

### Year 11 Mock Examinations information 2023-24

In addition to the Knowledge organisers that are hyperlinked for each subject, staff will also be setting revision tasks on Go4Schools. Some of these tasks will be set on the online learning platforms we subscribe to on student's behalf. The logon details are below, and it is possible to reset passwords for each site using students school email account. If your child has any problems, please ask them to contact Mr Bird, <u>daniel.bird@csschool.co.uk</u>.





# **English language**

□ English Language Paper 1 Full Paper

# English Literature, Paper 1, full paper

### Macbeth

### **Characters:**

- Macbeth
- Lady Macbeth
- □ The Witches
- Banquo
- □ Macduff

### Themes:

- □ Kingship
- □ False Appearances
- Good and Evil
- □ Ambition

### A Christmas Carol

#### Characters:

- □ Scrooge
- Bob and the Cratchits
- Fred
- The ghosts

#### Themes:

- Poverty and the struggles of the poor
- □ The Supernatural
- Redemption
- □ Ignorance and want



# **HIGHER**

Paper 1 (non-calculator)

- Division
- □ Fractions
- Volume and surface area
- □ Graphs Frequency polygons and scatter graphs
- Indices
- Venn diagrams
- □ % increase
- Pressure
- □ Simultaneous equation from graphs
- □ Angles in polygons
- Probability tree
- Direct proportion
- Perpendicular lines
- □ Spheres
- □ Changing the subject
- Ratio
- Product rule
- □ Functions
- □ Circle theorems
- **D** 3D trig
- Surds
- **Quadratic inequalities**



# **HIGHER**

Paper 2 (calculator)

- Indices
- □ Angle rules
- Proportion
- □ HCF LCM
- Quadratics graphs
- Density
- Percentages
- □ Right angled trig
- Box Plots
- **D** Expanding polynomials
- Algebraic proof
- Sectors
- □ Factorising
- Completing the square
- □ Transformations
- Rate of change
- Cones / frustums
- □ Exponential graphs
- Recurring decimals
- Algebraic fractions
- Vectors
- Tangents to circles



### **FOUNDATION**

Paper 1 (non-calculator)

- □ Fractions
- Percentages
- Decimals
- □ Solving equations
- □ Factors
- □ Angle rules
- Coordinates and midpoints
- Estimation
- □ Averages
- □ Writing and Simplifying expressions
- □ Factorising
- Ratio
- □ Sequences
- Division
- Volume and surface area
- □ Graphs Frequency polygons and scatter graphs
- Indices
- Exact trig values
- □ Tree diagrams
- Venn diagrams



# **FOUNDATION**

Paper 2 (calculator)

- □ Fractions
- Percentages
- Decimals
- Ordering numbers
- □ Area and perimeter
- □ Shapes
- □ Changing units
- □ Graphs pie chart, bar chart, travel graphs
- Ratio
- □ Proportion
- □ Time problem
- □ Transformations
- Bearings
- Equations
- □ Expressions
- Indices
- □ Angle rules
- LCM HCF
- **Quadratic graphs**
- Density
- Standard form



### Science

# Combined Biology / Separate Biology

- □ CB1/SB1 Key concepts in Biology
- □ CB2/SB2 Cells and control
- □ CB3/SB3 Genetics
- □ CB4/SB4 Natural selection and genetic modification
- □ CB5/CB5 Health, disease, and the development of medicines

# **Combined Chemistry / Separate Chemistry**

- □ CC1/SC1 States of matter
- □ CC2/SC2 Methods of separating and purifying substances
- □ CC3/SC3 Atomic structure
- □ CC4/SC4 The periodic table
- □ CC5/SC5 Ionic bonding
- □ CC6/SC6 Covalent bonding
- □ CC7/SC7 Types of substance
- □ CC8/SC8 Acids and alkalis
- □ CC9/SC9 Calculations involving masses
- □ CC10 /SC10 Electrolytic processes
- □ CC11/ SC11 Obtaining and using metals
- □ CC12/ SC12 Reversible reactions and equilibria
- □ SC13 Transition metals, alloys, and corrosion (separate chemistry only)
- □ SC14 Quantitative analysis (separate chemistry only)
- □ SC15 Dynamic equilibria, calculations involving volumes of gases (separate chemistry only)
- □ SC16 Chemical cells and fuel cells (separate chemistry only)

# **Combined Physics / Separate Physics**

- CP1/SP1 Motion
- □ CP2/SP2 Forces and motion
- □ CP3/SP3 Conservation of energy
- CP4/SP4 Waves
- □ CP5/SP5 Light and the electromagnetic spectrum
- □ CP6/SP6 Radioactivity
- □ SP7 Astronomy (separate physics only)



# **Computer Science**

- □ Algorithms
- Computer systems
- Cyber security
- Data representation
- Databases and SQL
- HTML
- □ Impacts on technology
- Networks
- □ Programming

# **Design Technology**

- New and emerging technologies
- Energy, materials, systems and devices including composite materials and open loop systems
- Materials and their properties
- Commercial manufacturing processes, stock forms, treating and finishing of materials – chose to focus on <u>one</u> of the following:
  - $\circ \quad \text{Paper and board} \quad$
  - o Timber
  - o Metal
  - o Polymers
  - $\circ$  Textiles
- **D** Ecological and social footprint
- □ Scales of production
- Design principles including research, specifications, ergonomics, functionality and innovation
- □ Two-point perspective drawing
- Material management and marking out

Through the assessment you must demonstrate an understanding of the mathematical and scientific requirements identified below

- □ Recognise and use expressions in decimal and standard form
- □ Use ratios, fractions and percentages.
- Calculate surface area and volume
- □ Plot, draw and interpret appropriate graphs.



### **Drama**

#### Section B – Live Theatre Review

The characteristics of a live theatre production:

- □ the meaning of drama and theatre terminology used by theatre makers
- □ how genre is used in live performance to communicate meaning to an audience

The characteristics of the performance text including:

- □ characters
- □ theatrical setting

How meaning is communicated through:

- □ the use of performance space and spatial relationships on stage
- □ the relationship between performers and audience
- □ the design of set, props, costume, lighting, and sound
- an actor's vocal and physical interpretation of character
- □ the use of performance conventions

Acting skills including:

- □ characterisation.
- □ Vocal techniques an actor might use to communicate a role.
- Communication through physicality and the use of body language, facial expression, and gesture.

The use of semiotics / symbolism

The development of character through the creation and use of:

- □ costume
- □ hair and makeup.



# Food preparation and nutrition

#### Food science

- Dextrinization
- □ Shortening
- Gelatinization
- □ The science of making jam

### Food hygiene and safety

- use-by dates
- best before dates
- Food storage
- food safety and hygiene rules
- consumer groups and food choice

### **Nutrition**

- Eatwell plate and healthy eating requirements
- Deficiency and excess of nutrients
- How to improve bone health
- Dietary fibre

#### Food Provenance

- □ Free range food
- □ Free range food production



### **French**

#### Module 1

- □ Friends what makes a good friend
- □ Talking about family relationships
- Making arrangements to go out
- Describing a night out with friends
- □ Talking about life when you were younger
- Discussing role models

#### Module 2

- □ Sport and music
- □ Technology films and TV
- □ Life on-line
- Talking about books and reading
- **D** Talking about TV programmes
- Talking about actors and films

#### Module 3

- Daily life
- Food for special occasions
- Family celebrations
- □ Festivals and directions

#### Module 4

- Describing a region
- □ Talking about your town village and district
- □ What you can do in your area
- Discussing weather and plans
- Describing community plans

#### Module 5

- Dream Holidays
- Booking and Reviewing hotels
- Ordering in a restaurant
- □ Talking about travelling
- Buying souvenirs
- Disastrous holidays

#### Module 6

- School Subjects and opinions
- Descriptions of school
- **Comparing UK and Francophone schools**
- School rules
- Healthy Living
- Vices
- School Exchanges



# **Geography**

#### Natural Hazards:

- Tectonics
- Weather
- Climate change

### **Physical landscapes: Rivers**

### Urban issues:

- □ Urban World (Rio)
- □ UK urban change (Bristol)
- □ Sustainability (Frieberg)

### **Resource management:**

UK resources (NOT Food)

# **Geology**

- Minerals
- Sedimentary rocks
- Igneous rocks
- Metamorphic rocks
- Deformational structures
- Geological time
- Origins of life



### **History**

- □ Medicine Through Time 1250-Modern day
  - o Medieval Medicine 1250-1500
  - Renaissance Medicine 1500-1700
  - Early Modern 1700-1900
  - Modern Medicine 1900-today
- □ Medicine on the Western Front
- □ Henry VIII and his ministers 1509-40
  - o Wolsey
  - o Cromwell
  - o Religious Change
- Germany
  - o Unit 1: The Weimar Republic
  - Unit 2: The Rise of the Nazis
  - Unit 3: Consolidation of power



# <u>RE</u>

### **Christianity Topics**

#### Beliefs

- □ The Nature of God, Omnipotent, Omniscient, Evil and Suffering, and The Trinity
- □ Creation, Genesis and the Word and Spirit from John's Gospel
- □ Jesus Christ, Incarnation, crucifixion, Atonement, Resurrection and Ascension.
- □ Salvation, Ways of interpreting the Bible, Sin, Grace, and Holy Spirit in Evangelical worship.
- □ The Afterlife, Eschatological beliefs, Judgement and Resurrection and beliefs about Heaven and Hell

#### Practises

- **D** Forms of worship, liturgical, non-liturgical and individual worship, and Prayer
- □ Sacraments, Baptism and Eucharist
- □ Pilgrimage and celebrations, Walsingham and Taize, and Christmas and Easter.
- □ Christianity in Britain and the Church in the local community.
- □ The Worldwide Church Mission and evangelism, Tearfund, Persecution of Christians past and present, reconciliation, the World Council of Churches the ecumenical movement.

### Judaism Topics

#### Beliefs

- □ The nature of God, God as One (the Shema), Creator, Law giver, Judge, the Torah and Shekhinah (the divine presence of God)
- □ Messiah differing views in Orthodox and Reform Judaism
- Covenant, Abraham's, Moses' and the 10 Commandments
- Life on Earth, Pikuach Nefesh, free will and the 613 Mitzvot
- □ The afterlife, Orthodox and Reform beliefs about death, judgement, bodily and nonbodily resurrection, immortality of the soul

#### Practises

- □ Worship and practises, Orthodox and Reform synagogue services, prayer, celebrating Shabbat items worn for prayer, worship in the home.
- □ The Synagogue, features, function
- Rituals, Brit Milah, Bar Mitzvah, Bat Mitzvah, Bat Chayil, Marriage Death and mourning.
- Daily Life, Dietary Laws
- □ Festivals, Rosh Hashanah, Yom Kippur, Pesach, and Sukkot.



## **BTEC Sport**

### Components of physical fitness:

- Aerobic endurance:
- □ Cardiorespiratory system
- muscular endurance
- □ flexibility
- speed
- muscular strength
- body composition

### Components of skill-related fitness:

- Agility
- Balance
- $\hfill\square$  Coordination
- Power
- Reaction time

### Exercise intensity and how it can be determined:

- □ intensity be able to measure heart rate (HR) and apply HR intensity to fitness
- $\hfill\square$  training methods
- □ know about target zones and training thresholds; be able to calculate training
- $\Box$  zones and apply HR max to training: HR max = 220 age (years)
- $\Box$  be able to calculate 60–85% HR max and know that this is the recommended
- **u** training zone for cardiovascular health and fitness
- □ know that the Borg (1970) (6–20) Rating of Perceived Exertion (RPE) Scale can
- □ be used as a measure of exercise intensity
- □ know about the relationship between RPE and heart rate where:
- □ RPE x 10 = HR (bpm)
- □ application of the FITT principles to training methods, regimes and given
- exercise situations.



### **BTEC Sport**

### Additional principles of training:

- □ Progressive overload:
- **G** specificity:
- □ individual differences/needs:
- **a**daptation:
- **u** reversibility:
- variation
- □ rest and recovery
- application of the principles of training-to-training methods, regimes and given exercise settings.

# Fitness training methods for the following components of fitness, as well as the pros and cons of all.

#### flexibility training:

- □ static:
- ballistic:
- □ Proprioceptive Neuromuscular Facilitation (PNF)

### strength, muscular endurance, and power training:

- **c**ircuit training:
- □ free weights
- **D** plyometrics:

#### aerobic endurance training:

- continuous training
- □ fartlek training
- interval training
- □ circuit training

#### speed training:

- □ hollow sprints:
- □ acceleration sprints.
- □ interval training:



# **BTEC Sport**

#### Fitness test methods for components of fitness:

flexibility: sit and reach test (usually measured in cm or inches)

strength: grip dynamometer (usually measured in KgW)

#### aerobic endurance:

- D multi-stage fitness test, known as the bleep test (usually predicted in
- □ ml/kg/min)
- □ forestry step test (usually predicted in ml/kg/min)
- definition of VO2 max (ml/kg/min): the maximum amount of oxygen uptake,
- $\hfill\square$  usually measured in ml of oxygen per kg of body mass per minute. It is a
- □ measure of cardiorespiratory endurance.

#### speed:

**3**5m sprint (usually measured in s)

#### agility:

□ Illinois agility run test (usually measured in s)

#### anaerobic power:

• vertical jump test (usually measured in kgm/s)

#### muscular endurance:

• one-minute press-up, one-minute sit-up (usually measured in number of reps/minute)

#### body composition:

- Body Mass Index (BMI) (usually measured in kg/m<sup>2</sup>)
- Bioelectrical Impedance Analysis (BIA), used for prediction of percent
- body fat
- skinfold testing
- percent body fat

#### Requirements for administration of each fitness test:

- D pre-test procedures (informed consent, calibration of equipment)
- □ knowledge of published standard test methods and equipment/resources required
- purpose of each fitness test
- $\hfill\square$  accurate measurement and recording of test results
- basic processing of test results for interpretation (using published data tables and appropriate units for comparison purposes)
- □ ability to safely select appropriate test(s) for given purposes, situations and/or participants
- □ the terms 'reliability,' 'validity' and 'practicality' related to each fitness test method
- advantages and disadvantages of fitness test methods.