



Year 11 Mock Exams

January 2020

Exam Topics

Biology - Edexcel

The following topics will be examined in the 1 hour 45 min Biology mock exam:

- SB1 Key Concepts in Biology
- SB2 Cells and Control
- SB3 Genetics
- SB4 Natural Selection and Genetic Modification
- SB5 Health, Disease and the Development of Medicines
- SB6 Plant Structures and their Functions
- SB7 Animal Coordination, Control and Homeostasis

Specification booklets available online provide a checklist of the detailed content for each of the above.

Chemistry - Edexcel

Students should be familiar with all the Chemistry topics studied since Year 9. With reference to the Edexcel specification documents this equates to topics 0 to 8 plus points 9.10 - 9.21.

Classical Civilisation - OCR

For both papers, each topic has prescribed sources that pupils **must know** and be able to answer questions on.

Answers to the longer questions need to include both fact and argument / analysis – i.e. give your evidence and explain HOW it answers the question.

Myth and Religion Paper:

All topics covered in myth and religion. Pupils should all have a copy of the specification which has more detail than below and notes on all these topics.

If pupils would like access to the textbook, they should see Mrs Dicks and photograph the relevant sections (however, the notes they have are more detailed and comprehensive).

- The gods (including Homeric Hymn to Demeter)
- The Universal Hero: Heracles and Hercules
- Religion and the City: sanctuaries, temples, prayer, sacrifice, priests
- Myth and the City: Foundation stories: Poseidon and Athena; Theseus; Aeneas; Romulus and Remus
- Festivals: City Dionysia (includes theatre and drama); Great Panathenaia; Lupercalia; Saturnalia
- Myths and Symbols of Power: Centauromachy; Amazonomachy; Prima Porta; Ara Pacis
- Death and Burial: Preparation of body; funerary procession; Burial (NB stelai for Greece); Festivals for the Dead
- Journeying to the Underworld: Persephone and Demeter (Homeric Hymn to Demeter); Orpheus and Eurydice

Pupils should be able to compare Greek and Roman aspects for each of topic.

Roman City Life Paper

- Roman Housing: insula and domus
- Rome Home and Family: paterfamilias; patrons; clients; education; the dinner party (cena)
- Roman Society: Citizens; Senators; Equites; Slaves; Freedmen

Computer Science - OCR

Paper 1

- 1) Machine architecture, RAM, different types of memory
- 2) Operating systems, compression software, embedded systems
- 3) Network threats, encryption
- 4) Networking topology, hardware, wireless, virtual networks
- 5) Domain Name System
- 6) Environmental considerations

Paper 2

- 1) Sound, images and data representation
- 2) Flowcharts, trace tables, translators
- 3) Logic errors and syntax errors, abstraction, defensive and robust design
- 4) Data representation, binary, hex, logic gates
- 5) Algorithms using functions, data types, casting, check digits, binary search, use of bubble sort. Algorithm using loops selection and sequence

Detailed information can be found on Teams and in the notes and documents provided by subject teachers.

Design Technology - AQA

Time allowed: 2 hours

The paper is divided into three sections as follows:

- Section A Core technical principles
- Section B Specialist technical principles
- Section C Designing and making principles

The maximum mark for the paper is 100

Equipment needed:

- Black or blue pen, HB pencil, scientific calculator

Areas to be covered in the examination:

- Sensors
- Tolerances
- Forces
- Types of hard and softwood
- Types of polymer
- Types of ferrous, non-ferrous metals and alloys
- Modern manufacturing systems
- Types of lever and gears
- Modern materials
- Smart materials
- Renewable energy

- Crowdfunding and the Fair-trade organization
- Converting raw materials into stock forms
- Reinforcing physical and mechanical properties of materials
- Mass production processes
- Mechanical properties of materials
- Ethical decisions associated in the extraction of raw materials
- The Alessi design group, Arts and Crafts, The Bauhaus, Art Deco and Memphis
- User centred design and iterative design methods
- Safety, ergonomics and function in product design
- Advantages of CAD / CAM over traditional methods of product design, development and manufacture
- Quality control procedures used in manufacture

Applied mathematical questions (approximately 15% of the overall DT paper):

Although these will be included within the actual summer GCSE paper (as they were in the Year 10 summer mock exam) none are included here as the focus is purely DT.

English Language - AQA

AQA Language Paper 2 FULL PAPER

All pupils should refer to their Language revision booklets for preparation for this paper (lilac and yellow)

- For Q5 all pupils should revise the advice offered in the yellow booklet; all pupils should refer to marked work and exemplar work (in the booklet or on Teams/Cloudbox)
- All pupils should practise timed papers over the Christmas break. The final two papers in the booklet are past papers and the mark schemes are accessible online (June and November 2017)
- For Q5, all pupils should learn rhetorical/persuasive devices and how to use them

- All pupils should use exam preparation booklet to practise written responses: planning is important for the quality of your ideas and the structure of your response
- All pupils should complete any specific revision work set by their teacher

English Literature - AQA

GCSE Paper 1 Shakespeare and the 19th Century Novel FULL PAPER

All pupils should re-read their Shakespeare play (*Macbeth*) and *The Strange Case of Dr Jekyll and Mr Hyde* over the Christmas holidays.

- All pupils should complete any revision work set by their subject teacher i.e. revision notes on key moments and context, analytical essays etc. (this will be specific to teaching group).
- On top of this, all pupils should be accessing Teams and/or the English Cloudbox to revise Knowledge Organisers for both texts. Specimen papers will be available on Cloudbox over the Christmas holidays
- All pupils, if set a written essay, should time their work and aim to write their essays in 45-50 mins.
- All pupils must learn key quotations (in groups according to characters and themes).
- All pupils should be prepared to discuss key social and historical issues which affect the writer and text of their studied play/novel
- All pupils must learn technical terminology for language analysis

Geography - Edexcel

These are pointers to the information that you can learn. Note that there will also be questions asking you to manipulate data and interpret graphs/maps/figures that you cannot revise specifically for but will have to use your wider geographical understanding to answer.

Paper 1 1 ½ hours, 3 questions, spend 30 minutes on each

Hazardous Earth

- Global circulation model – how it predicts arid zones of low rainfall and other areas of high rainfall
- Interpreting climate graphs
- Economic impact of tropical cyclones
- Projections of global sea level rise and why they vary
- Historical evidence for past climate change
- Features of plate boundaries
- Impacts of earthquakes on a developing nation

Development Dynamics

- Measures of economic development
- Relationship between political stability, corruption and economic development
- Interpreting population pyramids
- Intermediate technology
- Foreign Direct investment and economic development
- Positive and negative impacts of rapid economic development on different age groups
- International role of India and how it is changing

Challenges of an urbanising world

- Interpreting graphs showing urbanisation
- Generic and specific advantages and disadvantages of bottom-up and top-down strategies in megacities
- Challenges of urban growth for the people in megacities
- Why de-industrialisation occurs

Paper 2 1 ½ hours, 3 questions, spend 30 minutes on each

The UK's Evolving Physical landscape

- Names of weathering and erosion processes
- Impacts of glaciation on the landscape
- Constructive and destructive waves
- Reasons for the increase in frequency of storms in the future
- Concordant and discordant coastlines
- River features and transportation processes in different parts of a river
- Link between rock type and physical geography of the UK

The UK's Evolving Human Landscape

- Interpreting choropleth maps
- Location of different economic sectors in the UK and therefore the number and types of jobs available
- Structure of a city: links between land use and building height
- Positive and negative effects of regeneration in Birmingham
- Effects of migration in Birmingham

Fieldwork

1. Investigating River Processes and Pressures

- How to come up with an enquiry question
- The use of OS maps in fieldwork investigations
- Problems of data collection in a river environment
- Assessing accuracy and reliability of results

2. Investigating Dynamic Urban Areas

- Your collection and use of quantitative data
- How you presented your results
- Evaluation of your methods of data collection

History - Edexcel

1. Henry VIII and his ministers, 1509-40

Henry VIII and Wolsey

- Henry VIII as England's new King
- The rise of Wolsey and his domestic policies
- Wolsey's foreign policy
- Wolsey and the annulment crisis
- Wolsey's fall from power

Henry VIII and Cromwell

- Cromwell's rise to power
- The reasons for the fall of Ann Boleyn
- Henry's marriage to Jane Seymour
- Cromwell's reform of government
- The fall of Cromwell

The Reformation and its impact

- The break with Rome
- Opposition to the Reformation
- The dissolution of the monasteries
- The Pilgrimage of Grace

2. Superpower relations and the Cold War, 1941-91

Early tension between East and West

- The development of the Cold War 1947-49
- The Cold War intensifies including arms race and Hungary

Cold War crises, 1958-70

- Berlin Wall
- Cuba Crisis
- Prague Spring

The End of the Cold War, 1970-91

- Attempts to reduce tension between East and West
- Flashpoints
- The collapse of Soviet control of Eastern Europe

3. Weimar and Nazi Germany, 1918-39

The Weimar Republic, 1918-29

- The origins of the Republic
- Early challenges to the Weimar Republic
- The recovery of the Republic
- Changes in society

Hitler's rise to power, 1919-33

- The early development of the Nazi Party
- The Munich Putsch and the lean years
- Growth in support of the Nazis, 1929-32
- How Hitler became Chancellor

Nazi control and dictatorship, 1933-39

- The creation of a dictatorship, 1933-34
- The police state
- Controlling and influencing attitudes
- Opposition, resistance and conformity

Life in Nazi Germany, 1933-39

- Nazi policies towards women
- Nazi policies towards the young
- Employment and living standards
- Persecution of minorities

Latin - OCR

1. Language Paper

- All grammar has now been learned; revision guides and PowerPoints are on the VLE

2. Literature Paper

- Prose: all text covered up to the point of the mocks
- Pupils should know how to translate and comment on the Latin text

Maths - AQA

GCSE – AQA

There will be three full GCSE mock papers. All students will have completed the full GCSE course.

There is a full GCSE specification available on Cloudbox under Mathematics/Year 11.

The best way to get good at maths is to do maths! Make use of class notes, revision guides and revision cards. There is a large selection of practice papers and mark schemes available on Cloudbox. Start with Zigzag papers. The Churchill papers tend to be more challenging.

Add Maths – OCR

There will be no Additional Mathematics Mock in January – there will be a full mock paper given at the beginning of March.

MFL – AQA

(Spanish / French / German)

Topics to revise:

Theme One - Identity and culture

- Relationships with family and friends
- Marriage and partnership
- Social media
- Mobile technology
- Music, cinema and TV
- Food and eating out
- Sport
- Customs of Spain/France/Germany
- Festivals in Spain /France/Germany

Theme Two - Local, national, international and global areas of interest

- Home
- Where I live
- Charity and voluntary work
- Healthy and unhealthy living
- Environment
- Poverty and homelessness
- Holidays and travel
- Regions of the country

Theme Three - Current and Future study and employment

- School and subjects
- Life at school
- University or work
- Choice of career

1. Pupils are currently preparing answers for their oral exams (in December/January). They must continue to do so over this half term.

2. Pupils are doing all four exams (reading, writing, listening and speaking) in which **all of the three major themes** we study at GCSE will appear. Therefore, they must all revise vocabulary from their booklets as well as practise their listening and reading skills using websites such as quizlet and languages online, which they all have access to.
3. In class pupils are covering the major grammar points but they should also go over this again.

The MFL department advise all students to familiarise themselves with all the information on the VLE about the GCSE paper and use the past papers as an integral part of their revision. Furthermore, they will find a comprehensive GCSE vocabulary lists on the VLE. Students are also given booklets with grammar, vocabulary and the specification in them.

Music – Edexcel

Musical elements revision of the 8 set works:

- Purcell – Music for a While
- Bach – Brandenburg Concerto No. 5 in D (3rd movement)
- Beethoven – Pathetique Sonata (1st movement)
- J. Williams – Star Wars/Rebel Blockade Runner
- Queen – Killer Queen
- Wicked – Defying Gravity
- Esperanza Spalding – Samba em Preludio
- Afro Celt Sound System – Release

Additional preparation:

- 1) Listen to unfamiliar pieces (suggestions on the wider listening document on Cloudbox Year 11 page) to draw lists of meaningful comparisons and contrasts – useful for final 12-mark question.
- 2) Be prepared for a short dictation question (filling in missing rhythm and melody). Use musictheory.net to practise chords, cadences etc.

Physical Education - AQA

The Year 11 mock exam will cover all topics from the GCSE specification which have been taught up until Christmas.

Detailed information on the exam requirements and topics can be found on Microsoft Teams.

Physics - Edexcel

The following topics are examinable in the Year 11 mock Physics exam (see Edexcel GCSE 9-1 Specification 1PH0 for details):

- Topic 1 – Key concepts of physics
- Topic 2 – Motion and forces
- Topic 3 – Conservation of energy
- Topic 4 – Waves
- Topic 5 – Light and the electromagnetic spectrum
- Topic 6 – Radioactivity (6.1 – 6.35 only)
- Topic 7 – Astronomy
- Topic 8 – Energy - Forces doing work
- Topic 9 – Forces and their effects
- Topic 10 – Electricity and circuits
- Topic 11 – Static electricity
- Topic 12 – Magnetism and the motor effect
- Topic 13 – Electromagnetic induction
- Topic 14 – Particle model (14.1 – 14.11 only)
- Topic 15 – Forces and matter

Religious Studies - AQA

The topics that will be assessed are:

- Christianity: beliefs and teachings
- Christianity: practices
- Sex and relationships

Each topic will have 24 marks available. This includes questions worth 1, 2, 4, 5 and 12 marks with an additional 2 SPaG marks available. You will have 1 hour 20 minutes to complete the exam.

There are revision resources available for these topics on Teams. Key terms can be rehearsed using the Quizlets under Mrs Khan's account. You also have your class notes that will be valuable to revise from.