Year 11 - Mock Exam Revision topics.

This guide lists all the topics you need to revise for each of your mock exams .

Use this resource as a checklist.

Combined Science and Triple topics

Chemistry
Atomic structure
periodic table
bonding
chemical calculations
chemical changes- reactions of acids
energy changes

Physics
energy and energy resources
electric circuits
electricity in the home
molecules and matter
radioactivity

Biology
cell structure and transport
cell division
digestion
organisation
communicable diseases
preventing and treating disease
non-communicable diseases
photosynthesis
respiration

Hospitality and Catering

Unit 1

LO1

Understand the environment in which hospitality and catering providers operate

LO2

Understand how hospitality and catering provision operates

LO3

Understand how hospitality and catering provision meets health and safety requirements

LO4

Know how food can cause ill health

GCSE Spanish

The basics: Numbers, Times & dates, Question words, Opinion phrases, Weather
Family and friends: Physical descriptions, Personalities and Relationships

Free time activities: Music, Cinema, TV, Food, Hobbies and Sport

Technology in everyday life: Technology, Social media (advantages / disadvantages)

Customs and festivals: Comparing different festivals, Discussing past experiences

Where you live: Places in the city, Home, Activities you do at home, Chores you do at home, Shopping (clothes / food)

Lifestyle: Healthy living / Unhealthy living, Illnesses / injuries Remedies

Social and global issues: Environmental problems, Ways to protect the environment, Problems in society

Travel and tourism: Where to go, Accommodation (types of accommodation, booking and dealing with problems), Transport, What to do on holiday
Current and future study and employment: School subjects School routine, School rules, School life / activities, Jobs (work experience), Future plans, Gap year plans (un año sabático)

Grammar: Past / present / future tense / conditional tense Imperfect tense (used to…),Subjunctive tense (if i could...)

GCSE PE

Applied Anatomy and Physiology

1.1 - The structure and function of the musculo-skeletal system

1.2 - The structure and function of the cardio-respiratory system

1.3 - Anaerobic and aerobic exercise

1.4 - The short and long term effects of exercise

Movement Analysis

2.1 - Lever systems

2.2 Planes and axes of movement

Physical Training

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

3.2 - The components of fitness

3.3 - The principles of training

3.4 - The long term effects of exercise

3,5 - How to optimise training and prevent injury

3.6 - Effective use of warm up and cool down

GCSE Computer Science

Paper 1

1.1.1 Architecture of the CPU

1.1.3 Embedded systems

1.2.1 Primary storage (Memory)

1.2.3 Units

1.3.1 Networks and topologies

1.3.2 Wired and wireless networks, protocols and layers

1.4.1 Threats to computer systems and networks

1.4.2 Identifying and preventing vulnerabilities
1.5.1 Operating systems
1.5.2 Utility software
2.2.3 Additional programming techniques

Paper 2

- 1.2.4 Data storage
- 2.1.1 Computational thinking
- 2.1.2 Designing, creating and refining algorithms
- 2.1.3 Searching and sorting algorithms
- 2.2.1 Programming fundamentals
- 2.2.2 Data types
- 2.2.3 Additional programming techniques
- 2.3.1 Defensive design

GCSE sociology	Geography (Paper 1 90 minutes)	Business Studies	History GCSE
Families – sub-topics/checklist 1. What is family? 2. What different family types are there in the UK? 3. What alternatives to families exist in the UK? 4. How might an individual's family and household settings change over the course of their life? 5. What are the links between families, households & ethnicities? 6. What types of family diversity are there? 7. How do families differ within a global context? 8. How do functionalist view families? 9. How does Parsons view the functions of family? 10. How do Marxist view families? 11. How do feminists view families? 12. What were conjugal roles and relationships like in the past? 13. What is a symmetrical family? 14. Is the symmetrical family a reality or a myth? 15. How is power distributed between partners in relationships? 16. What are conventional families? 17. How have relationships between parents and their children changed? 18. How have people's relationship with their wider families changed? 19. What changes are taking place in the family structures? 20. What are the trends in lone parent families? 21. What changes are taking place in fertility? 22. How do marriages differ in a global context? 23. What are the changing patterns of marriage? 24. What are the changing patterns of divorce? 25. What are the consequences of divorce? 26. What are the contemporary social issues relate to families? 27. What methods are used to research families? Explain , also, the strengths and weaknesses of these methods/ **Education – sub-topics / Checklist** 1. What are the economic and selective roles in education? 2. What are the socialisation, social control and political roles of education? 3. What is learned through formal and informal education 4. How does the functionalist perspective view the role of the education system? 5. How does Parsons view the role of the education system? 6. What is the Marxist view on the role of education for a capitalist society? 7. What have been the key historical changes in Britain's education system? 8. How is the education system organised in contemporary Britain? 9. Should education be provided by the state or by the independent sector? 10. What are the vocational and alternative forms of provision? 11. What key changes were introduced through the 1988 Education Act? 12. What is marketization and how has it influenced education? 13. How did New Labour develop educational policy after 1997? 14. What are academies, free schools and selection by ability?	**Section A The Challenge of Natural Hazards** ● **Tectonic Theory/ Plate boundaries** ● **Earthquakes and volcanoes including a case study of Haiti and Christchurch** ● **Tropical storms** ● **Climate change (evidence, reasons both physical and human, mitigation and management)** ● **Extreme weather in the UK: Somerset Levels** **Section B The Living World** ● **Food chains, ecosystems and biomes.** ● **Rainforests: importance, characteristics, deforestation and management** ● **Deserts: Characteristics, challenges, opportunities, management** **Section C Coasts and Rivers** ● **Processes that include erosion, transportation and deposition** ● **River and coastal features** ● **Management of rivers and coasts** ● **Case study of a river flooding (Banbury or River Parrett)** **Geography** (Paper 2/3 60 minutes) Section A- The Changing Economic World ● **Global variations in economic development and quality of life.** ● **The Case Study of Nigeria** ● **The Case Study of the UK** Section B - The Tropical Rainforest **Exam questions on the Rainforests Pre-release booklet**	● Methods of growth in a business ● Financial growth in a business ● Aiims and objectives of a business ● Economy of Business ● Product, Price, Place, Promotion ● Marketing Mix ● Business operations ● Technology and production ● Managing stock ● Working with supplies ● Business calculations ● Understanding business performance	In the December mocks you will only have Paper 1 and Paper 2. **Paper 1** consists of the Historic Environment on the Western Front and Medicine through time c1250-present. **Paper 2** consists of both Early Elizabethan England *and* American West c1834-1894. Below is a list of topics for year 11 history December 2022 mock exam with page references from the green revision book: Paper 1 - MTT ● Mediaeval healers p9 ● Developments in the understanding of causes, treatments and preventions of infectious diseases 1500-1900 p15-18, p22-23 ● Care and treatment 1700-1900 p19-21 ● Medicine in the trenches p33-38 ● Science and technology in the 20th century p24-28 Paper 2 - Elizabeth ● Challenges Elizabeth faced in 1558 p90-92 ● Elizabethan Leisure p106 ● Plots p98-99 ● Rivalry between England and Spain p100-102 Paper 2 - American West For each topic make detailed notes about what happened and the consequences ● Manifest Destiny p48, p50 ● Range wars p61 ● Railroads p52 ● Gold Mining p51, 57 ● Farming technology p53 For further information see your google classroom or ask your teacher.

English Language & Literature (Paper 2 for both)

Language Paper 2:

- Non-fiction, two extracts (1x 19th century & 1x 20th or 21st century)

- Transactional/non-fiction writing task (speech, letter, article, leaflet)

Literature Paper 2:

- 'An Inspector Calls' or 'Animal Farm' (11R1 only) essay. You will have a choice of a theme or character essay. Pick one only to answer in the exam.

- 'Power and Conflict' poetry essay (revise the first 11 poems, up to and including 'War Photographer')

- Unseen poetry x2 questions (1 essay on the first unseen poem and 1 short essay comparing the methods used in both unseen poems).

Extra revision resources and links to help you to 'get ahead' in preparation for your December mock exams in Language Paper 2 and Literature Paper 2:

Language Paper 2

Q.1-4 (reading):

https://www.youtube.com/playlist?list=PLqGFsWf-P-cB-GSeqYup7PXId4pbldQVq (Mr Bruff playlist)

Q.5 (non-fiction/transactional writing task):

https://www.youtube.com/watch?v=T7TM6qmRqus (Mr Bruff letter writing)

https://www.youtube.com/watch?v=EMmAriRCl20&list=PLqGFsWf-P-cB-GSeqYup7PXId4pbldQVq&index=21 (Mr Bruff speech writing)

https://www.youtube.com/watch?v=60NkImwWrvc&list=PLqGFsWf-P-cB-GSeqYup7PXId4pbldQVq&index=10 (Mr Bruff article writing)

https://www.youtube.com/watch?v=WgivWzc9e0E (English with Matt letter writing)

https://www.bbc.co.uk/bitesize/guides/z27cmnb/revision/3 (BBC Bitesize)

Literature Paper 2

An Inspector Calls:

https://www.amazon.co.uk/Grade-GCSE-English-Text-Guide/dp/1841461156/ref=sr_1_2?crid=9S5Z2JKAOQ4E&keywords=an+inspector+calls+revision+guide+cgp+aqa&qid=1666284470&sprefix=an+inspector+calls+revision+guide+cgp+aqa%2Caps%2C189&sr=8-2 (CGP revision guide, available on Amazon)

https://www.youtube.com/watch?v=CtqlCIjZtcY&list=PLqGFsWf-P-cDvuiSH8SycEDh1Ugke9tmb (Mr Bruff 'An Inspector Calls' playlist)

'Power and Conflict' poetry anthology:

https://www.amazon.co.uk/Literature-Conflict-Anthology-Revision-Paperback/dp/B08K94FWWH/ref=sr_1_3?crid=2RBQDX9AVTX3T&keywords=power+and+conflict+revision+guide+cgp+aqa&qid=1666285578&sprefix=power+and+conflict+revision+guide+cgp+aqa%2Caps%2C176&sr=8-3 (CGP revision guide)

https://www.youtube.com/watch?v=PV_EeGJmWqA&list=PLqGFsWf-P-cAO64lBHZTFwTz2X0DD_Cxk ('Power and Conflict' playlist)

GCSE French

The basics: Numbers, Times & dates, Question words, Opinion phrases, Weather

Family and friends: Physical descriptions, Personalities and Relationships

Free time activities: Music, Cinema, TV, Food, Hobbies and Sport

Technology in everyday life: Technology, Social media (advantages / disadvantages)

Customs and festivals: Comparing different festivals, Discussing past experiences

Where you live: Places in the city, Home, Activities you do at home, Chores you do at home, Shopping (clothes / food)

Lifestyle: Healthy living / Unhealthy living, Illnesses / injuries Remedies

Social and global issues: Environmental problems, Ways to protect the environment, Problems in society

Travel and tourism: Where to go, Accommodation (types of accommodation, booking and dealing with problems), Transport, What to do on holiday

Current and future study and employment: School subjects
School routine, School rules, School life / activities, Jobs (work experience), Future plans, Gap year plans (un año sabático)

Grammar: Past / present / future tense / conditional tense
Imperfect tense (used to...),Subjunctive tense (if i could...)

	Number	Ratio	Algebra	Geometry	Probability	Statistics
Paper 4	• Calculator use: quotients • **Priority of operations** • Percentage calculations • **Percentage change** • **Reverse percentages** • **Upper and lower bounds** • Standard form representation • Decimal, fractions and percentages equivalence	• Direct proportion • Solve ratio and proportion problems • Growth and decay problems	• Factorise quadratic expressions • Multiplying out brackets • Algebraic fractions • Substitute values into expressions • Formulate algebraic expressions • Use of brackets • **Solving inequalities** • Drawing and interpreting graphs • **Quadratic graphs** • Equations of circles • Algebraic proofs	• Properties of a triangle • Circle terms • Angles in polygons • **Properties of parallel lines** • Units of length and time • **Compound units: rates** • **Volume of pyramid and sphere** • Standard circle theorems • Circumference of a circle • Pythagoras' theorem	• Enumeration • Calculation with the laws of probability • Conditional probability	• Collecting data • **Scatter diagrams and outliers**
Paper 5	• **Fraction arithmetic** • Decimal arithmetic • Types of numbers • **Factors and multiples** • Decimals and fractions • Recurring decimals • Percentage calculations • Percentage change • Index notation • Powers of integers • Laws of indices • Surds and exact calculations • Rounding • Estimation • Standard form representation • **Standard form calculation**	• **Simplify ratios** • Use ratio • **Inverse proportion**	• Simplifying algebraic expressions • Formulate algebraic expressions • **Multiplying out brackets** • Rearranging formulae • Substitute values into expressions • Use of brackets • Use kinematics formulae • **Quadratic equations** • Approximate solutions by iteration • Equations of circles • Drawing and interpreting graphs • Distance/speed – time graphs • Parallel and perpendicular lines • **Equation of a line**	• Units of speed, distance and time • **Transformations** • Construct loci • Maps, **bearings** and scale drawings • Circumference of a circle and length of an arc • Area of a rectangle • **Trigonometry** • **Exact trigonometric ratios**	• **Relative frequency** • Equally likely outcomes and probability • Venn diagrams and sets • Conditional probability	• Graphical misrepresentation • **Pie chart** • Line graph and time series
Paper 6	• Types of numbers • Factors and multiples • **Percentage change** • Reverse percentages • Index notation • Laws of indices • Rounding • Standard form calculation	• Use ratio • **Calculate with proportions** • **Direct proportion** • **Growth and decay problems**	• Simplifying algebraic expressions • Completing the square • **Multiplying out brackets** • Formulate algebraic expressions • Rearranging formulae • Factorise expressions • Use of brackets • **Linear equations** • Quadratic equations • Graphical inequalities • Features and types of graphs • Trigonometric graphs • Transformations of graphs • Drawing and interpreting graphs • Solution set for inequalities	• Reasons for congruency • Length, area and volume scale factors of similar figures • Units of money, distance, time, **density, mass, volume** and area • Area of a triangle • **Volume and surface area: cuboid and prism** • Area and circumference of a circle • Trigonometry • Solving non-right-angled triangles	• Equally likely outcomes and probability • Sample spaces • Enumeration • **Calculation with the laws of probability** • Conditional probability	• Cumulative frequency

December 2022 – Year 11 mock exams
Maths Revision topic lists
FOUNDATION TIER

Southfields Academy
CARPE DIEM

	Number	Ratio	Algebra	Geometry	Probability	Statistics
Paper 1	• Four rules with integers • Money calculations • **Priority of operations** • Inverse operations • Understand number definitions and terms • Prime numbers • Fraction, decimals and percentages • Fraction of a quantity • Percentages of quantities • **Percentage change** • **Reverse percentages** • Listing FDP in order • Use of calculator • Standard form notation • Rounding • **Upper and lower bounds**	• Share into a ratio • Use a ratio	• Simplifying algebraic expressions • Factorising expressions • Linear equations • **Solving inequalities** • Function machines • **Quadratic graphs**	• Polygons (notation and terms) • **Properties of parallel lines** • Properties of solids • Column vectors • Time • **Compound units: rates** • Area of a rectangle • Area of a circle • Area of composite shapes • **Volume including cylinder, pyramid and sphere**	N/A	• Averages and range • **Scatter diagram and correlation** • Graphical misrepresentation • Frequency tree
Paper 2	• Arithmetic with positive and negative numbers • Division of a quantity • **Prime factors** • Fraction, decimals and percentages • Fractions of a quantity • **Fraction arithmetic** • Calculations with decimals • Percentage conversions • Percentage of a quantity • **Standard form calculations**	• **Simplify ratio** • Interpreting ratio • **Inverse proportion**	• **Multiplying out brackets** • **Formulate algebraic expressions** • Equations and identities • Solve linear equations • **Solve quadratic equations** • Rearrange equations • **Equation of a straight line**	• Construct and interpret angle bisector, line bisector and distance from a point. • **Transformations** • Money • **Bearings** • Area of a triangle • **Trigonometry** • **Exact trigonometric ratios**	• **Relative frequency** • Probability of equally likely events	• Bar chart and **Pie chart**
Paper 3	• Calculations with integers • Calculations with decimals • Prime numbers • Factors, multiples and LCM • Sequence rule to find a term • Understand number definitions and terms • Fractions, decimals and percentages • Fraction of a quantity • Fraction arithmetic • Percentage of a quantity • **Percentage change** • Powers of integers • Use of calculator	• Write in a ratio • Simplify a ratio • **Calculate with proportions** • Share in a ratio • **Direct proportion** • Simple interest • **Growth and decay problems and graphs**	• Simplify algebraic products and quotients • **Multiply out brackets** and simplify • Factorise quadratic expressions • Substitute into an expression • **Solve linear equation** • Solve simultaneous equations • Continue sequence • Quadratic graphs • Graphs of real-world contexts	• Symmetry • Circle terms • Properties of quadrilaterals • **Mass, Volume, Density** • Perimeters of triangles and quadrilaterals • **Volume and surface area: cuboid and prism**	• Understand the probability scale • Probability calculation • Listing outcomes and related probabilities • Tree diagram • **Calculation with the laws of probability**	• Averages