




## Year 11 Mock Examinations information 2022-23

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, [daniel.bird@csschool.co.uk](mailto:daniel.bird@csschool.co.uk).

	Username: firstname.surname Password: username
	Username: firstname.surname@csschool.co.uk Password: seneca2020
	Username: firstname.surname@csschool.co.uk Password: Stretton2021

## English language

- English Language Paper 1 Full Paper

## English Literature, Paper 1, Section A

### **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

# Maths

## HIGHER

### Paper 1 (non-calculator)

- Inequalities
- Equations of circles
- Area of circles
- Prime factors
- Fraction/ratio/percentages
- Standard form
- Angles
- Probability
- Direct and inverse proportion
- Indices
- Algebraic fractions
- Quadratic graphs
- Compound measures
- Averages
- Surface area
- Cumulative frequency
- Ratio
- Recurring decimals
- Area
- Speed / time graphs
- Vectors

# Maths

## HIGHER

### Paper 2 (calculator)

- Pythagoras' Theorem
- Probability
- Simultaneous equations
- Substitution
- Rearranging formulae
- Ratio
- Percentages
- Circle theorems
- Bounds
- Frequency polygons
- Compound measures
- Histograms
- Algebraic frac Value of money
- Frequency polygons
- Compound measures
- Area
- Straight Line graphs
- Compound Percentages
- Indices
- Product rule
- Vectors
- Right-angled trigonometry
- Expanding brackets
- Factorising

# Maths

## FOUNDATION

### Paper 1 (non-calculator)

- Metric units
- Ratio
- Percentages
- Stem and leaf diagrams
- Volume
- Inequalities
- Simplifying expressions
- Transformations
- Place value
- Number patterns
- Directed number
- Fractions
- Probability
- Estimating
- Compound measures
- Frequency trees
- Prime factors
- Ordering fractions/percentages/decimals
- Displaying data
- Money problems
- Standard form
- Angles
- Quadratic graphs
- Trigonometry
- Substitution

# Maths

## FOUNDATION

### Paper 2 (calculator)

- Fractions / percentages / decimals
- Ratio
- Area
- Percentages
- Fractions
- Factors and multiples
- Simplifying expressions
- Square roots
- Symmetry
- Percentages
- Value for money
- Frequency polygons
- Angles
- Pythagoras' Theorem
- Compound measures
- Two-way tables
- Sequences
- 3D shapes
- Area
- Probability
- Bearings
- Averages
- Using a calculator
- Solving equations
- Expanding brackets
- Factorising
- Rounding
- Substitution

## 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/SB5 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)

## Design Technology

- Industry and enterprise
- Robotics and automation in the workplace
- Sustainability and the environment
- Anthropometrics and ergonomics
- People culture and society
- Design principles from the NEA  
(researching/specification/ideas/development/prototyping)
- Properties of materials
- Calculating volumes/areas/diameter/circumference
- Specialist technical area (one from timber/metal/polymer/textile)



## 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
- 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)

## History

- Medicine Through Time 1250-Modern day
  - 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
  - Wolsey
  - Cromwell
  - Religious Change
- Germany
  - Unit 1: The Weimar Republic
  - Unit 2: The Rise of the Nazis
  - Unit 3: Consolidation of power

## RE

### 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

- 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 non-bodily 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.

## Spanish

### Module 1 – Holidays

- Usual Holidays (Present Tense)
- Past Holidays (Preterite Tense)
- Describing Holiday accommodation (Imperfect Tense)
- Booking holiday accommodation
- Discussing a disastrous holiday
- Plans for future holidays

### Module 2 – School

- School Subjects and opinions
- School description - facilities
- School Rules
- Description of primary school (imperfect tense)
- School Day and Extra-Curricular Activities
- School Exchanges

### Module 3 My People

- My favourite Apps
- Present Continuous Tense (what are you doing right now)
- Descriptions of family and friends
- Relationships with family and friends
- Usual and past leisure activities

### Module 4 – Interests and Influences

- TV Programmes and Films
- Sport
- Trending issues
- Role Models
- Making arrangements to go out
- Reading preferences – digital or paper format?

### Module 5 – Shopping and Cities

- Places in Town & Directions
- Tourist Office Conversations
- Shopping conversations (shopping for clothes and presents)
- Shopping preferences (online or high street?)
- Descriptions of Towns / Cities
- Town v Countryside

## BTEC Construction

- Sustainability and the environment
- Strength
- Load resistance
- Construction methods
- Intumescent materials
- Weather resistant materials
- Earthwork supports
- Excavation
- Foundation purposes
- Foundation types (including how to draw them)
- Suspended and solid ground floors
- SIPS (structurally insulated panels)
- Traditional masonry
- Timber frames
- Cross wall construction
- Types of wall partitioning
- Building orientation
- Housing development (meaning)
- Local and national construction
- External and internal wall cladding
- Structural forms
- Prefabrication
- How to calculate volumes and areas

## 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
- 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
- training methods
- know about target zones and training thresholds; be able to calculate training zones and apply HR max to training:  $HR\ max = 220 - age\ (years)$
- be able to calculate 60–85% HR max and know that this is the recommended 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:
- $RPE \times 10 = HR\ (bpm)$
- application of the FITT principles to training methods, regimes and given exercise situations.



## BTEC Sport

### Additional principles of training:

- Progressive overload:
- specificity:
- individual differences/needs:
- adaptation:
- 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:

- circuit training:
- free weights
- 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:**

- 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 VO<sub>2</sub> max (ml/kg/min): the maximum amount of oxygen uptake,
- usually measured in ml of oxygen per kg of body mass per minute. It is a
- measure of cardiorespiratory endurance.

**speed:**

- 35m 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:

- pre-test procedures (informed consent, calibration of equipment)
- knowledge of published standard test methods and equipment/resources required
- purpose of each fitness test
- 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.