89v2rsPch4NHYNaokT  Quizizz: https://quizizz.com/admin/search/weimar%20and%20nazi%20germany  Kahoot: https://create.kahoot.it/search?filter=1&query=weimar%20and%20nazi%20germany&tags=weimar%20and%20nazi%20germany&tags=weimar%20and%20nazi%20germany
Geography	Natural Hazards - effects and responses. Tectonic Hazards - causes of Earthquakes and volcanoes (tectonic plates) Tectonic Hazards in contrasting countries (Nepal and Chile), Living with TH - management strategies. Weather Hazards - global atmospheric circulation, Tropical storms and why they develop, Effects of storms on people and the environment (Typhoon Haiyan) UK	Seneca Learning Website - Geography AQA, then select topic.  GCSE Bitesize - Geography  New GCSE 9-1 Geography

weather hazards, Somerset Level AQA Revision Guide (with Flooding. Climate Change - evidence, Online Ed) - New Edition for causes (physical and natural) effects, 2020 exams & beyond (CGP managing CC GCSE Geography 9-1 Ecosystems - global ecosystems. Revision) Tropical Rainforests - characteristics, GCSE AQA deforestation, economic and Geography for the environmental impacts, Managing the grade 9-1 exams -TRF. complete revision and Coasts - physical processes, coastal landforms, coastal landscapes (Dorset), practice guide. ISBN: coastal management strategies. 9781 78294 613 7 River Landscapes - shape of river valleys, processes (erosion, transportation and deposition) landforms, management strategies against flooding (hard and soft engineering) French For the Reading, Writing and Listening **New GCSE revision guide** papers for Foundation Students: and workbook French CGP Topics to focus on: GCSE Grades 9-1. GCSE Pod and SENECA -Items you can buy whilst shopping and AQA GCSE FRENCH, shops. Seasons and the weather forecast. Holidays including types, activities and **DUOLINGO** - building up transport additional vocabulary Types of jobs, activities in the workplace The time Opinions, quantifiers, time phrases **BBC Bltesize Eduquas** Sporting activities GCSE French - work through the reading, Recycling items Differences between French and English writing and listening Schools activities. Positives and negatives of town/village life Forms of transport Directions Hotels and facilities Numbers Environment Festivals Holiday Family members Present tense endings About yourself School Recognising questions in French For the Reading, Writing and Listening papers for Higher Students

Differences between French and English

Schools

Positives and negatives of town/village life Time phrases and fractions Holiday verbs Character adjectives Higher numbers Family members Parts of the body Technology **Festivals** Places in a town Jobs and skills Environment including recycling and pollution and key verbs Holidays and festival activities **Opinions** Times Family members Under the influence - social issues School life World problems – migration Jobs and activities Extreme sports High level adjectives Technology present and past tense Health lifestyle present and past tense. Recognising questions in French Spanish For the Reading, Writing and Listening New GCSE revision guide papers for Foundation Paper Students: and workbook Spanish Topics to focus on: **CGP GCSE Grades 9-1.** GCSE Pod and SENECA -**Opinions** Transport AQA GCSE Spanish World of work **DUOLINGO** - building up Restaurants School additional vocabulary Recycling Free time activities **BBC Bitesize Eduquas** GCSE Spanish - work Holidays Present tense//preterite//conditional// through the reading, writing and listening future simple. activities. Personal information Recognising questions in Spanish and being able to respond to them. For the Reading, Writing and Listening papers for Higher Paper Students: Topics to focus on: **Opinions** Transport

	World of work Restaurant School and studies Recycling Free time activities Present tense//preterite//present perfect//conditional//future simple Technology Healthy lifestyle Recognising questions in Spanish and being able to respond to them.	
Computer Science		