

HELSEBY

Sixth Form



Year 13

Subject Specific Revision

Information for the

PPE's

November 2024

Maths

2 papers x 2 hours

Pure – 2 hours

Statistics and Mechanics – 2 hours

Students should bring: Pen, Pencil, Calculator, and Ruler.

Topics to be covered:

All AS Topics

Pure:

Argument and Proof, Index Laws, Surds, Quadratic Functions, Lines and Circles, Simultaneous Equations, Inequalities, Differentiation, Rates of Change, Tangents and Normals, Turning Points, Integration, Area under a Curve, Trigonometry, Sine and Cosine Rules, Polynomials, Binomial Theorem, Algebraic Division, Vectors, Curve Sketching, Laws of Logarithms, Exponential Functions, Exponential Processes, Curve Fitting

Mechanics:

Forces and Newton's Laws, Units and Kinematics

Stats:

Probability, Binomial Distribution, Hypothesis Testing, Collecting, Representing and Interpreting Data, The Large Data Set

Resources we will provide:

Past exam papers already being completed and marked.

Past exam questions as starters in lessons

Revision resources: ActiveLearn textbook

Further Maths

3 papers x 1 hour 30 minutes

Students will need a calculator

Topics to be covered:

Paper 1 Core:

- Complex Numbers
- Argand Diagrams
- Roots of Polynomials
- Sums of series
- Proof by Induction
- Volumes of revolution
- Matrices
- Vectors

Paper 2 Stats:

Stats:

- Binomial Distribution
- Poisson distribution
- Discrete random variables
- Chi-squared tests
- Contingency tables
- Hypothesis testing

Paper 3 Mechanics:

Mech:

- Work, energy, power
- Momentum and collisions
- impulses

Resources we will provide: Formula Booklet

Revision resources: ActiveLearn, Completed assessments

English Language

Paper 1 Section A Individual Variation 1 hour 15 minutes

Paper 2 Child Language 1 Hour 15 minutes

Topics to be covered:

Paper 1

- How language varies depending upon mode, field, function and audience
- How language choices can create personal identities

Paper 2

- Spoken language acquisition and how children learn to write between the ages of 0 and 8
- The relationship between spoken language acquisition and literacy skills that children are taught, including the beginnings of reading
- Appropriate theories of children's language development

Revision Resources: Have been provided on ClassCharts and in lessons and also on RM Shared

English Literature

1 paper 2 hours 30 minutes **Aspects of Tragedy** – Closed book exam

Topics to be covered:

- "Othello"
- Poetry of Keats
- Death of a Salesman

Revision resources:

- Classroom notes
- Essays and text annotations.
- Emagazine subscription

Media Studies

1 x full Component One paper; Media Products, Industries and Audience 2 hours 15 minutes

Topics to be covered:

All Component One texts must be revised* as at least four of them will appear on the paper, just as in the real exam.

Topics to be covered:

- Newspapers/news websites (The Times & The Mirror)
- Music videos ('Formation' & 'Riptide')
- Film (I, Daniel Blake & Black Panther)
- Advertising (SuperHuman, Tide & KOTV poster)
- Radio (Woman's Hour)
- Computer Games (Assassins Creed)

*All theorists and terminology covered in Y12 – Subject handbook final sections (theorists in a nutshell and glossary of terms) are especially useful. Also, be prepared to respond to "unseen" audio-visual and print texts.

Resources provided: 'Unseen' audio-visual and print texts.

Revision resources: class notes, Eduqas fact sheets, Zig-zag e-revision, Mrs Fisher and Media Insider Youtube videos and all the free digital resources on the Eduqas website.

Art & Photography

Students will be assessed on their portfolio work in Art and Photography. During the PPE window students should continue to work on their individual portfolios. All students have been given individual targets and deadlines which they need to work towards. Students will not be having a formal PPE at this time whilst we await confirmation about what the exam board will expect.

Performing Arts

1 x paper 70 minutes

Students are to pick on piece of live theatre that we have explored in lesson. Students will complete research and produce notes and a bibliography within lesson time and they will bring these into the PPE with them.

In the exam, they will explore question two of the Unit 1 exam which focusses on analysing theatre techniques and conventions in line with a theme. Students will have 70 minutes to complete this question, on laptops, and using their pre-prepared notes.

BTEC Applied Science

1 x 2 hour paper Unit 3 Science investigation skills

Students should bring: Pen, pencil, ruler, rubber and calculator

Topics to be covered:

- D Enzymes in action – D1 protein in structure, D2 Enzymes as biological catalysts in chemical reactions,
- D3 Factors that can affect enzyme activity
- E Diffusion of molecules – E1 Factors affecting the rate of diffusion, E2 Arrangement and movement of molecules
- G Energy content of fuels – G1 Fuels, G2 Hazards associated with fuels, G3 Units of energy

Revision Resources:

Applied science text book chapter 3 – available on TEAMS

BTEC Applied Science Help https://www.youtube.com/channel/UC11v-AL_4VFrVczVBzURmIg

Where you can find the following videos to help prepare:

Science investigation skills

Skills investigation basics

Skills planning an investigation

Skills tables and graphs

Skills graphs and correlations

Writing a plan

Uncertainty and errors

Unit 3 Enzymes 3 videos

Unit 3 Diffusion of molecules 3 videos

Unit 3 Fuels 3 videos

Biology

2 papers 1 x 2 hour 1 x 1 hour.

Students should bring: Pen, Pencil, Ruler (with millimetre measurements), eraser and scientific Calculator

Topics to be covered:

Paper 1: All AS Content

Section 1 (Biological Molecules, Nucleic Acids)

Section 2 (Cells, Membranes, Immune system)

Section 3 (Exchange of substances, Mass transport)

Section 4 (DNA, Protein Synthesis, Genetic diversity, Biodiversity)

- General How Science Works skills.

Paper 2:

- Respiration + selected other A2 content (further information will follow in class)
- General How Science Works skills

Revision resources:

- Practice papers and mark schemes
- Guide on preparation for examinations
- Links to past papers
- YouTube revision sites
- Revision notes + summary grids

All will be shared via Class Charts

Chemistry

Paper 1: Inorganic & Physical Chemistry 90 marks / 1hour 45mins.

Paper 2: Organic & Physical Chemistry 90marks / 1hour 45mins.

Students should bring: Pen, pencil, ruler (with millimetre measurements), eraser, scientific calculator.

Paper 1: Inorganic & Physical Chemistry - Atomic Structure Amount of Substance Bonding Energetics Chemical Equilibria & Le Chatelier's Principle Equilibrium Constant Kc Oxidation, reduction & redox equations Periodicity & Group 2 Group 7, The Halogens Thermodynamics

Paper 2: Organic & Physical Chemistry - Amount of Substance Bonding Chemical Equilibria & Le Chatelier's Principle Equilibrium Constant Kc Introduction to organic chemistry Alkanes Halogenoalkanes Alkenes Alcohols Organic analysis Rate Equations

These topics are common to Paper 1 & Paper 2. Amount of Substance Bonding Chemical Equilibria & Le Chatelier's Principle Equilibrium Constant Kc Introduction to organic chemistry Alkanes Halogenoalkanes Alkenes Alcohols Organic analysis Rate equations

Resources we will provide: Practice papers and mark schemes. Guide on Preparation for Examinations

Revision resources:

- Allery Tutor Chemistry Videos link to play list

<https://www.youtube.com/channel/UCPtWS4fCi25YHw5SPGdPz0g>

- A level Chemistry revision notes. <https://www.docbrown.info/page13/page13.htm>

- A level Chemistry notes. <http://www.knockhardy.org.uk/sci.htm>

- A level Chemistry notes and activities <https://s-cool.co.uk/a-level/chemistry>

- A level Chemistry notes and activities. <http://www.chemguide.co.uk/>

- A level Chemistry notes and activities. <http://www.chembook.co.uk/>

Additional Information: These topics are common to paper 1 and paper 2: Amount of substance Bonding Chemical Equilibria & Le Chatelier's principle Equilibrium Constant Kc

Physics

Paper 1 x 2hours Paper 2 x 1 hour 30 minutes

Students should bring Pen, Pencil, Rubber, Ruler and Calculator

Paper 1 - Full A Level paper 1 - 85 Marks split 60 short and long answer questions and 25 multiple choice

Topics to be covered:

- Measurement and errors
- Particles and radiation
- Mechanics and materials
- Electricity
- Periodic motion

Paper 2 – Year 2 content and required practicals

Topics to be covered:

- Thermal Physics
- Further Mechanics
- Gravitational Fields
- Radioactivity (except nuclear fusion and fission)
- All required practicals completed up to the exam

Resources provided:

- Equation sheet

Revision Resources: Information and resources available via ClassCharts

Business Studies

1 x 2 hour paper. (Paper 3 longer case study)

Students should bring: pen, pencil, ruler, rubber, and calculator.

Topics to be covered: Students should focus on their recent learning, 3.7 and 3.8 Strategy as well as the following topics

- Methods of promotion
- Copyright
- Gearing, Liquidity ratios and Debt Factoring
- Leadership Styles and Strategies
- Stakeholders and Takeovers
- Strategic planning including Ansoff, Porter's Five Forces and Porter's Generic Strategies

Resources provided:

- Case Study, question paper and lined paper

BTEC Business

Due to the nature of this vocational course, students have not currently covered enough of the theory to be assessed in any depth at this stage. During the PPE window, students should continue with the Assignment Brief for the unit they are currently undertaking.

Economics

1 x 2 hour paper.

Students should bring: pen, pencil, ruler, rubber, and calculator

Topics to be covered:

- Micro Economics.
- All Y12 work covered Sept to Dec 2023
- Y13 work covered since we returned in Sept 2024

Revision Resources:

- Revision guide pages as follows: Y12 Micro p5-37; 76-88; 90-106. Y13 Work Market structures P38-56; 58-67. Labour markets P102-117

Computer Science

Paper 1: Programming to be completed in MGR Lesson

Paper 2: 1 hour 30 minutes (MDA material)

Topics to be covered:

- 4.5 Fundamentals of data representation
- 4.6 Fundamentals of computer systems
- 4.7 Fundamentals of computer organisation and architecture
- 4.8 Consequences of uses of computing

Revision Resources:

- Class Notes
- Revision pack
- Isaac Computing
- Craig“n” Dave YouTube website
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BTEC ICT

Due to the nature of this vocational course, students have not currently covered enough of the theory to be assessed in any depth at this stage. During the PPE window, students should continue with the Assignment Brief for the unit they are currently undertaking

History

1 paper 1 hour 30 minutes – full paper worth 50 marks

The Early Tudors 1485 – 1558 - Students should prepare for questions on **Henry VII**
Henry VIII **Edward VI** and **Mary I**

Revision Resources:

Weekly revision tasks to be completed in class and at home to help structure revision and preparation

<https://www.hoddereducation.co.uk/subjects/history/products/16-18/my-revision-notes-ocr-as-a-level-history-england-1>

Politics

1 x 2 hour paper on the **UK Government and Politics**

Q 1,2 and 3, 9 marks each, Q4 25 mark extract question, Q5/Q6 Mark essay question (from a choice of 2)

Topics to be covered:

- The Constitution
- Parliament
- Democracy and Participation
- Prime Minister and the Cabinet
- The Judiciary
- Devolution
- Elections and Referendums
- Political Parties
- The European Union

Revision Resources:

Resources provided by class teacher.

Geography

1 paper 2 hours and 30 minutes

Topics to be covered:

- Water and cycles unit
- Coastal systems and landscape unit
- Changing places unit

Resources provided: Time for independent revision (homework)

Revision resources:

- Classroom notes.
- A level textbook: AQA Geography, Skinner et al (2016).
- A level revision guides: ·
- My Revision Notes: AQA A-level Geography: Second Edition (2021),
- AQA Complete Revision & Practice, CGP A-Level Geography, (2021)
- AQA past papers <https://www.aqa.org.uk/subjects/geography/as-and-a-level/geography-7036/assessment-resource>

Cambridge Technical Sport Studies

2 papers

- 1 x one hour 30 minutes **Unit 1**
- 1 x 1 hour **Unit 3**

Unit 1 Body Systems (for those taking resits only)

Topics to be covered:

- The Skeletal system
- The muscular system
- The cardiovascular system
- The Respiratory system
- The energy systems

Unit 3 Sports Organisation and Development (all students)

Topics to be covered:

- How sport in the UK is organised
- Sports development
- Measuring the impact of sport development

Revision resources:

- Folders
- Textbooks
- RMShared

French

Students will sit two written exams and complete one speaking exam of AS/A Level standard –

Component 1 - Listening, reading and translation - 2 hours 30 minutes

Component 2 – Literature exam (2 essays) – 2 hours

Component 3 - Speaking Assessment 30 minutes to be arranged with MFL Staff during lesson time

Topics to be covered:

- Revise all of the topics covered this year, including A04 facts for the speaking exam
- Practise grammar covered this year and revise key topic vocabulary.
- Revise all the main characters and themes from 'No et Moi', specific vocabulary & short quotes from the book and some phrases to help sequence your ideas. Don't forget to revise compound tenses and learn some key complex vocabulary.

Resources provided:

- Printed exam papers & photo card. Lined exercise paper.
- Equipment Required:
- Pen & spare pen Highlighter pen

Revision Resources:

- All Languages & grammar notes
- A04 Fact lists (a few key dates/examples/trends from French or French-speaking countries)
- Grammar practice booklets
- Interactive listening & reading tasks on Kerboodle
- Cheat sheets from 'No et Moi' on key themes & characters

Additional Information: The two written papers will be scheduled during the exam fortnight. We will make individual appointments with students to sit a speaking exam.

German

Students will sit two written exams and complete one speaking exam of AS/A Level standard –

Component 1 - Listening, reading and translation – 1 hour 45 minutes

Component 2 – Literature exam (Translation section and 1 essay on Goodbye Lenin) – 1 hour 30 minutes

Component 3 - Speaking Assessment 30 minutes to be arranged with MFL Staff during lesson time

Topics to be covered:

- Revise all of the AS topics, including A04 facts for the speaking exam (family ,Technology, Youth Culture – Music, Fashion, TV, Festivals and Traditions, Art and Architecture and Berlin cultural life then and now)
- Practice grammar covered to date and learn some of the key rules
- Revise all of the main characters and themes from “Goodbye Lenin”, specific vocabulary and short quotes from the film and some phrases to help sequence your ideas.

Resources provided: printed exam papers and photo card. Lined exercise paper

Equipment required: Pen and spare pen, Highlighter pen

Revision Resources:

- All language and grammar notes – exercise book and folders
- Past papers (we will do some practice papers together in class too)
- Language Nut vocabulary and grammar tasks
- A04 fact lists (a few key dates/examples/statistics/trends from German or German speaking countries)
- Cheat sheets from “Goodbye Lenin” on key themes and characters; study guide book and past essays with feedback and redrafts
- Vocabulary lists – printed lists and audio on Kerboodle
- Vocabulary builder tasks on Kerboodle per topic
- Interactive listening and reading tasks on kerboodle per topic
- Example speaking answers on Kerboodle per topic
- End of unit “ test yourself” tasks on Kerboodle
- Wiederholung section and tasks at end of each unit

Note: Where possible Kerboodle revision tasks can be assigned to you. Wiederholung tasks will required using the online textbook. Your teacher will explain in class.

Additional Information: The two written papers will be scheduled during the exam fortnight. We will make individual appointments with students to sit a speaking exam

R.E.

2 x 2 hour papers

Paper 1 Philosophy

Topics to be covered:

- Aristotle, Plato, Religious Experiences, Religious Language

Paper 2 Ethics

Topics to be covered:

- Situation Ethics, Euthanasia,
- Sexual ethics – Utilitarianism, situation ethics, natural Law and Kant
- Conscience – Aquinas and Freud

Revision resources: Textbooks, A3 Sheets and Year 12 revision notes. We will go through exam structure in lesson

Psychology

2 papers x 2 hours

Students should bring: Pen Pencil Ruler Calculator

Paper 1:

- Social Influence
- Memory
- Attachment
- Psychopathology

Paper 2:

- Issues and debates
- Relationships
- Approaches
- Research Methods

Students should already have their completed booklets/class notes for each topic, alongside previous assessments (with feedback) and some sample answers.

Revision resources:

Flash cards for each topic

Past paper questions

Essay plans

<https://www.tutor2u.net/psychology>

Sociology

2 x 2 hour papers

Topics to be covered:

Paper 1:

- Education, Research methods, Methods in context

Paper 2:

- Family, Crime and Deviance – Marxist views on crime, Gender and crime, Functionalism and crime

Revision resources:

- Students have been provided with flashcards and A3 summary sheets to use for revision
- Use feedback from previous assessments
- <https://www.tutor2u.net/sociology/latest>

Criminology

No PPE - Students will complete a Controlled Assessment utilising draft documentation they have prepared during lessons.

Level 3 Cambridge Technical - Health and Social Care

No PPE – Students are completing ongoing internally assessed units.

D&T – Product Design

Paper 1x 2 hours and 30 minutes .Written paper 120 marks. Will cover areas of the specification:

- Technical Principles. This paper will include the following topics:
 - Composites
 - Enhancement of metals
 - Finishing of papers and boards
 - Manufacture, repair, maintenance and disposal
 - Materials and their applications
 - Maths: circle area
 - Maths: Pythagoras' theorem
 - Maths: trigonometry
 - Maths: calculating volume
 - Methods for investigating and testing materials
 - Performance characteristics of metals
 - Performance characteristics of polymer based sheet and film
 - Performance characteristics of polymers
 - Performance characteristics of woods
 - Processes of polymers
 - Processes of woods
 - Product development and improvement
 - Protecting designs and intellectual property: open design
 - Rapid prototyping
 - Safety in products and services to the customer
 - Scales of production
 - Smart materials

Paper 2x 1 hour and 30 minutes. Written paper 80 marks. Will cover areas of the specification:

- Designing and Making principles. This paper will include the following topics
 - Accuracy in design and manufacture
 - Design styles and movements
 - Designers and their work
 - Enhancement of metals
 - Iterative design process
 - Major developments in technology
 - Maths: calculating mass
 - National and international standards in product design
 - Processes of metals
 - Processes of polymers
 - Product life cycle
 - Prototyping methods
 - Quality assurance
 - Rapid prototyping
 - Socio economic influences on the work of designers
 - The use of a design process
 - Virtual modelling
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Students should bring: usual writing and drawing instruments and scientific calculator

Revision Resources:

The following text books are useful to support revision for the exam papers:

- <https://www.amazon.co.uk/AQA-AS-Level-Design-Technology/dp/1510414088>
- <https://www.amazon.co.uk/My-Revision-Notes-Technology-Product/dp/151043229>