

CONTENT COVERED: January 2021 Mock exams

Subject	Topics/Work covered by the exam
<p>English Language:</p> <p>Literature:</p>	<ul style="list-style-type: none"> • English language Paper 2, Viewpoints and perspectives • Section A Reading section B Writing 1 hr 45 min • Unseen Poetry - analysis /comparison 55 min
<p>Maths</p>	<p>Foundation: (please also check with your teacher)</p> <ul style="list-style-type: none"> • Number • Algebra • Graphs, tables, and charts • Fractions and percentages • Equation, inequalities, and sequences • Angles • Averages and range • Perimeter, area, and volume • Graphs • Transformations • Ratio and proportion • Right-angled triangles • probability <p>Higher: (please also check with your teacher)</p> <ul style="list-style-type: none"> • Number • Algebra • Interpreting and representing data • Fractions, ratio, and percentages • Angles and trigonometry • Graphs • Area and volume • Transformations and constructions • Equations and inequalities • Probability • Multiplicative reasoning • Similarity and congruence • Trigonometry

<p>Biology</p>	<ul style="list-style-type: none"> • Key biological concepts • Cells and control • Genetics • Natural Selection and Genetic Modification • Health, Disease and the Development of Medicines
<p>Chemistry</p>	<ul style="list-style-type: none"> • States of Matter • Methods of Separating and Purifying Substances • Atomic Structure • The Periodic Table • Bonding (Ionic and Covalent) • Types of Substance • Acids and Alkalis • Calculations Involving Masses • Electrolytic Processes • Obtaining and Using Metals • Reversible Reactions and Equilibria
<p>Physics</p>	<ul style="list-style-type: none"> • Forces and Motion • Conservation of Energy • Waves • Light and the Electromagnetic Spectrum • Radioactivity • Astronomy
<p>Combined Science</p>	<p>FOUNDATION</p> <p>The Year 11 Biology Mock exam will assess your understanding of the following topics...</p> <ul style="list-style-type: none"> • Key biological concepts • Cells and control • Genetics • Natural Selection and Genetic Modification • Health, Disease and the Development of Medicines <p>The Year 11 Chemistry Mock exam will assess your understanding of the following topics...</p> <ul style="list-style-type: none"> • States of Matter • Methods of Separating and Purifying Substances • Atomic Structure • The Periodic Table • Bonding (Ionic and Covalent) • Types of Substance • Acids and Alkalis • Calculations Involving Masses

- Electrolytic Processes
- Obtaining and Using Metals
- Reversible Reactions and Equilibria

The Year 11 Physics Mock exam will assess your understanding of the following topics...

- Motion
- Forces and Motion
- Conservation of Energy
- Waves
- Light and the Electromagnetic Spectrum
- Radioactivity

HIGHER

The Year 11 **Biology** Mock exam will assess your understanding of the following topics...

- Key biological concepts
- Cells and control
- Genetics
- Natural Selection and Genetic Modification
- Health, Disease and the Development of Medicines

The Year 11 **Chemistry** Mock exam will assess your understanding of the following topics...

- States of Matter
- Methods of Separating and Purifying Substances
- Atomic Structure
- The Periodic Table
- Bonding (Ionic and Covalent)
- Types of Substance
- Acids and Alkalis
- Calculations Involving Masses
- Electrolytic Processes
- Obtaining and Using Metals
- Reversible Reactions and Equilibria

The Year 11 **Physics** Mock exam will assess your understanding of the following topics...

- Motion
- Forces and Motion
- Conservation of Energy
- Waves
- Light and the Electromagnetic Spectrum
- Radioactivity

<p style="text-align: center;">Computer Science</p>	<p>Paper 1 – Computer Systems</p> <ul style="list-style-type: none"> • 1.1 Systems Architecture. The Purpose of The CPU. • 1.2 Memory. Primary Memory. • 1.3 Storage. Secondary Storage. • 1.4 Wired & Wireless Networks. Types of Network. • 1.5 Network Topologies & Protocols. • 1.6 System Security. • 1.7 System Software. • 1.8 Legal, Ethical, Moral, & Environmental Concerns.
<p style="text-align: center;">Geography</p>	<p>Physical topics:</p> <ul style="list-style-type: none"> • Weather Hazards (Tropical storms / UK extreme weather / climate change) • Living world (Ecosystems / rainforests / cold environments) • Physical landscapes (Coasts) <p>Human topics:</p> <ul style="list-style-type: none"> • Urban Issues & Challenges (Rio / Brazil / Freiberg) • Resource management (Food)
<p style="text-align: center;">History</p>	<p>Paper 1 (1 hr 15 mins): Medicine Through Time</p> <p>Focus: The Causes, Diagnosis, Treatment and Prevention</p> <ul style="list-style-type: none"> • The Middle Ages 1250-1500 • The Renaissance 1500-1700 • Early Modern 1700-1900 • Modern 1900-today • The Western Front - Injuries, illness and the trenches <p>Paper 2: Henry VIII and his ministers (55 minutes)</p> <ul style="list-style-type: none"> • Rise of Wolsey • Domestic and Foreign Policy • Wolsey and the annulment • Rise of Cromwell • Cromwell and the annulment • Changes to the church and opposition • Dissolution of the monasteries and the consequences • Fall of Anne Boleyn • Changes to government and parliament • Fall of Cromwell.
<p style="text-align: center;">French</p>	<ul style="list-style-type: none"> • age, birthdays • physical description and personality • relationships (family and friends) • marriage • future relationships

	<ul style="list-style-type: none"> • grammar check • free time • technology in everyday life • for and against technology • books and reading • tv and films • shopping for clothes • customs and holidays • describing festivals and traditions • French speaking festivals • describing daily life • Studio Module 4 home town • describing a region/ town • what to see and do • Opinions about where you live • Town V Countryside • directions and asking the way • travel and tourism • Weather • holidays - what you do normally • holidays - past • holidays - future • dream holiday / ideal holiday • booking accommodation • café and restaurant • buying souvenirs • holiday disasters • School subjects and opinions • School rules, timetable and typical day • Describing Schools • Differences between French and UK Schools • School exchanges • Healthy living at school & Youth Health Problems • Career Choices and Future Career Plans • Plans, Hopes and Wishes for the Future • Applying for Jobs & Discussing Work Experience • Job Case Studies
<p style="text-align: center;">BTEC Digital IT</p>	<ul style="list-style-type: none"> • External threats to digital systems and data security • Data level protection • Cloud computing and storage • Modern technologies • Defining responsibilities and security parameters • Disaster recovery policy • Actions to take after an attack • Legal and ethical responsibilities • Environmental considerations

	<ul style="list-style-type: none"> • Be able to present knowledge and understanding of the use of data flow diagrams. <p>Understand how organisations use different forms of notation to explain systems, data and information</p>
<p style="text-align: center;">Design</p>	<p><u>Section A - Core technical principles</u></p> <ul style="list-style-type: none"> • Smart Materials • Motion, forces, cams and gears • Properties and characteristics of materials - Timbers, metals and alloys and polymers • Reduction in household emissions <p><u>Section B - Specialist Technical Principles</u></p> <ul style="list-style-type: none"> • Specialist additive techniques - eg, 3D printing, welding • Automation and robotic production lines • CAM - The types, its features and suitability • Characteristics and physical properties of materials - Timber, metals, polymers, textiles • The 5 stages of a Lifecycle assessment <p><u>Section C - Designing and making principles</u></p> <ul style="list-style-type: none"> • Suitability for users • Environmental and social factors • Market Research - Types and reasons for use • Ways and why to test a product • Ways to reduce negative global impact when designing products • Basic mathematics • How do designers gather information? • Design companies - Detailed information about one - Apple, Alessi, Braun, Dyson, Gap, Primark, Under Armour, Zara • Isometric Drawing • Bought in component parts
<p style="text-align: center;">Drama</p>	<p>Section A - Blood Brothers Set Text</p> <ul style="list-style-type: none"> • Contexts – social, historical, cultural and their impact on text • conventions of the period it was set • genre • structure • characters • style • plot and subplot

	<ul style="list-style-type: none"> • 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. • how performance styles affect the direction, acting and design of a performance. <p>Live Theatre Review: Monster Calls – Section B</p> <ul style="list-style-type: none"> • the meaning of drama and theatre terminology used by theatre makers • how genre is used in live performance to communicate meaning to an audience • how to analyse a live theatre performance • how to evaluate the work of others, drawing considered conclusions.
<p style="text-align: center;">Music</p>	<p>Area of study 1: Western classical tradition 1650–1910 Listening – unfamiliar music</p> <ul style="list-style-type: none"> • The Coronation Anthems and Oratorios of Handel. • The Orchestra Music of Haydn, Mozart and Beethoven. • The piano music of Chopin and Schumann. • The Requiem of the late Romantic period. <p>Study piece</p> <ul style="list-style-type: none"> • Haydn: Symphony 101 in D major The Clock movt. 2 <p>Area of study 2: Popular music Listening – unfamiliar music</p> <ul style="list-style-type: none"> • music of Broadway 1950s to 1990s • rock music of 1960s and 1970s • film and computer gaming music 1990s to present • pop music 1990s to present. <p>Study piece</p> <p>The Beatles: <i>Sgt Pepper's Lonely Hearts Club Band</i> – the following three tracks:</p> <ul style="list-style-type: none"> • <i>With a Little Help from my Friends</i> • <i>Within You, Without You</i>

- *Lucy in the Sky with Diamonds*

Area of study 4: Western classical tradition since 1910

Listening – unfamiliar music

- The orchestral music of Copland
- British music of Arnold, Britten, Maxwell-Davies and Tavener
- The orchestral music of Zoltán Kodály and Béla Bartók
- Minimalist music of John Adams, Steve Reich and Terry Riley.

Study piece

- Aaron Copland: *Saturday Night Waltz* and *Hoedown* from *Rodeo*

Musical Language - Musical elements, Reading staff notation, Writing staff notation, Chords and chord symbols, Musical vocabulary and terminology