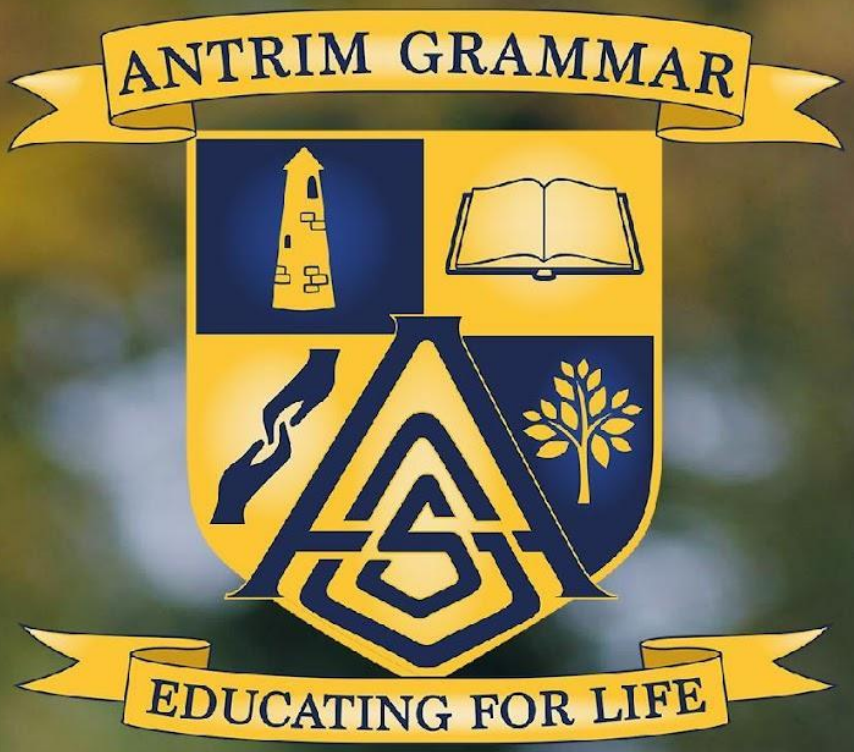


Year 12 Revision Topics

Winter Examinations 2025

This booklet will outline the key topics you should revise for your subjects for the Winter Examinations. This is a topic guide only. Individual subjects will give you further advice and guidance on revising for their subject in class via Google Classroom.

Subject	Topics to be revised
Biology	**Year 12 Double Award** No assessment due to November GCSE module. **Year 12 GCSE – Pupils will complete two papers. One covering all Unit 1 topics and the second will assess Unit 2 topics covered so far and practical work from Unit 1 and 2 covered to date.** **Unit 1 GCSE – 7 Booklets** 1. Cells 2. Photosynthesis 3. Nutrition and food tests 4. Enzymes 5. Breathing and respiration 6. Nervous system and hormones 7. Ecological relationships **Unit 2** 1. Osmosis 2. Circulatory system 3. Reproduction
Business & Communication Systems	● Stakeholders ● Business Ownership ● Recruitment ● Selection ● Training
Business Studies	Topic 5: Business Growth ● 5.1 Business success or failure ● 5.2 Business growth Topic 6: Finance ● 6.1 Sources of Finance ● 6.2 Cash flow forecasts ● 6.3 Financial statements ● 6.4 Ratios ● 6.5 Break even
Chemistry	**Year 12 GCSE** **Those topics shown in bold are from Unit 2** Atomic Structure

	Formulae and Equations Bonding Structures and nanoparticles Acids, Bases and Salts Periodic Table Solubility Chemical Analysis Quantitative Chemistry 1 **Metals and the Reactivity Series** **Redox, Rusting and Iron** **Rates of reaction** **Year 12 Double Award** No assessment due to November GCSE module.
Computer Science	1. Component 1: a. Hardware b. Logical Operations c. Networking and Cybersecurity d. Data Representation and Storage e. Data Organisation f. Operating systems g. Principles of Programming h. Algorithms and Constructs i. Software Development j. Program Construction k. Ethical, Legal and Environmental Impacts of Digital Technology
Design and Technology	Pupils will complete a 20 mark design question similar in style to the question they will sit in the summer 2026 Unit 2C module. They will be briefed on this in class.
Drama	The exam will last 90 minutes You will be given a clean copy of Blood Brothers **<u>1a. Contextual section (a)</u>** You need to know at least 4 specific facts from your handouts based on Historical / Cultural and Social context – this include dates, specific names

	and details. **1b.Contextual Section (b)** You need to know at least 4 specific details about the following Blood Brothers headings: ● Theatrical Conventions ● Form and Style ● Genre ● Language See Knowledge Organiser on Google Classroom for full details
Engineering	**2 hour practical examination** taking place at the end of the examination week. Pupils will be prepped for this in class and will then take the examination under the conditions akin to those in the summer 2026 Unit 2 exam.
English Language English Literature	**UNIT 4 - Section A - 60 minutes** ● 15 minutes to plan ● 30 minutes writing ● 10 minutes checking ● **Your teacher will put a full Knowledge Organiser in Google Classroom.** **UNIT 1 Section A: You have 60 Minutes on the novel .** **Plan** - 15 minutes, **Write** - 35 Minutes, **Check**– 10 Minutes. You should refer to the following Literary Terms in your Analysis: Symbolism, Assonance, Alliteration, Consonance, Fricatives, Plosives, Metaphors, Similes, Pathetic Fallacy, Character or Characterisation, Imagery (such as Animalistic Imagery) and Themes. Terms referred to in the novel: Savage, civilised, temptation, authority, symbolism, Garden of Eden, foreshadowing, metaphor, allegory, scar, fable, conch and irony. **Learn using essay plans. Focus on Characters and Themes. **Unit 2 Section A: You have 60 minutes on the Play.** **'An Inspector Calls'** Revise characters and themes, Context, Dramatic Devices and use PEAAL (Point, Evidence, Analysis, Audience, Link to the question). **Your teacher will put a full Knowledge Organiser in Google Classroom.**
Food and Nutrition	**You will have a mixture of short, medium and longer style questions that reflect the layout of the CCEA GCSE examination paper. Longer essay responses are 9 and 12 marks in length and require between 1-2 A4 responses.** **UNIT TOPIC**

	1. Food Provenance **2. Food Processing** 3 **Food & Nutrition for Good Health** (i) Eatwell Guide (ii) 8 Tips for Healthy eating 4 **Energy & Nutrients** (i) Factors influencing individual energy requirements (ii) Achieving energy balance and maintaining a healthy weight (iii) Recommended energy values provided by protein, fats & carbs 5 **Macronutrients** (i) Protein (ii) Fats (iii) Carbohydrates 6 **Micronutrients** (i) Vitamins (ii) Minerals (iii) Interactions between vitamins and minerals 7 **Fibre** (i) Functions (iii) Main sources 8 **Water** (i) Functions (ii) Main sources (iii) Recommendations for water intake (iv) Importance of hydration in the body 9. **Nutritional & Dietary Needs og groups of people** 10. Priority Health Issues 11. **Being an effective consumer when shopping for food** (i) define the term effective consumer (ii) explore the barriers to being an effective consumer: access; age; ethnicity; knowledge; and resources (iii) evaluate the following food shopping options for a range of consumers: independent grocery shops; supermarkets; markets; farm

	shops; online shopping; shopping apps (iv) explain how the NI Trading Standards Service offers protection for consumers when buying food 13 **Food Safety** (i) Conditions needed for bacterial growth (ii) Food poisoning bacteria (iii) Food purchase (iv) Food storage (v) Personal hygiene (vi) Food preparation & cooking (vii) Consumer protection & food safety
French	You will have a listening, a reading and a writing test. The Listening test will be done in class before exam week. To help you, try some of the activities on https://www.bbc.co.uk/bitesize/examspecs/zmshxbk **Reading exam** You should revise vocabulary from the CCEA vocabulary list, although you will also have to work out the meaning of new words using listening and reading skills. Tests 31,32,35,336,38,39,40,41,42 are particularly useful. You can also practise past papers from other exam boards here: https://www.aqa.org.uk/subjects/languages/gcse/french-8658/assessment-resources?f.Sub-category%7CF=Sample+papers+and+mark+schemes https://www.eduqas.co.uk/qualifications/qualification-resources.html?subject=French&level=GCSE&pastpaper=true REMEMBER YOU SHOULD NOT ACCESS CURRENT CCEA PAST PAPERS AT THIS STAGE. TO DO SO WILL BE CONSIDERED CHEATING. The previous specification papers are available in Shared Resources and you may use them. Read over your learning notes on reading and listening skills. **Writing exam** Revise vocabulary particularly on Social Media and New Technology, Daily Routine and Travel and Tourism.

	Revise grammar, particularly forming verbs in past, present and future Read over the tips on answering the long writing question. For the long writing question, you will have a choice of writing five paragraphs on EITHER Customs, Festivals and Celebrations OR My Home and Local Area You should use your speaking test questions and/or written paragraphs to revise.
Further Mathematics	Ch1 Simplifying Algebraic Expressions Ch2 Equations Ch3 Simultaneous Equations Ch4 Trigonometry Ch6 Differentiation Ch8 Turning Points Ch11 Matrices
Geography	**Population and Migration** All material in booklet to include (but not limited to): - Population growth, change and structure (to include the Demo. Transition Model and population pyramids); - Migration (reasons – push and pull); and - Case study of Greece (impacts on refugees and Greece **Changing Urban Areas** All material in booklet to include (but not limited to): - Land use zones of a settlement – be able to define and recognise on an OS Map - The 3 Issues facing inner cities in MEDCs - Titanic Quarter case study; and - Rio case study **Development** All material in booklet to include (but not limited to): - How we define development (including indicators); - Reasons why countries are still less developed (e.g. historical, environmental, etc); **Fieldwork** Revise the graph (i.e. be able to draw it) and the analysis and interpretation of it.
History	**Paper 1 Unit 1 Northern Ireland and its Neighbours, 1920-1949 & German Depth Study - 1 hour 45 minutes**

	Section A - NI and Ireland ● Partitioning of Ireland ● De Valera and his role in the dismantling of the Anglo-Irish Treaty ● Conscription ● The war effort in NI ● The establishment of the Welfare State in Britain and NI ● The Impact of the Welfare State in NI ● The Ireland Act, 1949 **Section B - Nazi Germany** ● The creation of the Police State ● Propaganda and censorship ● Life for young people in Nazi Germany ● Life for Jews and minorities in Nazi Germany ● Germany at war **Paper 2 International Relations 1945-2003 (1hour 15 minutes)** ● Hiroshima and Nagasaki ● Berlin Blockade and Airlift, 1948-49 ● Hungary, 1956 ● Berlin, 1959-1961 ● Czechoslovakia, 1968 Please see the revision list posted on your Google Classroom for a fuller breakdown of what to revise within these topics.
Mathematics	No examination due to GCSE November module.
Moving Image Arts	**Film Language Techniques** · analyse and evaluate the use of film language in a variety of previously unseen short film sequences and film stills · use appropriate film language terminology; **Camera** - identify and describe different types of camera framing (shot size and camera angle) and camera movement (panning, tracking, tilting and zooming) and explain their purpose **Editing** - demonstrate knowledge and understanding of continuity editing techniques: cross-cutting; shot/reverse-shot; inter-cutting; eyeline match; action match; and 180 and 30 degree rules; explain how continuity techniques are used to create meaning and audience response; and recognise and identify non-linear editing techniques: montage, compression of time using freeze frame, slow motion, time lapse, flashbacks, flash forwards, fast-paced accelerated continuity, slow-paced editing and jump cuts. **Lighting** - demonstrate knowledge and understanding of the following lighting techniques: high-key lighting; low-key lighting; colour filters; silhouette; shadows; practical lighting;

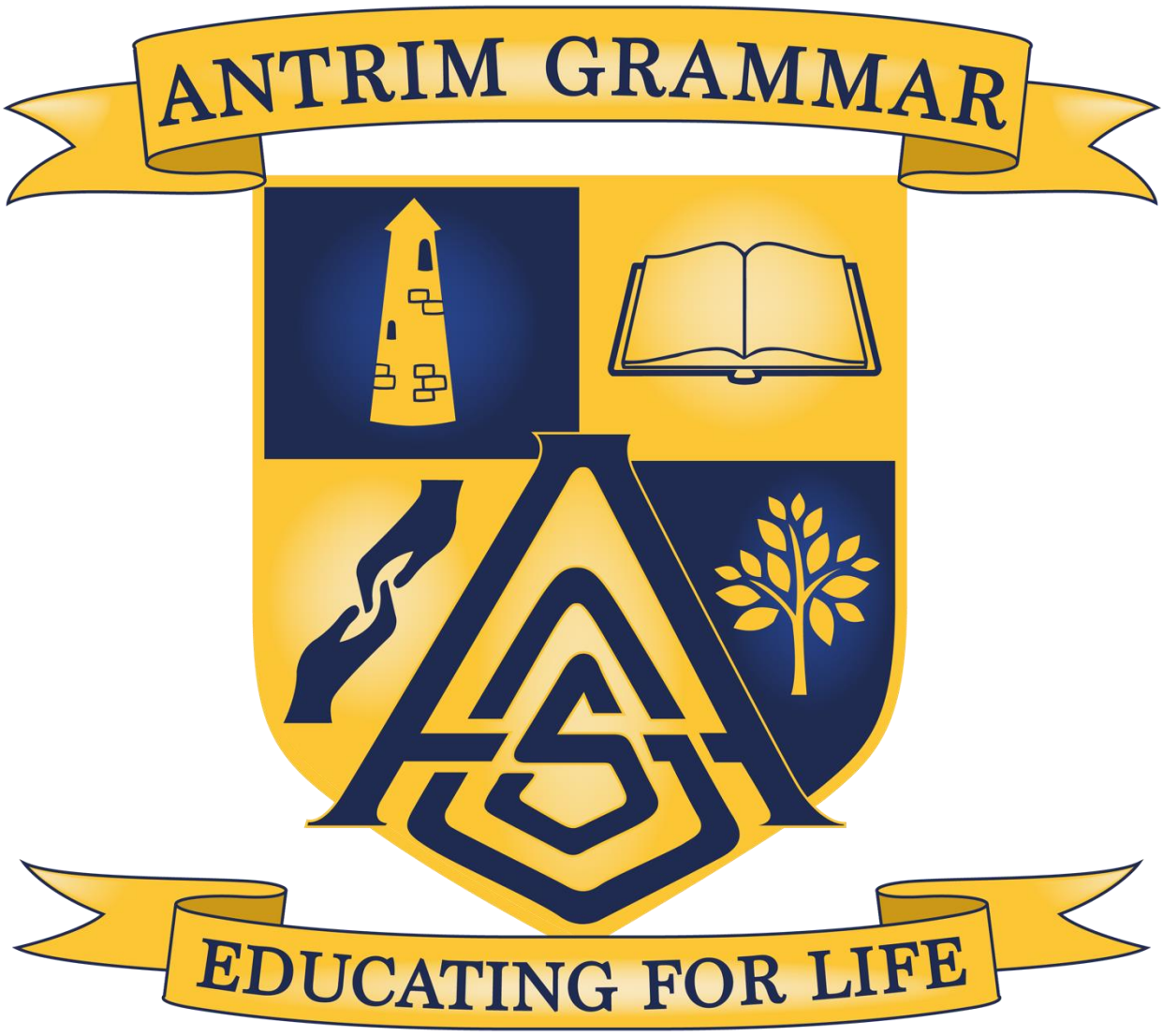
	explain how different lighting techniques are used to create different atmospheres and effects; **Sound** - identify and explain the following types of sound and how these are used: diegetic; non-diegetic; sound effects; musical scores; dialogue; voiceover; sound bridges; foley sound; and wildtrack. **Mise en Scene -** Demonstrate knowledge of the strands that make up this element of film (props/ makeup/ costume/ performance/ setting)
Music	- Performance (1 Piece on chosen instrument) (Western Classical Music) - Mozart: Horn Concerto No.4, 3rd Movement - Handel - 'For unto Us a Child is Born' (Film Music) - Coates: The DamBusters March - Williams: Superman Theme - Horner: Young Peter (from The Amazing Spiderman) (Popular Music: 1980-present day) - Eurythmics: Sweet Dreams
Physics	**Year 12 Double Award** No assessment due to November GCSE module **Year 12 GCSE** ● Module 1 – Forces, Energy, Atomic and nuclear- paper 1 ● Module 2 –Electricity, Waves to date - paper 2
Religious Studies	*(To help revise make sure you use: your learning intentions sheets and the power point presentations.)* **Paper 1: Christian Ethics (1 hour 30 mins)** <u>Personal and Family Issues</u> **Sexual Relationships:** The meaning and purpose of sexual relationships. Christian opinions on homosexuality, civil partnerships, pre-marital sex, single life/celibacy. Church and bible teachings relating to sexuality. **Marriage:** the Christian Wedding Ceremony including symbolism and the warning stated by minister / priest. Why do people get married? What problems do marriages face? How can a troubled marriage be saved? Marriage guidance and counselling services. Alternatives to marriage: cohabitation and civil partnerships. Evaluate the role of faith in a successful marriage.

	Divorce: Reasons for divorce. Who is affected by divorce? What the bible says about divorce. What the Churches say about divorce. Different church responses to remarriage. **Family Life:** Different types of families. Bible teaching about family life. The importance of the family unit in society. Challenges families face. <u>Matters of Life and Death</u> **Abortion:** Why is Abortion a controversial issue? Pro-Life and Pro-Choice views and organisations. Laws surrounding abortion in Britain and NI. Foetal development. Biblical and Church viewpoints. The Sanctity of Life. Case Studies. Alternatives to Abortion. **Euthanasia**: voluntary, non-voluntary / involuntary, active and passive. Assisted Suicide / Assisted Dying / Mercy Killing. The Sanctity of Life. Euthanasia and the law. Arguments For Euthanasia and Arguments Against Euthanasia. Palliative Care as an alternative to Euthanasia. What the bible says about Euthanasia. What the churches say about Euthanasia. Case Studies. **Capital Punishment**: The Law. Arguments For and Against Capital Punishment. Campaigns against the death penalty. What the Bible says. What the churches say. Case Studies. <u>Punishment, Forgiveness and Justice</u> **Punishment:** The Aims of Punishment, Types of Punishment. **Forgiveness:** The teaching and example of Jesus: The Parable of the Unforgiving Servant, The Parable of the Lost Son, The Lord's Prayer, Jesus' response to the woman caught in adultery, Jesus on the cross. Religious leaders demonstrating forgiveness eg ML King, Archbishop D Tutu. Case studies. **Restorative Justice**: How Restorative Justice works in practice, the role of the victim, the offender and the community. The benefits and limitations of Restorative Justice. Case Studies: Peter Woolf and Will Riley. <u>Bioethics</u> **Human Infertility**: The nature of human infertility and ways of overcoming it. The role of AI (AIH and AID) and IVF treatment in overcoming infertility and issues arising from these treatments eg spare embryos, involvement of a third person, 'playing God'. **The status of the embryo** and the moral problems associated with destroyed embryos and embryo experimentation. **Different types of human surrogacy** and the issues surrounding surrogacy. **The law** relating to reproductive technologies. **The role of the Human Fertilisation and Embryology Authority** in regulating developments in bioethics. Biblical and church teaching that is relevant to reproductive technologies.

	Modern Warfare The **Causes of War** and the **Just War tradition** in Christianity and its continuing relevance for today. The Ethics of Modern Warfare, including the use of **weapons of mass destruction** and the morality of **nuclear deterrence.** The debate about the **human and economic cost of war** and the victims of war including refugees, child soldiers and innocent civilians. The debate about **pacifism**. Knowledge of different religious and ethical viewpoints. **Paper 2: Philosophy of Religion (1 hour)** The Existence of God The meaning of the terms: theist, atheist and agnostic. **Arguments FOR the existence of God** and counter arguments: 1) The First Cause / Cosmological argument and Thomas Aquinas. 2) The Teleological Argument / Argument from Design ie W Paley and the watch, Newton and thumb. Nietzsche's claims of an imperfect world and 'God is dead'. 3) The Argument from Religious Experience: general and special revelations. Examples of special revelations from different religious traditions. Modern case studies eg Danielle Gault. The subjectivity of miracles. 4) The Moral Argument: the role of conscience and the concept of a divine lawmaker. Moral Law. The contribution of Immanuel Kant and CS Lewis. Strengths and weaknesses of the argument. The Nature of God Key terms used to describe the nature of God eg immanent, transcendent, omnipotent, omniscient, omnipresent, knowable (personal), unknowable (impersonal), monotheism, polytheism. **Teaching about the nature of God in at least 2 religions** **Christian teaching about the nature of God:** Monotheism, Trinity - 1 God in 3 persons. Omnipotent –Creator. Immanent – involved through role of Holy Spirt. Personal - 'Our Father' (Anthropomorphism). Incarnation – God became human in Jesus, the Son of God. Beliefs outlined in Creeds. **Hindu teaching about the nature of God** Polytheism, transcendent, impersonal. Brahman: Brahma, Shiva, Vishnu=Trimurti. Not human. Creation Stories The teaching of 2 religions about creation: **Christian beliefs about Creation:** Creationism: found in Genesis. Literal and symbolic interpretations of 6 days. Role of humans in creation – made in the image of God. **Hindu beliefs about Creation:** Brahman and the Trimurti, the Samsara cycle – creation is an ongoing process, reincarnation. Creation myths. **Scientific Theories: The Big Bang and the Theory of Evolution.** Contribution of scientists: William Smith, Charles Lyle, Charles Darwin. Faith versus science debate eg why v how. Rejection or combination of

	scientific theories with the Christian account. Is religion and science incompatible? Professor Alister McGrath and Theistic evolution.
Single Award Science	**Booklet 1** Elements, Compounds and Mixtures Structure of the Atom Periodic Table **Book 2** Formulae and Equations Bonding Acids, Bases and Salts **Book 3** Materials Using Materials to fight Crime Qualitative Analysis Metals and the Reactivity Series Aluminium Extraction Energetics
Spanish	The Spanish examination consists of 3 papers: 1. Listening (completed in class on 28th November) 2. Reading (60 minutes) 3. Writing (60 minutes) For the **Listening and Reading papers**, you need to understand the meaning of vocabulary and use listening and reading techniques to work out the meaning of new words. Revise: ● Vocabulary from: ❖ Context 1 (Specification pg. 54-65) ❖ Context 2 covered so far (Specification pg. 66-84) ❖ Context 3 covered so far (Specification pg. 85-93) ● Numbers (Specification pg. 98-99)Completing some exam-style questions will also be useful: https://www.bbc.co.uk/bitesize/guides/zn2d8xs/test For the **Writing paper**, you need to be able to write accurately in Spanish from memory. Q1: Short sentences ● Vocabulary from Context 3 (Specification pg. 85-93)

	● Grammar: Present Tense verb endings Q2: Short sentences ● Vocabulary from Context 2 (Specification pg. 66-84) ● Grammar: Present Tense, Preterite Tense and Near Future Tense verb endings Q3: Translate sentences into Spanish ● Vocabulary from Context 3 (Specification pg. 85-93) ● Grammar: time and frequency phrases, Present Tense, Preterite Tense and Near Future Tense verb endings Q4: Extended writing ● You will have **a choice of two questions**. Answer the question on **either** Context 1: Myself, family, relationships and choices **or** Context 3: My studies and school life. Use the Speaking questions and Writing tasks in your blue book to help you prepare.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EDUCATING FOR LIFE