



Barr Beacon School Year 10 Mock Examinations Summer 2024 Revision List

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Subject: English Language

Link to specification: <https://www.aqa.org.uk/subjects/english/gcse/english-language-8700/specification-at-a-glance>

Year 10 Mock Exam Paper Structure

Paper duration: 1hr 45 mins

Topics: Explorations in creative reading and writing

Content

Question 1 – Comprehension – 4 marks

- **A question that tests reading comprehension (Assessment Objective 1)**

How it looks:

- **Read again** the first part of the source, from lines **[these will be from the beginning of the extract]**. List four things about the **[focus of the question]** from this part of the source. **[4 marks]**

Guidance:

- Start each point with the focus of the question
- Students may quote or paraphrase

Question 2 – Language Analysis – 8 marks

- **A question that tests the analysis of language (Assessment Objective 2)**

How it looks:

- Look in detail at this extract, from lines **[these will from the next part of the extract]** of the source: **How does the writer use language here to describe [the focus of the question]?**

Guidance:

- Make sure that you comment on effect and that these comments are precise and link to the extract in order to achieve Level 3 or above.
- Zoom in and analyse individual words or phrases.
- Select two or three relevant quotations– there is no need for length. Explore 2/3 quotations in detail.
- Comment on the writer’s methods
- You should offer layers of interpretation and unfold these; link methods to a core idea (big idea).

Question 3 – Structure Analysis – 8 marks

- **A question that tests the analysis of structure (Assessment Objective 2)**

How it looks:

You now need to think about the whole of the source.

This text is from the **[beginning, middle or end]** of a novel.

How has the writer structured the text to interest you as a reader?

Guidance:

- What is happening at this point and WHY?
- You should think about the whole of the source in order to explore the development of character or events to achieve level 3 or above.
- You should practise examining patterns and making links and connections between different parts of a source.
- You should look at questions 1, 2 and 4 on the exam paper to support you with the three foci (beginning, middle and end).
- Most extracts will begin by establishing character/setting and/or event, will then shift or develop the initial focus and finally, will juxtapose or be cyclical to the beginning of the extract.

Question 4 – Evaluation (Assessment Objective 4) – 20 marks

- A question that tests how well you can evaluate the truth of a statement; that tests how well you can explore the effect of language and structure to prove what the writer is intending to do.

How it looks:

Focus this part of your answer on the second part of the source, from **[a section after where you have look in question 1 and question 2 to the end of the extract.]**

A student said, ['a statement with 1-3 parts'].

To what extent do you agree?

Guidance:

- Within the statement, one the parts of the statement with be 100% agreeable, one of the parts will have some room to argue against the statement.
- The method should drive the evaluation – evaluate and interpret the statement (what) through analysing methods used (how).
- You can evaluate all methods – language, structure, tone.
- You should comment on each element of the statement; select relevant evidence and begin drawing evaluative conclusions.
- You should spend longer on this question than question's 2 and 3.
- You should use adverbs when evaluating e.g. ultimately, arguably, successfully.
- You should use tentative language: could, may, might, should, perhaps, maybe.

Question 5 – Creative Writing (Fiction) – 40 marks (24 for content and organisation – Assessment Objective 5, 16 for spelling, punctuation and grammar – Assessment Objective 6)

- A question that assesses your ability to write a creative description OR a creative piece of fiction.

How it looks:

Either

Describe **[insert focus]** as suggested by this picture:

OR

Write a story about **[insert focus]**.

Guidance

- You should aim to write **2-3** sides of A4, focusing on **quality communication**.
- To reach grades 4-5 as a minimum, you need to have a **clear narrative or description that develops a coherent idea**.
- You need to ensure your narrative is well sequenced and organised.
- Narratives should focus on a **'moment in time'**. You do not have to rush to write a complete story. **Instead, focus on unfolding the mood, setting, character, and language.**
- **Write more about less;** add detail and description.
- Attempt to **consciously craft** your language devices – if you use a simile/metaphor/personification, link back to it and develop it throughout your response.
- **Vary your vocabulary, punctuation and sentencing for effect.**

Subject: English Literature

Link to specification: <https://qualifications.pearson.com/en/qualifications/edexcel-gcses/english-literature-2015.html>

Year 10 Mock Exam Paper 1 Structure

Paper 1

Paper duration: 1hr 45

Topics: Shakespeare and Post–1914 Literature

Content

Shakespeare extract question:

- Selecting quotations relevant to the question and annotating an extract.
- Analysing language for Shakespeare’s methods i.e. metaphor, simile, personification
- Analysing form and structure – how is the use of a play significant? How is the extract structured to build tension/ interest the audience/ present a character’s development?
- How is the audience meant to react? What did Shakespeare intend for us to think/ feel/ understand?

Shakespeare whole text question:

Context

The Setting - It is generally believed that the play is based on a real Italian love story from the 3rd Century. The ‘real families’ are the Capeletti and the Montecchi families.

Patriarchal society - a general structure in which men have power over women. This was the way society was structured during the Elizabethan era. The father was the head of the household and controlled the actions of their daughters until they were married.

Religion - Romeo and Juliet was set during a time of religious and political turmoil. Europe was a traditionally Catholic society with a strong belief in damnation for mortal sin. Suicide and bigamy were both considered to be mortal sins.

Love and relationships - Courtly love (like royalty) should be polite, ceremonious, restrained, intellectual, courteous and those involved should be in love with the idea of being in love.

Honour - Family honour was important to the Elizabethans.

There was a strong belief that the slightest wrong or insults must be avenged as a matter of personal pride or to protect reputation.

Fate and Destiny - Most Elizabethans believed in the ideas of fate and astrology; rich people often paid for horoscopes for their children, and before major decisions such as marriage or travel, one would often consult an astrologer to see if the stars favoured it. Many people believed that they had no free will: that they had no choice to change their destiny because everything was already ‘predestined’.

Plot and key themes:

- **Love**
- **Honour**
- **Suffering**
- **Violence**
- **Family**

Blood Brothers

Context

Margaret Thatcher

- Prime Minister from 1979, pledged to reduce unemployment.
- 1970-74 she was education secretary, influenced the grammar schools and capped learning (Our Day Out – also by Russell, “The factories must have their fodder”)
- Maggie Thatcher the milk snatcher.

Nuclear Families

- Expectations of a family norm was for a family to consist of four (mother, father, two children – nuclear structure).
- Mrs Johnstone as a Catholic; social attitudes towards divorce; 1950s bride – gender roles and expectations as a maternal figure.
- 1960s – homosexuality made legal and divorce made easier.

Money and Social Class

- Social class divide; Willy Russell as a working-class person – dropped out of school early, went into hair-dressing, retrained as a teacher and then began writing plays.
- The role that money plays in Blood Brothers relates to the socioeconomic differences caused by Mickey and Edward's vastly different upbringings and circumstances. While Edward lives an upper class life, Mickey struggles to make ends meet, which leads to crime, drug abuse, and, ultimately, the play's tragic ending.

Education

- Private school led to university and well-paid jobs.
- Private school led to university and well-paid jobs.

Plot, key characters and key themes:

- Social class
- Violence
- Brotherhood
- Superstition
- Money

Subject: Maths

Link to specification: <https://qualifications.pearson.com/content/dam/pdf/GCSE/mathematics/2015/specification-and-sample-assesment/gcse-maths-2015-specification.pdf>

Link to Knowledge Organisers:

- Available on school website at <https://barrbeaconschool.co.uk/homework/>
- Videos available on Mathswatch with pupil login from KS3
- Slides available on Dr Frost maths with pupil login from KS4

Year 10 Mock Exam Paper Structure

No. of papers: 2 (one in sports hall and one in lessons)

Paper duration:

- Paper 1 (Non-Calculator) 90 minutes in sports hall
- Paper 2 (Calculator) 45 minutes in classes

Topics: Numeracy, Algebra, Statistics & Probability, Geometry and Ratio & Proportion

Content

Higher Tier

- o Calculations, Checking and Rounding
- o Indices
- o BIDMAS
- o Factors, Multiples and Primes
- o Standard Form
- o Surds
- o Collecting Like Terms
- o Expanding Brackets
- o Sequences
- o Averages and Range
- o Data, including Scatter Graphs
- o Polygons, Angles and Parallel Lines
- o Fractions, Decimals and Percentages
- o Sharing in a ratio
- o Combining ratios
- o Unitary Ratio
- o Scale-up Recipes
- o Converting between currencies
- o Direct and Inverse Proportion
- o Probability
- o Linear Graphs
- o Coordinate Geometry
- o Inequalities
- o Transformations
- o Constructions and Loci
- o Bearings
- o Perimeter and area of 2D Shapes
- o Volume and Surface Area of 3D Shapes
- o Accuracy and Bounds
- o Solving Quadratics
- o Simultaneous Equations

Foundation Tier

- o Integers and Place Value
- o Decimals
- o Indices, Powers and Roots
- o Factors, Multiples and Primes
- o Collecting Like Terms
- o Expanding Brackets
- o Substitution
- o Tables, Charts and Graphs
- o Pie Charts
- o Scatter Graphs
- o Fractions, Decimals and Percentages
- o Percentage of an Amount
- o Increasing and Decreasing by a Percentage
- o Percentage Profit and Loss
- o Using multipliers
- o Simple and Compound Interest
- o Transformations
- o Sequences
- o Properties of Shapes, Parallel and Angle Facts
- o Interior and Exterior Angles in a Polygon
- o Perimeter and area of 2D Shapes
- o Volume and Surface Area of 3D Shapes
- o Real Life Graphs
- o Straight Line Graphs
- o Pythagoras

Content

Higher Tier

- o Calculations, Checking and Rounding
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Foundation Tier

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- o Interior and Exterior Angles in a Polygon
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- o Volume and Surface Area of 3D Shapes
- o Real Life Graphs
- o Straight Line Graphs
- o Pythagoras

Subject: Combined Science

Link to specification: <https://bit.ly/3PCC9FC>

Link to Knowledge Organisers: www.kayscience.com

Year 10 Mock Exam Paper Structure

No. of papers: 3 (Biology, Chemistry, Physics)

Paper duration: 1 Hour 15 minutes

Topics: Biology Topics (1,2,4) Chemistry topics (1,2,5,6) Physics topics (1,2,3,4)

Content

Biology

- Cells
 - Eukaryotes and prokaryotes
 - Animal and plant cells
 - Required practical activity 1: Microscopy
 - Cell specialisation and differentiation
 - Cell division
 - Transport in cells (Diffusion, Osmosis and Active Transport)
- Human and Plant Structures in biology
 - Principles of organisation
 - The human digestive system
 - The heart and blood vessels
 - Blood
 - Coronary heart disease: a non-communicable disease
 - Health issues
 - The effect of lifestyle on some non-communicable diseases
 - Cancer
 - Plant tissues, organs and organ systems
- Bioenergetics
 - Photosynthetic reaction
 - Rate of photosynthesis
 - Uses of glucose from photosynthesis
 - Required practical activity 2: Investigating photosynthesis
 - Aerobic and anaerobic respiration
 - Response to exercise
 - Metabolism
 - Enzymes

Chemistry

- Atomic Structure
 - Atoms, elements and compounds
 - Mixtures
 - The development of the model of the atom
 - Relative electrical charges of subatomic particles
 - Size and mass of atoms
 - Relative atomic mass
 - Electronic structure
 - The periodic table
 - Development of the periodic table

- Metals and non-metals
- Group 0,1 and 7
- Bonding Structure and Properties of Matter
 - Chemical Bonds
 - Ionic bonding
 - Ionic compounds
 - Covalent bonding
 - Metallic bonding
 - The three states of matter
 - State symbols
 - Properties of ionic compounds
 - Properties of small molecules
 - Polymers
 - Giant covalent structures
 - Properties of metals and alloys
 - Structure and bonding of carbon (Diamond, Graphite, Graphene and fullerenes)
- Energy Changes
 - Energy transfer during exothermic and endothermic reactions
 - Required practical activity 10: investigate the variables that affect temperature changes in reacting solutions
 - Reaction profiles
 - The energy change of reactions (HT only)
- The Rate and extent of chemical changes
 - Calculating rates of reactions
 - Factors which affect the rates of chemical reactions
 - Required practical activity 11: investigate how changes in concentration affect the rates of reactions by a method involving measuring the volume of a gas produced and a method involving a change in colour
 - Collision theory and activation energy
 - Catalysts

Physics

- Atomic Structure (Radioactivity)
 - The structure of an atom
 - Mass number, atomic number and isotopes
 - The development of the model of the atom
 - Radioactive decay and nuclear radiation
 - Nuclear equations
 - Half-lives and the random nature of radioactive decay
 - Radioactive contamination
- Energy Stores and Transfers
 - Energy stores and systems
 - Changes in energy
 - Energy changes in systems
 - Power
 - Energy transfers in a system
 - Efficiency
 - National and global energy resources
- Specific and Latent Heat
 - Density of materials
 - Changes of state
 - Internal energy

- Temperature changes in a system and specific heat capacity
- Changes of state and specific latent heat
- Particle motion in gases
- Electricity
 - Standard circuit diagram symbols
 - Electrical charge and current
 - Current, resistance and potential difference
 - Resistors
 - Series and parallel circuits
 - Direct and alternating potential difference
 - Mains electricity
 - Electrical power
 - Energy transfers in everyday appliances
 - The National Grid

Subject: Triple Science: Biology

Link to specification: <https://bit.ly/4axullg>

Link to Knowledge Organisers: www.kayscience.com

Year 10 Mock Exam Paper Structure

No. of papers: 1

Paper duration: 1:45

Topics: B1, B2, B3, B4

Content

- Cells
 - o Eukaryotes and prokaryotes
 - o Animal and plant cells
 - o Required practical activity 1: Microscopy
 - o Culturing microorganisms
 - o Required practical activity 2: investigate the effect of antiseptics or antibiotics on bacterial growth
 - o Cell specialisation and differentiation
 - o Cell division
 - o Transport in cells (Diffusion, Osmosis and Active Transport)
- Human and Plant Structures in biology
 - o Principles of organisation
 - o The human digestive system
 - o Required practical activity 4: use qualitative reagents to test for a range of carbohydrates, lipids and proteins
 - o Required practical activity 5: investigate the effect of pH on the rate of reaction of amylase enzyme
 - o The heart and blood vessels
 - o Blood
 - o Coronary heart disease: a non-communicable disease
 - o Health issues
 - o The effect of lifestyle on some non-communicable diseases
 - o Cancer
 - o Plant tissues, organs and organ systems
- Infection and response
 - o Communicable (infectious) diseases
 - o Viral diseases
 - o Bacterial diseases
 - o Fungal diseases
 - o Protist diseases
 - o Human defence systems
 - o Vaccination
 - o Antibiotics and painkillers
 - o Discovery and development of drugs
 - o Producing monoclonal antibodies
 - o Uses of monoclonal antibodies
 - o Plant disease
- Bioenergetics
 - o Photosynthetic reaction
 - o Rate of photosynthesis

- o Uses of glucose from photosynthesis
- o Required practical activity 2: Investigating photosynthesis
- o Aerobic and anaerobic respiration
- o Response to exercise
- o Metabolism
- o Enzymes

Subject: Triple Science - Chemistry

Link to specification: <https://bit.ly/4axsQil>

Link to Knowledge Organisers: www.kayscience.com

Year 10 Mock Exam Paper Structure

No. of papers: 1

Paper duration: 1:45

Topics: C1, C2, C3, C4 (not electrolysis), C5

Content

Atomic Structure

Atoms, elements and compounds

Mixtures

The development of the model of the atom

Relative electrical charges of subatomic particles

Size and mass of atoms

Relative atomic mass

Electronic structure

The periodic table

Development of the periodic table

Metals and non-metals

Group 0,1 and 7

Comparison of transition metals with Group 1 elements

Typical properties of transition metals

Bonding Structure and Properties of Matter

Chemical Bonds

Ionic bonding

Ionic compounds

Covalent bonding

Metallic bonding

The three states of matter

State symbols

Properties of ionic compounds

Properties of small molecules

Polymers

Giant covalent structures

Properties of metals and alloys

Structure and bonding of carbon (Diamond, Graphite, Graphene and fullerenes)

Sizes of particles and their properties

Uses of nanoparticles

Quantitative Chemistry

Conservation of mass and balanced chemical equations

Relative formula mass

Mass changes when a reactant or product is a gas

Chemical measurements

Moles (HT only)

Amounts of substances in equations

Using moles to balance equations (HT only)

Limiting reactants (HT only)

Concentration of solutions

Percentage yield
Atom economy
Using concentrations of solutions in mol/dm³
Use of amount of substance in relation to volumes of gases

Chemical Changes

Metal oxides
The reactivity series
Extraction of metals and reduction
Oxidation and reduction in terms of electrons
Reactions of acids with metals
Neutralisation of acids and salt production
Soluble salts
Required practical 1: preparation of a pure, dry sample of a soluble salt from an insoluble oxide or carbonate using a Bunsen burner to heat dilute acid and a water bath or electric heater to evaporate the solution.
The pH scale and neutralisation
Titrations
Strong and weak acids

Energy Changes

Energy transfer during exothermic and endothermic reactions
Required practical activity 4: investigate the variables that affect temperature changes in reacting solutions
Reaction profiles
The energy change of reactions (HT only)
Cells and batteries
Fuel cells

Subject: Triple Science- Physics

Link to specification: <https://bit.ly/3K2Y9XE>

Link to Knowledge Organisers: www.kayscience.com

Year 10 Mock Exam Paper Structure

No. of papers: 1

Paper duration: 1 hour 45 min

Topics: P1, P2, P3, P4

Content

- Atomic Structure (Radioactivity)
 - The structure of an atom
 - Mass number, atomic number and isotopes
 - The development of the model of the atom
 - Radioactive decay and nuclear radiation
 - Nuclear equations
 - Half-lives and the random nature of radioactive decay
 - Radioactive contamination
 - Background radiation
 - Different half-lives of radioactive isotopes
 - Uses of nuclear radiation
 - Nuclear fission
 - Nuclear fusion
- Energy Stores and Transfers
 - Energy stores and systems
 - Changes in energy
 - Energy changes in systems
 - Power
 - Energy transfers in a system
 - Required practical activity 2 (physics only): investigate the effectiveness of different materials as thermal insulators
 - Efficiency
 - National and global energy resources
- Specific and Latent Heat
 - Density of materials
 - Required practical activity 5: use appropriate apparatus to make and record the measurements needed to determine the densities of regular and irregular solid objects and liquids.
 - Changes of state
 - Internal energy
 - Temperature changes in a system and specific heat capacity
 - Required practical activity 1: investigation to determine the specific heat capacity of one or more materials.
 - Changes of state and specific latent heat
 - Particle motion in gases
 - Pressure in gases
 - Increasing the pressure of a gas
- Electricity
 - Standard circuit diagram symbols
 - Electrical charge and current
 - Current, resistance and potential difference

- Required practical activity 3: Use circuit diagrams to set up and check appropriate circuits to investigate the factors affecting the resistance of electrical circuits
- Resistors
- Required practical activity 4: use circuit diagrams to construct appropriate circuits to investigate the I–V characteristics of a variety of circuit elements, including a filament lamp, a diode and a resistor at constant temperature.
- Series and parallel circuits
- Direct and alternating potential difference
- Mains electricity
- Electrical power
- Energy transfers in everyday appliances
 - The National Grid
 - Static charge
 - Electric fields

Subject: History

Link to specification: <https://www.aqa.org.uk/subjects/history/gcse/history-8145/specification-at-a-glance>

Link to Knowledge Organisers: https://matrixacademytrust-my.sharepoint.com/:p:/r/personal/revision_matrixacademytrust_co_uk/_layouts/15/Doc.aspx?sourcedoc=%7BAD779FB2-7716-4ED2-8C5E-4E4E6320B253%7D&file=KO-%20Booklet%20for%20Y11.pptx&action=edit&mobileredirect=true

Year 10 Mock Exam Paper Structure

No. of papers: 1 paper

Paper duration: 1 hour

Topics: Britain: Health and the People c1000-present

Content

- war
- superstition and religion
- chance
- government
- communication
- science and technology
- the role of the individual in encouraging or inhibiting change.

- **Part one: Medicine stands still**
- Medieval medicine: approaches including natural, supernatural, ideas of Hippocratic and Galenic methods and treatments; the medieval doctor; training, beliefs about cause of illness.
- Medical progress: the contribution of Christianity to medical progress and treatment; hospitals; the nature and importance of Islamic medicine and surgery; surgery in medieval times, ideas and techniques.
- Public health in the Middle Ages: towns and monasteries; the Black Death in Britain, beliefs about its causes, treatment and prevention.

- **Part two: The beginnings of change**
- The impact of the Renaissance on Britain: challenge to medical authority in anatomy, physiology and surgery; the work of Vesalius, Paré, William Harvey; opposition to change.
- Dealing with disease: traditional and new methods of treatments; quackery; methods of treating disease; plague; the growth of hospitals; changes to the training and status of surgeons and physicians; the work of John Hunter.
- Prevention of disease: inoculation; Edward Jenner, vaccination and opposition to change.

- **Part three: A revolution in medicine**
- The development of Germ Theory and its impact on the treatment of disease in Britain: the importance of Pasteur, Robert Koch and microbe hunting; Pasteur and vaccination; Paul Ehrlich and magic bullets; everyday medical treatments and remedies.
- A revolution in surgery: anaesthetics, including Simpson and chloroform; antiseptics, including Lister and carbolic acid; surgical procedures; aseptic surgery.

- Improvements in public health: public health problems in industrial Britain; cholera epidemics; the role of public health reformers; local and national government involvement in public health improvement, including the 1848 and 1875 Public Health Acts.

- **Part four: Modern medicine**

- Modern treatment of disease: the development of the pharmaceutical industry; penicillin, its discovery by Fleming, its development; new diseases and treatments, antibiotic resistance; alternative treatments.
- The impact of war and technology on surgery: plastic surgery; blood transfusions; X-rays; transplant surgery; modern surgical methods, including lasers, radiation therapy and keyhole surgery.
- Modern public health: the importance of Booth, Rowntree, and the Boer War; the Liberal social reforms; the impact of two world wars on public health, poverty and housing; the Beveridge Report and the Welfare State; creation and development of the National Health Service; costs, choices and the issues of healthcare in the 21st century.

Subject: Geography

Link to specification: <https://www.aqa.org.uk/subjects/geography/gcse/geography-8035/specification-at-a-glance>

Link to Knowledge Organisers: New KO for all topics.pptx

Year 10 Mock Exam Paper Structure

No. of papers: 1 paper

Paper duration: 1hr 30 minutes

Topics: Natural Hazards / Living World / Changing Economic World

Content

Natural Hazards

- Types of natural hazard.
- Factors affecting hazard risk.
- Plate tectonics theory.
- Constructive, destructive and conservative plate margins
- Reasons why people continue to live in areas at risk from a tectonic hazard.
- How monitoring, prediction, protection and planning can reduce the risks from a tectonic hazard.
- LIC Earthquake case study: Pakistan
- HIC Earthquake case study: Italy
- Global atmospheric circulation model
- Primary and **secondary** effects of tropical storms.
- Immediate and long-term responses to tropical storms.
- **Tropical Storm Case study: Hurricane Katrina**
- How monitoring, prediction, protection and planning can reduce the effects of tropical storms.

Living World

- **Case study – small- scale UK ecosystem: Sutton Park**
- producers, consumers, decomposers, food chain, food web and nutrient cycling. The impact on the ecosystem of changing one component.
- Biomes – large-scale global ecosystems.
- Physical characteristics of a tropical rainforest.
- How plants and animals adapt to tropical rainforest.
- **Tropical rainforest case study: Amazon Rainforest**
- Causes of deforestation
- Impacts of deforestation
- Strategies used to manage the rainforest sustainably
- The physical characteristics of a hot desert.
- How plants and animals adapt to a hot desert.
- **Hot desert case study: The Thar Desert**
- development opportunities (mineral extraction, energy, farming, tourism)
- challenges of developing hot desert environments: extreme temperatures, water supply, inaccessibility
- Causes of desertification
- Strategies used to reduce the risk of desertification

Changing Economic World

- HIC/NEE/LIC characteristics
- Development indicators
- Demographic Transition Model
- Causes of uneven development
- Strategies used to reduce development gap
- **Case study: Jamaica** – how tourism can reduce the development gap
- **LIC/NEE Case study: Nigeria** – location & importance
- TNCs – Shell: advantages and disadvantages for host country
- Types of aid, impacts of aid on the receiving country
- Environmental impacts of economic development
- UK Economy: causes of economic change, post-industrial economy, science and business parks, social and economic change in rural landscapes (Outer Hebrides and South Cambridgeshire), north-south divide, transport improvements.

Subject: French

Link to specification: <https://qualifications.pearson.com/en/qualifications/edexcel-gcses/french-2016.html>

Link to Knowledge Organisers:
French

Year 10 Mock Exam Paper Structure

No. of papers: 4

Paper duration:

Reading: 45 mins

Writing: 1 hour

Listening 30 mins

Speaking 10 mins

Topics:

Myself and My Family

Free time

Holidays

Town/ local area

Content

Me and My Family

- Who is in your family?
- What does your family look like?
- What makes a good family member/friend?
- Do you get on with your family/friends?

Free Time

- What do you like to do in your spare time?
- What films or TV shows do you like to watch?
- What did you like to do when you were younger?
- What did you do last weekend?

Holidays

- Where do you go on holiday and what do you do?
- Where did you last go on holiday?
- What was your worst/best holiday like?
- Where would you like to go in the future?

Town:

- What is there in your town?
- What is there in your region?
- What can you do in your town/region?
- What are the problems in your area.

Content

Me and My Family

- Who is in your family?
- What does your family look like?
- What makes a good family member/friend?
- Do you get on with your family/friends?

Free Time

- What do you like to do in your spare time?
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Holidays

- Where do you go on holiday and what do you do?
- Where did you last go on holiday?
- What was your worst/best holiday like?
- Where would you like to go in the future?

Town:

- What is there in your town?
- What is there in your region?
- What can you do in your town/region?
- What are the problems in your area.

Subject: German

Link to specification: <https://qualifications.pearson.com/en/qualifications/edexcel-gcses/german-2016.html>

Link to Knowledge Organisers:

German

Year 10 Mock Exam Paper Structure

No. of papers: 4

Paper duration:

Reading: 45 mins

Writing: 1 hour

Listening 30 mins

Speaking 10 mins

Topics:

Holidays

Town and region

Hobbies and free time

Celebrations

Myself, family and friends

School (basics)

Content

Holidays

- Where do you go on holiday and what do you do?
- Where did you last go on holiday?
- What was your worst/best holiday like?
- Where would you like to go in the future?

Town:

- What is there in your town?
- What is there in your region?
- What can you do in your town/region?
- What are the problems in your area.

Free Time

- What do you like to do in your spare time?
- What did you like to do when you were younger?
- What did you do last weekend?
- What will you do next weekend?
- How do you use social media?

Celebrations

- What different celebrations do you celebrate?
- How do you celebrate a birthday or Christmas?
- What family event did you celebrate last?
- Why are celebrations important?

Me and My Family

- Who is in your family?
- What does your family look like?
- What makes a good family member/friend?
- Do you get on with your family/friends?
- Who is your role model and why?

School

- What school subjects do you like and dislike?
- Describe your favourite teacher

Subject: GCSE P.E.

Link to specification:

<https://qualifications.pearson.com/content/dam/pdf/GCSE/Physical%20Education/2016/Specification%20and%20sample%20assessments/GCSE-physical-education-2016-specification.pdf>

Year 10 Mock Exam Paper Structure

No. of papers: **1**

Paper duration: **1hour 30mins**

Topics: **Fitness and Body Systems**

Content

1.1 The structure and functions of the musculoskeletal system

- The functions of the skeleton applied to performance in physical activities and sports
- Classification of bones
- Structure
- Classification of joints
- Movement possibilities at joints dependant on joint classification
- The role of ligaments and tendons, and their relevance to participation
- Classification and characteristics of muscle types
- Location and role of the voluntary muscular system to work with the skeleton
- Characteristics of fast and slow twitch muscle fibre types

The structure and functions of the cardiorespiratory system

- Functions of the cardiovascular system applied to performance in physical activities
- Structure of the cardiovascular system
- Structure of arteries, capillaries and veins
- The mechanisms required (vasoconstriction, vasodilation)
- Function and importance of red and white blood cells, platelets and plasma
- Composition of inhaled and exhaled air and the impact of physical activity
- Vital capacity and tidal volume

- Location of main components of respiratory system (lungs, bronchi, bronchioles, alveoli, diaphragm)
- Structure of alveoli to enable gas exchange and the process of gas exchange
- How the cardiovascular and respiratory systems work together

Anaerobic and aerobic exercise

- Energy: the use of glucose and oxygen to release energy aerobically
- Energy sources: fats as a fuel source for aerobic activity, carbohydrates as a fuel source for aerobic and anaerobic activity
- Short-term effects of physical activity and sport on lactate accumulation, muscle fatigue
- Short-term effects of physical activity and sport on heart rate, stroke volume and cardiac output, and the importance of this to the player/performer
- Short-term effects of physical activity and sport
- How the respiratory and cardiovascular systems work together to allow participation in, and recovery from, physical activity and sport: oxygen intake into lungs, transfer to blood and transport to muscles, and removal of carbon dioxide
- Long-term effects of exercise on the body systems
- Interpretation of graphical representations

The short- and long-term effects of exercise

- Short-term effects of physical activity and sport on lactate accumulation, muscle fatigue
- Short-term effects of physical activity and sport on heart rate, stroke volume and cardiac output
- Short-term effects of physical activity and sport on depth and rate of breathing
- How the respiratory and cardiovascular systems work together to allow participation in, and recovery from, physical activity and sport
- Long-term effects of exercise on the body systems
- Interpretation of graphical representations of heart rate, stroke volume and cardiac output values

Lever systems, examples of their use in activity and the mechanical advantage they provide in movement

- First, second and third class levers
- Mechanical advantage and disadvantage

Planes and axes of movement

- Movement patterns using body planes and axes
- Movement in the sagittal plane about the frontal axis
- Movement in the frontal plane about the sagittal axis
- Movement in the transverse plane about the vertical axis

The relationship between health and fitness and the role that exercise plays in both

- Definitions of fitness, health, exercise
- Components of fitness and the relative importance
- Fitness tests: the value of fitness testing, the purpose of specific fitness tests, the test protocols, the selection of the appropriate fitness test for components of fitness and the rationale for selection
- Collection and interpretation of data from fitness test results
- Fitness tests for specific components of fitness

The principles of training and their application to personal exercise/ training programmes

- Planning training using the principles of training
- Factors to consider when deciding the most appropriate training methods and training intensities for different physical activities and sports
- The use of different training methods for specific components of fitness, physical activity and sport

The long-term effects of exercise

- Long-term effects of aerobic and anaerobic training
- Long-term training effects
- Long-term training effects and benefits

How to optimise training and prevent injury

- The use of a PARQ to assess personal readiness for training
- Injury prevention
- Injuries that can occur in physical activity and sport
- Performance-enhancing drugs (PEDs)

Effective use of warm up and cool down

- The purpose and importance of warm-ups and cool downs
- Phases of a warm-up and their significance i
- Activities included in warm-ups and cool downs

Use of data

- Develop knowledge and understanding of data analysis i
- Demonstrate an understanding of how data is collected in fitness, physical and sport activities
- Present data (including tables and graphs)
- Interpret data accurately
- Analyse and evaluate statistical data from their own results and interpret against normative data in physical activity and sport

Subject: BTEC Sport

Link to specification: <https://qualifications.pearson.com/content/dam/pdf/btec-tec-awards/sport/2022/specification-and-sample-assessments/btec-tech-award-sport-spec.pdf>

Link to Knowledge Organisers:

Year 10 Mock Exam Paper Structure

No. of papers: **1**

Paper duration: **1hr 30mins**

Topics: **Developing Fitness to Improve Other Participants Performance in Sport and Physical Activity**

Content

A1 The importance of fitness for successful participation in sport

- Types of sports requiring specific components of fitness
- The basic principles of training frequency, intensity, time, and type (FITT)
- Additional principles of training

A2 Fitness training principles

- The basic principles of training frequency, intensity, time, and type (FITT)
- Additional principles of training

A3 Exercise intensity and how it can be determined

- Intensity
- Target zones and training thresholds
- The Borg (6–20) Rating of Perceived Exertion (RPE) Scale
- The relationship between RPE and heart rate where: $RPE \times 10 = HR$ (bpm).
- Calculate 1RM for strength and 15RM for muscular endurance
- Technology to measure exercise intensity

B1 Importance of fitness testing and requirements for administration of each fitness test

- Reasons for fitness testing
- Pre-test procedures
- Knowledge of published standard test methods and equipment.
- Accurate measurement and recording of test results.
- Basic processing of test results for interpretation (using published data tables)
- Ability to safely select appropriate test(s) for given purposes, situations and/or participants
- Reliability of test
- Validity of results
- Practicality

B2 Fitness test methods for components of physical fitness

- Aerobic endurance
- Muscular endurance
- Flexibility

- Speed
- Muscular strength
- Body composition

B3 Fitness test methods for components of skill-related fitness

- Agility
- Balance
- Coordination
- Power
- Reaction time

B4 Interpretation of fitness test results

- Comparison to normative published data
- Analyse and evaluate test results
- Recommendations for improvements to fitness performer based on test results

C1 Requirements for each of the following fitness training methods

- Warm-up prior to taking part in the fitness training method – pulse raiser, mobility and stretch; reduce the risk of injury, prepare the body for exercise
- Cool down after taking part in the fitness training method – gradually lower pulse and breathing rate to resting levels; remove lactic acid; stretch to help return muscles to pre-exercise length
- Linking each fitness training method to the associated component of fitness
- Application of the basic (FITT) and additional principles of training to each fitness training method
- Application of appropriate training intensities to fitness training methods

C2 Fitness training methods for physical components of fitness

- Aerobic endurance
- Flexibility:
- Muscular endurance:
- Muscular strength training:
- Speed:
- Agility:
- Power
- Balance
- Coordination:
- Reaction time:

C4 Additional requirements for each of the fitness training methods

- Advantages and disadvantages – to include number of people that can take part, cost of equipment, ease of set up, access to venue/location of training, risk of injury to the performer if performed incorrectly, effectiveness of training for given sports performer, specificity to component of fitness, replicating demands of the sport.

C5 Provision for taking part in fitness training methods

- Public provision – advantages and disadvantages
- Private provision – advantages and disadvantage
- Voluntary provision – advantages and disadvantages.

D1 Personal information to aid fitness training programme design

- Aims – details of what they would like to achieve for the selected sport.
- Objectives – how they intend to meet their aims using an appropriate component of fitness and method of training
- Lifestyle and physical activity history
- Attitudes, the mind and personal motivation for training

D2 Fitness programme design

- Use personal information to aid training programme design.
- Selection of appropriate training method/activity for improving/maintaining the selected components of physical and/or skill-related fitness
- Application of the FITT principles and additional principles of training

D3 Motivational techniques for fitness programming

- Definition of motivation – the internal mechanisms and external stimuli that arouse and direct behaviour.
- Types of motivation
- Principles of setting goals to increase and direct motivation.
- Personal goals – specific, measurable, achievable, realistic, time-related, exciting, recorded (SMARTER)
- Influence of goal setting on motivation
- Benefits of motivation on the sports performer

Subject: Psychology

Link to specification: <https://www.aqa.org.uk/subjects/psychology/gcse/psychology-8182/specification-at-a-glance>

Link to Knowledge Organisers: All pupils have been provided with a paper copy and have access to it on teams.

Year 10 Mock Exam Paper Structure

No. of papers: **1**

Paper duration: **1 hour 45 minutes**

Topics: **Memory, Perception, Development, Research Methods**

Content

Memory

Processes of memory: encoding (input) storage and retrieval (output)

- Different types of memory: episodic memory, semantic memory and procedural memory.
- How memories are encoded and stored.

Structures of memory

- The multi-store model of memory: sensory, short term and long term.
- Features of each store: coding, capacity, duration.
- Primacy and recency effects in recall: the effects of serial position.
- Murdock's serial position curve study.

Memory as an active process

The Theory of Reconstructive Memory, including the concept of 'effort after meaning'.
Bartlett's War of the Ghosts study.

Factors affecting the accuracy of memory, including interference, context and false memories.

Perception

Sensation and perception

- Factors affecting perception

Visual cues and constancies

- Monocular depth cues: height in plane, relative size, occlusion and linear perspective.
- Binocular depth cues: retinal disparity, convergence

Gibson's direct theory of perception – the influence of nature

- The real world presents sufficient information for direct perception without inference. Role of motion parallax in everyday perception.

Visual illusions

- Explanations for visual illusions: ambiguity, misinterpreted depth cues, fiction, size constancy.
- Examples of visual illusions: the Ponzo, the Müller-Lyer, Rubin's vase, the Ames Room, the Kanizsa triangle and the Necker cube.

Gregory's constructivist theory of perception – the influence of nurture

- Perception uses inferences from visual cues and past experience to construct a model of reality.

Factors affecting perception

- Perceptual set and the effects of the following factors affecting perception: culture, motivation, emotion, expectation.
- The Gilchrist and Nesberg study of motivation and the Bruner and Minturn study of perceptual set.

Development

Early brain development

- A basic knowledge of brain development, from simple neural structures in the womb, of brain stem, thalamus, cerebellum and cortex, reflecting the development of autonomic functions, sensory processing, movement and cognition.
- The roles of nature and nurture.

Piaget's stage theory and the development of intelligence

The role of Piaget's theory in education

- Piaget's Theory of Cognitive Development including concepts of assimilation and accommodation.
- The four stages of development: sensorimotor, pre-operational, concrete operational and formal operational. Application of these stages in education.
- Reduction of egocentricity, development of conservation. McGarrigle and Donaldson's 'naughty teddy study'; Hughes' 'policeman doll study'.

The effects of learning on development

- Dweck's Mindset Theory of learning: fixed mindset and growth mindset. The role of praise and self-efficacy beliefs in learning.
- Learning styles including verbalisers and visualisers. Willingham's Learning Theory and his criticism of learning styles.

Research Methods

Formulation of testable hypotheses

- Null hypothesis and alternative hypothesis.

Types of variable

- Independent variable, dependent variable, extraneous variables.

Sampling methods

Target populations, samples and sampling methods and how to select samples using these methods:

- random
- opportunity
- systematic
- stratified.

Strengths and weaknesses of each sampling method.

Understanding principles of sampling as applied to scientific data.

Designing research

- Quantitative and qualitative methods:
- the experimental method (experimental designs, independent groups, repeated measures, matched pairs, including strengths and weaknesses of each experimental design)
- laboratory experiments
- field and natural experiments
- interviews
- questionnaires
- case studies
- observation studies (including categories of behaviour and interobserver reliability).
- Strengths and weaknesses of each research method and types of research for which they are suitable.

Correlation

- An understanding of association between two variables and the use of scatter diagrams to show possible correlational relationships.
- The strengths and weaknesses of correlations.
- Computation of formulae is not required.

Research procedures

- The use of standardised procedures, instructions to participants, randomisation, allocation to conditions, counterbalancing and extraneous variables (including explaining the effect of extraneous variables and how to control for them).

Planning and conducting research

How research should be planned, taking into consideration the reliability and/or validity of:

- sampling methods
- experimental designs
- quantitative and qualitative methods.

Ethical considerations

Students should demonstrate knowledge and understanding of:

- ethical issues in psychological research as outlined in the British Psychological Society guidelines
- ways of dealing with each of these issues.

Quantitative and qualitative data

- The difference between quantitative and qualitative data

Primary and secondary data

- The difference between primary and secondary data

Computation

- Recognise and use expressions in decimal and standard form: use ratios, fractions and percentages, estimate results, find arithmetic means and use an appropriate number of significant figures.

Descriptive statistics

- Understand and calculate mean, median, mode and range.

Interpretation and display of quantitative data

- Construct and interpret frequency tables and diagrams, bar charts, histograms and scatter diagrams for correlation.

Normal distributions

- Characteristics of a distribution

Subject: Sociology

Link to specification: <https://www.aqa.org.uk/subjects/sociology/gcse/sociology-8192/specification-at-a-glance>

Link to Knowledge Organisers: https://matrixacademytrust-my.sharepoint.com/personal/revision_matrixacademytrust_co_uk/_layouts/15/onedrive.aspx?ga=1&id=%2Fpersonal%2Frevision%5Fmatrixacademytrust%5Fco%5Fuk%2FDocuments%2FBarr%20Beacon%20Homework%2FYear%202011%2FSociology%2FGCSE%20revision

Year 10 Mock Exam Paper Structure

No. of papers: 1

Paper duration: 1hr 45mins

Topics: Family and Households, Education.

Content

Family

Functions of Families

- Functions of families
- Sociological perspectives on the functions of families
- Key ideas of Murdock, Parsons and Zaratsky on families

Family Forms

- Various family forms (nuclear, extended, reconstituted, lone parent, single sex).
- Key ideas of **Rapoport & Rapoport** on family diversity

Conjugal Role Relationships

- Joint and segregated conjugal roles
- Domestic division of labour in both traditional and contemporary families
- Impact on conjugal role relationships within the contemporary family including decision making, money management, dual career families, child rearing and leisure activities
- The consequences of unequal power distribution in families
- Oakley's view on family; Power within Conjugal relationships & the conventional family
- Key ideas of Delphy and Leonard on families.
- Sociological perspectives on conjugal role relationships (functionalist, feminist and Marxist).

Changing Relationships Within Families

- How relationships within families have changed over time (preindustrial, industrial and contemporary/modern)
- Contemporary family related issues, the quality of parenting, the relationships between teenagers and adults, care of the disabled/elderly and arranged marriage
- Sociological perspectives on changing relationships within families (functionalist, feminist and Marxist)
- Key ideas of Young & Wilmott

Criticisms of Families

- Different criticisms of families
- describe, compare and contrast a variety of sociological perspectives on these issues (functionalist, feminist and Marxist)

Marriage & Divorce

- Patterns of cohabitation, marriage and divorce in Britain since 1945 using relevant statistical data
- Reasons for the rise in cohabitation including: changes in social attitudes and values, secularisation, changes in the status of women in society, views on marriage
- Reasons for the decrease in marriage since 1945 including: changes in social attitudes and values, secularisation, changes in the status of women in society, rising expectation of marriage
- Reasons for the rise in divorce since 1945 including: changes in the law, changes in social attitudes and values, secularisation, changes in the status of women in society
- The consequences of divorce for family members (husband and wife, children and extended family) and the increase in the numbers of lone parent families
- A variety of sociological perspectives on these issues (functionalist, feminist and Marxist).

Education

Roles and Functions of Education

- Functions of education including serving the needs of the economy, facilitating social mobility and maintaining social cohesion
- A variety of different types of school including primary and secondary, state and private
- Alternative forms of educational provision including home schooling and de-schooling
- Sociological perspectives on these issues (Functionalist and Marxist)
- Key ideas of Durkheim and Parsons on education

The Relationship between Education and Capitalism

- Key ideas of Bowles and Gintis on education and capitalism
- A variety of alternative sociological perspectives on the correspondence principle

Educational Achievement

- Factors affecting educational achievement including class, gender and ethnicity
- Describe sociological perspectives on these issues (functionalist, feminist and Marxist)
- Key ideas of Halsey, Heath & Ridge and Ball, Bowe & Gerwitz

Processes Within School

- processes within schools affecting achievement including, streaming, setting, mixed ability teaching, labelling and the self-fulfilling prophecy
- Key ideas of Ball on teacher expectations, streaming and setting
- Key ideas of Willis on the creation of counter school cultures
-

Subject: Philosophy and Ethics

Link to specification: <https://www.aqa.org.uk/subjects/religious-studies/gcse/religious-studies-a-8062/specification-at-a-glance>

Link to Knowledge Organisers: KO in books.

Year 10 Mock Exam Paper Structure

No. of papers: 1

Paper duration: 1 hour 45 mins

Topics: Christianity and Sikhism

Sikh beliefs:

- The nature of God as expressed in the Mool Mantra: the content and significance of the Mool Mantra, Guru Granth Sahib (GGS) 1a.
- God as Creator, including different aspects of God's relationship with creation:
- God shown in and through the universe
- God as separate from the universe
- The nature of human life as an opportunity to unite with God, including the development of Sikh virtues such as wisdom, truthful living, justice, temperance, self-control, patience, courage, humility, contentment.
- Beliefs in karma and rebirth, and the aim of mukti; the meaning of mukti, including the different aspects of mukti – positive and negative.
- The five stages of liberation (five khands) and barriers to mukti (illusion, self-centredness, lust, anger, greed, worldly attachment, pride).
- The importance of being gurmukh (God-centred) rather than manmukh (man-centred) and the elimination of pride or ego (haumai).

Beliefs about the nature of human life

- Belief in the oneness of humanity and in the equality of all, including complete equality of women with men.
- The expression of the equality of all in:
- the stories of the lives of Gurus, including Guru Nanak and Guru Gobind Singh
- the Guru Granth Sahib
- in Sikhism today.
- Sewa: the importance and priority of service to others, including physical (tan), mental (man) and material (dhan).
- The role and importance of the sangat (religious community).

Sikh Practices:

- Religious features of the gurdwara: design, furniture, and artefacts; the practices associated with these features and their importance, including the palki and takht.
- The role of the gurdwara within the Sikh community.
- The role of prayer in the home, GGS 305:4.
- The role and importance of the akhand path.
- The meaning and significance of langar as an expression of sewa.
- The significance of meditating on the name of God (nam japna) in daily life and in the gurdwara.
- Festivals and their importance for Sikhs in Great Britain today, including the origins and significance of the following:
 - Vaisakhi (Baisakhi)
 - Divali
- Gurpurbs, including Guru Nanak's birthday and differences in the way gurpurbs are celebrated in India and Great Britain.
- The importance of visiting Sikh historical gurdwaras, including the Golden Temple (Harimandir Sahib) in Amritsar.
- Birth and naming ceremonies including their meaning and significance.
- The initiation ceremony (Amrit Sanskar), including the meaning and importance of the Khalsa and the five Ks, and the different perspectives of sahadhari and amritdhari Sikhs.
- The significance and use of the names Singh and Kaur.

Subject: Enterprise

Link to specification: <https://www.ocr.org.uk/Images/610949-specification-cambridge-nationals-enterprise-and-marketing-j837.pdf>

Link to Knowledge Organisers: https://www.amazon.co.uk/Cambridge-National-Enterprise-Marketing-Revision/dp/100910649X/ref=pd_bxgy_thbs_d_sccl_1/261-9441865-1321165?pd_rd_w=UxFio&content-id=amzn1.sym.46f507f3-7fc1-4bf4-9492-ed026d6e4f68&pf_rd_p=46f507f3-7fc1-4bf4-9492-ed026d6e4f68&pf_rd_r=J5GKX0BWBW5VAYW84M6Y&pd_rd_wg=ztJ0g&pd_rd_r=87a4a348-6580-433e-acc2-81333843beaa&pd_rd_i=100910649X&pvc=1

Year 10 Mock Exam Paper Structure

No. of papers: 1

Paper duration: 90 minutes

Topics:

Topic Area 1: Characteristics, risk and reward for enterprise

Topic Area 2: Market research to target a specific customer

Topic Area 3: What makes a product financially viable

Topic Area 4: Creating a marketing mix to support a product

Content

1.1 Characteristics of successful entrepreneurs

1.2 Potential rewards for risk taking

1.3 Potential drawbacks for risk taking

2.1 The purpose of market research

2.2 Primary market research methods

2.3 Secondary market research sources

2.4 Types of data

2.5 Types of market segmentation

2.6 The benefits of market segmentation to a business

3.1 Cost of producing the product

3.2 Revenue generated by sales of the product

3.3 Profit/loss

3.4 How to use the formula for break-even as an aid to decision making

3.5 Importance of cash

4.1 The marketing mix elements for a good/service

4.2 How the elements of the marketing mix work together

4.3 Types of advertising medium used to attract and retain customers and the appropriateness of each

4.4 Sales promotion techniques used to attract and retain customers and the appropriateness of each

4.5 Public relations

4.6 How to sell the good/service to the consumer

4.7 The product lifecycle

4.8 Extension strategies for products in the product lifecycle and the appropriateness of each

4.9 Factors to consider when pricing a product to attract and retain customers

4.10 Types of pricing strategies and the appropriateness of each

Subject: Hospitality and Catering

Link to specification: <https://www.wjec.co.uk/umbraco/surface/blobstorage/download?nodeId=36667>

Link to Knowledge Organisers: <https://resources.wjec.co.uk/Pages/ResourceSingle.aspx?rId=4864>

Year 10 Mock Exam Paper Structure



No. of papers: 1

Paper duration: 1Hour 20 minutes

Topics: The Hospitality and Catering Industry

Content

-  Unit 1-1.1.1 Standards and ratings
-  Unit 1-1.1.1 Types of Hospitality and catering provisions
-  Unit 1-1.1.1 Types of service in commercial and non-commercial provisions
-  Unit 1-1.1.2 Types of employment roles and responsibilities within the industry
-  Unit 1-1.1.3 Working conditions in the hospitality and catering industry
-  Unit 1-1.1.4 Contributing factors to the success of hospitality and catering provision
-  Unit 1-1.2.1 The operation of the kitchen: Equipment
-  Unit 1-1.2.1 The operation of the kitchen
-  Unit 1-1.2.2 The operation of front and back of house: Front of house
-  Unit 1-1.3.1 Health and safety in hospitality and catering provisions
-  Unit 1-1.3.2 Food safety
-  Unit 1-1.4.1 Food related causes of ill health
-  Unit 1-1.4.2 Symptoms and signs of food-induced of ill-health
-  Unit 1-1.4.3 Preventative control measures of food-induced of ill-health
-  Unit 1-1.4.4 The Environmental Health Officer
-  Unit 1-1.1.2 Personal attributes, qualifications and experience
-  Unit 1-1.1.4 Positive and negative uses of media
-  Unit 1 -1.3.1 Safety documents in hospitality and catering
-  Unit 1-1.4.1 Hospitality and catering and the law

-  Unit 1-1.2.2 Customer requirements
-  Unit 1-1.2.3 Hospitality and catering provision to meet specific requirements

Subject: Computer Science

Link to specification: <https://www.ocr.org.uk/Images/558027-specification-gcse-computer-science-j277.pdf>

Link to Knowledge Organisers: T:\Subjects\Technologies\Computing\03 - Lesson resources KS4\GCSE Computer Science

Year 10 Mock Exam Paper Structure

No. of papers: 1

Paper duration: 90 Mins

Topics: Primary Storage

Secondary Storage

Data Storage

CPU

Embedded Systems

Operating Systems

Computational Thinking

Utility Software

Programming (2.1.2/2.1.3/2.2.1/2.2.2/2.3.1)

Networks/Topologies

Searching/Sorting Algorithms

Threats to Computer Systems and Networks

Ethical, legal, cultural and environmental impact

Content

- Primary Storage - The purpose of RAM and ROM in a Computer System
- Secondary Storage – ROM/Cache Memory/Optical/Magnetic/Solid State
- Data Storage – Data Units/Conversion/Characters/Binary Addition/Binary Shifts/Binary/Images/Sound/Compression
- CPU – Function/Cache Memory
- Embedded Systems – Definition/Examples
- Operating Systems – Utility Programs
- Computational Thinking Methods
- Flowcharts/Programming
- Networks/Topologies – Protocol-TCP/IP
- Searching/Sorting Algorithms – Bubble Sort/Binary Search
- Threats to Computer Systems and Networks – Brute Force/Data Interception/Virus (Malware)
- Ethical, legal, cultural and environmental impact