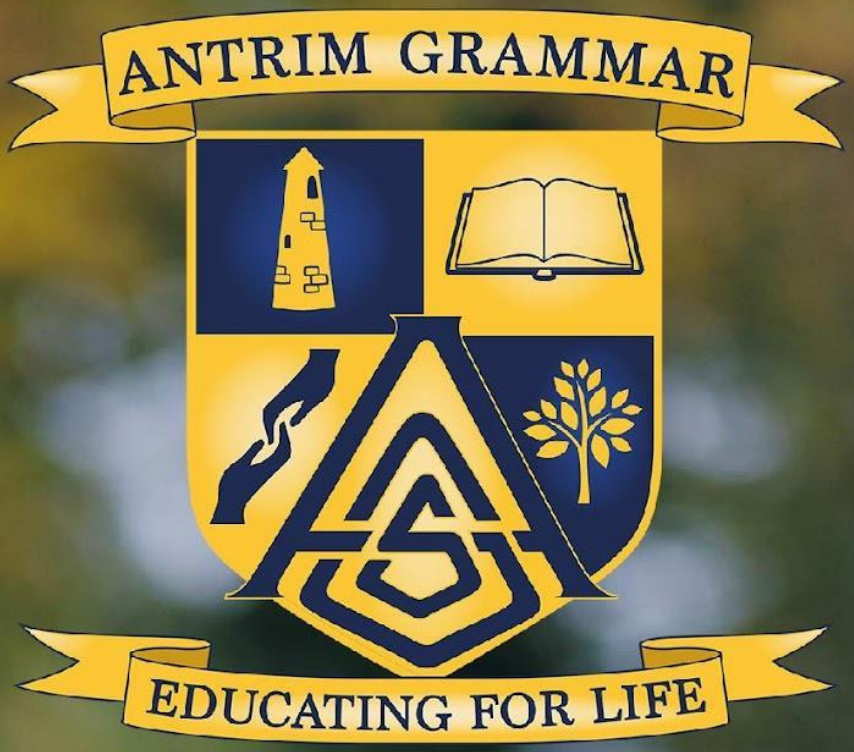


Year 14 Revision Topics

Winter Examinations 2025

This booklet outlines the key topics your should revise for your subjects for the Winter Mock Examinations.	
Subject	**Topics to be revised**
Biology	A21 (All content covered and associated Practicals) 4.1 Homeostasis 4.2 Immunity 4.3 Coordination and control a) Plants b) Animals i. Nervous system ii. The eye iii. Muscles 4.4 Ecosystems a) Populations b) Communities c) Ecological energetics d) Nutrient cycling
Business Studies	1. Business objectives 2. Organisational culture 3. Stakeholder objectives 4. Communication 5. Economies and diseconomies of scale 6. Business strategy and planning 7. Decision tree analysis 8. Risk and uncertainty 9. Company accounts 10. Ratio analysis 11. Investment appraisal
Chemistry	**A2 1 Mock Examination** ● Lattice Enthalpy ● Enthalpy- entropy and free energy ● Rates of Reaction ● Equilibrium ● Acid-base Equilibria ● Isomerism ● Aldehydes + Ketones ● Carboxylic Acids ● Derivatives of Carboxylic Acids ● Aromatic Chemistry
Computer Science	● Unit 3: ○ Data Structures ○ Logical Operations

	○ Principals of Programming ○ Algorithms and Programs ○ Systems Analysis ○ Systems Design ● Unit 4: ○ Hardware and Communication ○ Data Transmission ○ Data Representation and Data Types ● Unit 5: ○ Ongoing coursework
Design and Technology	**EDUQAS** Pupils will be tested on theory booklets: Section 3 – Processes Section 4 – Industrial & Commercial Practice
English Literature	**AEL11 - 'Othello'** Revision notebooks will be given out by your teacher. **AEL12 - Poetry - Chaucer's Wife of Bath - 60 minutes** There will be a Resource Booklet for the extract. **Your teacher will put your Knowledge Organiser into Google Classroom.**
French	The examination will include a listening, reading and prose test. There will be a literature essay done in class the week before the exams. Revise vocabulary for topics covered to date. Revise all grammar covered to date. Revise learning points for prose
Further Mathematics	● Polar co-ordinates ● Proof by induction ● Partial Fractions ● Hyperbolic functions ● Inverse Trig Functions ● Integration by Parts ● Reduction Formula
Geography	**Human** 1. Factors that define ethnicity; 2. Factors influencing perceived ethnic and social identity; 3. Three factors that create diversity and UK case study based on this; 4. Two factors that maintain diversity and Belfast case study based on this; and 5. Factors that create ethnic conflict; 6. Types of ethnic conflict; and 7. [Case study of Israel] **Physical** 1. Knowledge and understanding of the evidence and theory of plate tectonics; 2. Knowledge of the plate and sub-plate processes at all margins;

	3. Knowledge of landforms at these margins; 4. Knowledge of volcanic activity at plate margins and hot spots; 5. Knowledge of the benefits and hazards of volcanic activity; 6. How a country prepares to and responds to volcanic activity; 7. P, S and L waves; and 8. Impacts of seismic events (to include Tohuku)
Health and Social Care	● **Health Promotion Portfolio** ● **Supporting the Family Portfolio**
History	**<u>A21 - The American Presidency</u>** This will be a 1 hour 15-minute examination. A detailed knowledge of the events we have studied so far will be required. Consider the core contextual knowledge under the key themes below. Be prepared to make a link and judgement to the question throughout your answer. **An emerging international presence: Theodore Roosevelt and Woodrow Wilson** ● The office of President ● Roosevelt's active foreign policy ● Growth of US naval power ● Roosevelt's active domestic policy ● Wilson's progressive social reforms ● America's role in WW1 ● Reasons for America's emerging international presence **The passive presidents: Harding, Coolidge and Hoover** ● The 'boom' economy of the US in the 1920s ● Wall Street Crash and Depression **The New Deal: FDR, the Great Depression and WW2** ● Roosevelt's response to the Depression and the First New Deal ● Opposition of Supreme Court to aspects of the New Deal **<u>A22 - The Partition of Ireland</u>** Your mock will be 1h 50 minutes. You will be asked a value question (15 marks), an interpretation question (25 marks), and an essay question (20 marks). A detailed knowledge of the events from 1910 - September 1914 will be required. A timeline will assist you greatly with this. **Consider the key themes:** 1. Who was to blame for the Home Rule Crisis? 2. Who gained the most from the crisis? 3. Why the Liberals introduced HR, why they were unsympathetic to the Unionists, how effective was Asquith's leadership, were the Liberals to blame for the crisis, did Asquith achieve his political objectives? 4. Why did the Conservatives support the Unionist opposition to HR, were Law's tactics effective, how far did Conservative tactics threaten political stability?

	5. Did the IPP rely too much on the Liberals, and did they achieve their political objectives? 6. Why did unionists oppose HR and what tactics did the UUs adopt? How effective were their tactics and were they to blame for the crisis? Would all unionists have been satisfied by the outcome of the crisis in September 1914? **Core content:** ● First and Second HRB ● Liberal Victory in 1906, 1910 elections, 1909 Budget; 1911 Parliament Act ● Role of Edward Carson and the UUC in Ulster opposition ● Role of Sir James Craig ● Craigavon, Balmoral and Blenheim demonstrations and key quotations ● Role of the Conservatives and Andrew Bonar Law ● Introduction of the Third Home Rule Bill April 1912 ● Role of Asquith and the Feb Cabinet meeting ● Did Asquith make a mistake in not considering Ulster from the start? (Jalland argument) ● Agar-Robartes amendment ● Loreburn Letter ● Ulster resistance: SL&C, UVF ● Search for a Solution (Drift) ● Role of King summer 1913 ● Redmond's complacency ● Balmoral Castle ● Secret meetings and turn to compromise ● Asquith and Bonar Law meetings – county option – Redmond and Carson's response ● Larne and Howth gun running (UVF and IVF) ● Curragh incident ● Buckingham Palace Conference ● Political developments ● Causes of the Easter Rising (check essay plan)

BTEC IT	• Unit 1:
	  ○ Digital Devices, their functions and use
	  ○ Peripheral Devices and Media
	  ○ Computer Software in an IT System
	  ○ Emerging Technologies
	  ○ Choosing IT Systems
	  ○ Connectivity
	  ○ Networks
	• Unit 6 - Website Development:
	  ○ No examination, please follow coursework deadlines as given

Life + Health Sciences	**A2 2 Organic Chemistry** Nomenclature, Structure and Isomerism Alkanes Alkenes **A2 5 Genetics** Booklet 1 DNA and the Genetic Code Booklet 2 Meiosis and Genetic Diagrams
MAthematics	<u>Paper 1 Pure</u> 1. Algebra and Graphs 2. Functions 4. Coordinate Geometry 6. Binomial Expansion 7. Trigonometric Functions <u>Paper 2 Applied</u> 3. Radian measure 5. Sequences and Series M3. Moments Use moments in simple static contexts – to include o Rods o Ladders o Hinged beams M16. Variable Acceleration
Moving Image Arts	**A2 Film Theory** The A2 Moving Image Arts specification requires candidates to recall knowledge from throughout the GCE course - including;

	REALISM in Hollywood Realism & Formalism Poetic Realism Learn the CCEA Fact Files on the drive! **Knowledge and understanding of Film Language Terminology** – This must be demonstrated consistently throughout your writing **(use the laminated film language prompt cards!)** ● Practise timed unseen clip analysis (these will be available on the A Level drive. **IT IS IMPERATIVE YOU THOROUGHLY KNOW ALL AREAS OF FILM LANGUAGE**
Physics	Ch 4.1 Deformation of solids Ch 4.2 Thermal Physics to date Ch 4.3 Uniform circular motion Ch 4.4 Simple Harmonic motion to date Ch 4.5 The nucleus Ch 4.6 Nuclear decay Ch 4.7 Nuclear energy Ch 4.8 Nuclear fission and fusion Practical Theory
Psychology	Issues and Debates: Gender Bias Issues and Debates: Cultural Bias Issues and Debates: Free Will v Determinism Issues and Debates: Nature vs Nurture Forensic Psychology: Top Down profiling Forensic Psychology: Bottom Up profiling Forensic Psychology: Genetic and Neural exp Forensic Psychology: Kohlberg Forensic Psychology: D.A.T. Forensic Psychology: Custodial Sentencing Forensic Psychology: Behaviour Management Research Methods: Experimental Method Research Methods: Experimental Design Research Methods: Aims Research Methods: Hypotheses

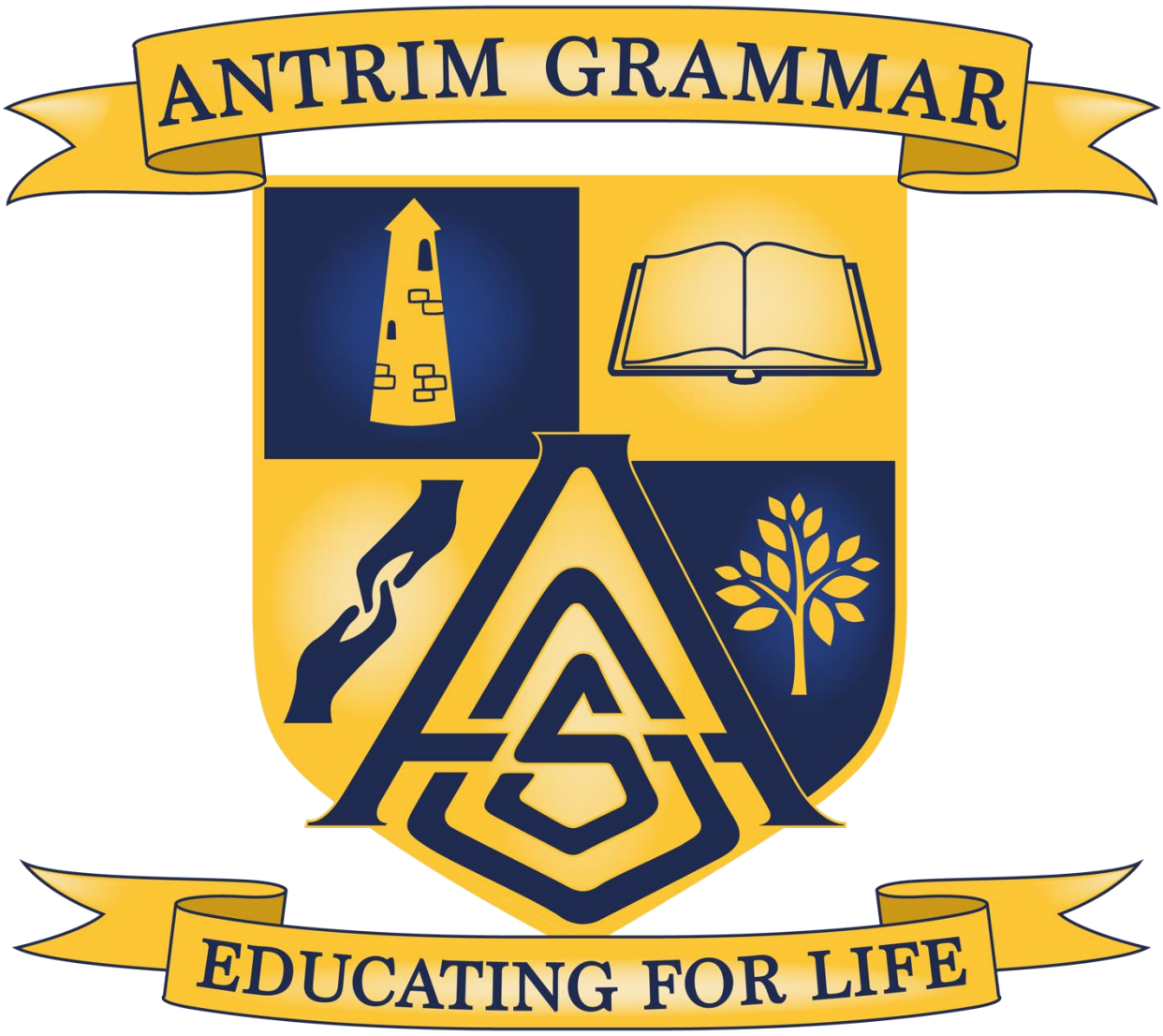
	Research Methods: Variables Research Methods: Questionnaires & Interviews Research Methods: Sampling Research Methods: Central tendency (mean median, mode) Research Methods: Graphs, tables scattergrams and bar charts Research Methods: Qualitative and Quantitative Data Research Methods: Inferential Statistics including The Sign Test Approaches: Cognitive, Learning Approaches and the Biological Approach Approaches: Psychodynamic Approach Approaches: Humanistic Approach
Politics	**The paper will be 75 minutes.** 5 + 10 - US only questions 10 + 30 - comparative questions **The US Executive** ● Presidential power (formal) ● Presidential power informal) ● Changes to the role of the President ● The Executive process ● Presidential Constraints ● The impact of Lobby groups ● The relationship between the Executive and Congress (Presidential Persuasion) ● Executive comparisons **Congress** ● The structure and powers of Congress ● Representation function, effectiveness and comparison
Religious Studies	**A22: New Testament** **Galatians** Defence of Paul's authority (Ch 1&2). Who were the Judaisers? Trouble in Galatia (1:6-10). Paul's message not of human origin (1:11-24). Endorsed by other apostles (2:1-10). Peter rebuked for his inconsistency (2:11-21). Paul's teaching on Law and Grace. Justification by Faith (Ch 3&4) Galatians' experience of the Spirit(3:1-5). Example of Abraham (3:6-9). Danger in replying upon the law (3:10-14). Purpose of the law in history (3:15-25). True descendants of Abraham (3:26-29).

	God's dealings with the Jews illustrated (4:1-7). Paul's concern for the Galatians (4:8-20). The true sons of Abraham shown from scripture (4:21-31). Life in the Spirit and Christian Freedom (Ch 5&6) The importance of standing firm for freedom (5:1-6). Paul's hope for the Galatians (5:7-12). The proper use of freedom (5:13-25). The 'law' of Christ (5:26-6:5). Sowing to the Spirit (6:6-10). Conclusion (6:11-18). Should a person obey the law of Moses in order to be a true Christian? **OAHE: Continuing relevance of the issues addressed in Galatians** **Corinthians** Context / Purpose / Characteristics. Main themes. Issues raised by Paul.- Ch 1-4: Unity**.** Division into parties (1:10-12)**.** Not due to Paul (1:13-17)**.** The foolishness of the gospel (1:18-2:5)**.** A message revealed (2:6-16)**.** Misunderstanding of leadership (3:1-9)**.** The foundation and the building (3:10-17)**.** Foolishness of worldly wisdom (3:18-23)**.** Apostles of Christ (4:1-21). Issues raised by Paul – Ch 5&6: Immorality. A case of incest (5:1-13). Fornication (6:12-20)**.** Lawsuits against fellow Christians (6:1-11). Issues raised by the Corinthians – Ch 7. General principle (7:1-7). The married (7:8-9). The unmarried and the widow (7:10-11). The Christian married to an unbeliever willing to live with the believer (7:12-14) The Christian married to an unbeliever not willing to live with the believer (7:15-16). Lead the life assigned by God (7:17-24). Virgins (7:17-24). Widows (7:39-40). Meat sacrificed to idols (8:1-13), Idol feasts and the Lord's Supper (10:14-22) Practical Advice (ch 10:23-11:1) **OAHE: Continuing relevance of the issues addressed in Corinthians** **A24: Church History** **Church Authority and Division** The nature and development of government in the early church with particular reference to the New Testament. The two fold pattern of ministry. Insights from the writings of the Apostolic Fathers in relation to the development of church government eg Didache, Ignatius. The contribution of Irenaeus, Tertullian and Cyprian to understanding of the development of the threefold pattern of ministry and the evolution of the role of bishop. The importance of the bishop of Rome as illustrated in the Cyprian – Stephen disagreement. The role of bishop as guardian of orthodoxy and ensuring church unity. The importance of councils / synods of bishops in dealing with matters of heresy, schism or discipline. The continuing significance of the threefold ministry. Different forms of religious leadership and organisational models and their authority and relevance for believers today ie Episcopalian, Presbyterianism, Congregationalism. **Heresy and Schism** Gnosticism **-** A consideration of philosophical background and pre-Christian origins. Main features eg. Two Gods, salvation through secret knowledge, evil nature of the material world. Main teachers eg. Valentinus, Basilides. Opposition from orthodox church leaders eg Irenaeus. The Church's response eg. Development of creeds, canon and doctrine of Apostolic succession. Marcionism **-** A consideration of historical context/biographical detail about Marcion. Major beliefs eg. Two Gods, separation of OT/NT Gods, evil nature of the material world, means of salvation. Foundation of a separate church and canon of scripture. Admiration for Paul. Rigid standards of moral behaviour.

	Similarities /differences to Gnosticism. Critical evaluation surrounding whether Marion was a Gnostic. The church's response to Marcion ie Tertullian's work: Against Heresies.Defending the Faith Irenaeus' Polemic Against Heresy: A consideration of the polemic as the first attempt at a critical investigation and refutation of Gnosticism. Does discovery of primary Gnostic texts throw doubt on reliability of his portrayal of Gnosticism? Main thrusts of Irenaeus' attack on Gnosticism eg description of Gnostic systems, development of doctrine of apostolic succession, Gnostic misuse of scripture, development of the "canon of truth" to test heretical interpretation, development of a list of authoritative writings separate from those of the Gnostics, a positive development of theological doctrines held by the church to counteract those compromised or rejected by the Gnostics eg. Unity of the Godhead, Christology, recapitulation. The Rule of Faith, the Canon of Scripture and the Succession Argument as a threefold defence against heresy. Montanism - A consideration of historical context/biographical detail about Montanus. The role of the Paraclete. Rejection of traditional church structures and authority. Belief in imminent Parousia. High moral standards and bravery in persecution. The importance of women prophetesses. The debate in relation to whether Montanism was a Heresy or a Schism. **OAHE**: The threat of heresy for the church in every era. The role and value of apologetics throughout history and today.
Spanish	The Spanish examination will consist of: ● A2 Unit 3 completed in class in November ● A2 Unit 2 completed during exam week Section A: Listening (45 minutes) ● Q1: Questions and answers in Spanish ● Q2: Questions and answers in English Revise: ● Topic vocabulary covered so far ● Numbers ● Technique ● Be prepared for something random! Section B: Reading (120 minutes) ● Q1: Gap-fill ● Q2: Comprehension with questions and answers in Spanish ● Q3: Summary in English ● Q4: Prose Revise: ● Topic vocabulary covered so far ● Grammar ● Technique for each question

	• Be prepared for something random!
BTEC Sport	**A1 Positive lifestyle factors and their effects on health and well-being Understand the importance of lifestyle factors in the maintenance of health and well-being.** • Exercise/physical activity: physical (strengthens bones, improves posture, improves body shape), reduces risk of chronic diseases (CHD, cancer, type 2 diabetes), psychological (relieves stress, reduces depression, improves mood), social (improves social skills, enhances self-esteem), economic (reduces costs to National Health Service, reduces absenteeism from work). • Balanced diet: eatwell plate (food groups), benefits of a healthy diet (improved immune function, maintenance of body weight, reduces risk of chronic diseases – diabetes, osteoporosis, hypertension, high cholesterol), fluid intake requirements (moderation of caffeine intake), strategies for improving dietary intake (timing of meals, eating less/more of certain food groups, five a day, reducing salt intake, healthy alternatives) • Positive risk-taking activities: participation in outdoor and adventurous activities, endorphin release, improved confidence. • Government recommendations/guide **A2 Negative lifestyle factors and their effects on health and well-being Understand the factors contributing to an unhealthy lifestyle.** • Smoking: health risks associated with smoking (CHD, cancer, lung disease, bronchitis, infertility). • Alcohol: health risks associated with excessive alcohol consumption (stroke, cirrhosis, hypertension, depression). • Stress: health risks associated with excessive stress (hypertension, angina, stroke, heart attack, stomach ulcers, depression). • Sleep: problems associated with lack of sleep (depression, overeating). • Sedentary lifestyle: health risks associated with inactivity. **A3 Lifestyle modification techniques Understand how lifestyle modification techniques can be used to reduce unhealthy lifestyle behaviours.** • Common barriers to change: time, cost, transport, location. • Strategies to increase physical activity levels: at home, at work, during leisure time, method of transport. • Smoking cessation strategies: acupuncture, NHS smoking helpline, NHS smoking services, nicotine replacement therapy, Quit Kit support packs. • Strategies to reduce alcohol consumption: counselling, self-help groups, alternative treatments.

	• Stress management techniques: assertiveness training, goal setting, time management, physical activity, positive self-talk, relaxation, breathing techniques, meditation, alternative therapies, changes to work-life balance. **B1 Screening Processes Be able to interpret the lifestyle of a selected individual using appropriate screening documentation and know when to refer the individual to a doctor.** • Screening questionnaires: lifestyle questionnaires, physical activity readiness questionnaires (PAR-Q). • Legal considerations: informed consent form, data protection, client confidentiality. **B2 Health monitoring tests Be able to interpret health monitoring results of a selected individual using normative data and make appropriate recommendations.** • Blood pressure. • Resting heart rate. • Body mass index (BMI). • Waist to hip ratio. **B3 Interpreting the results of health monitoring tests Be able to interpret health monitoring data against health norms and make judgements.** • Interpret results against normative data: compare and make judgements against population norms, norms for sports performers, norms for elite athletes, accepted health ranges.


ANTRIM GRAMMAR
EDUCATING FOR LIFE