

Subject	Topics to revise	
English	<u>Language Section B: Writing to persuade/argue/inform</u> ☐ Article writing - features, tone, structure ☐ Letter writing - features, tone, structure ☐ Techniques to create provoking writing - extended metaphor, motifs ☐ MESI (moral, economy, society and individual) method for planning and understanding the question ☐ Sentence types- compound, complex and simple ☐ Structure of a strong response ☐ Understanding of different readers/target audience within the questions	<u>Section B: Power and Conflict poetry</u> ☐ Remains- Context/ themes/ language/ structure ☐ Exposure- Context/ themes/ language/ structure ☐ Charge of the light brigade- Context/ themes/ language/ structure ☐ Bayonet Charge- Context/ themes/ language/ structure ☐ Poppies- Context/ themes/ language/ structure ☐ War photographer- Context/ themes/ language/ structure ☐ Crafting thesis statements ☐ Writing topic sentences linked to thesis statements ☐ Planning essays using Big Ideas
	<u>Literature Section A: An Inspector Calls</u> ☐ Understanding the plot/ characters ☐ Memorising and knowing quotes ☐ Motifs: photograph, drink, money ☐ Features of a play ☐ Significance of stage directions ☐ Themes: gender, class, social responsibility, power, old v young ☐ Capitalism vs Socialism ☐ Inspector as a mouthpiece ☐ Dramatic irony ☐ Context: 20th century, working conditions, Titanic, UK political structure/ class structures	<u>Section C: Unseen Poetry</u> ☐ Crafting thesis statements ☐ Writing topic sentences linked to thesis statements ☐ Planning essays using Big Ideas ☐ Approaching unseen poems- begin with title ☐ Comparing unseen poems ☐ Methods and techniques in poetry ☐ Structural techniques
Maths	<u>Foundation Paper 1 - Non- Calculator</u> ☐ Forming and solving equations ☐ Solving simple equations ☐ Substitution ☐ Drawing pie charts ☐ Distance - time diagrams ☐ Angle rules ☐ Nth term of an arithmetic sequences ☐ Four operations with decimals and fractions ☐ Ratio - problem solving ☐ Front and side elevations of 3D shapes ☐ Estimations using frequency tables ☐ Pressure problems ☐ Reverse percentages ☐ Reciprocals ☐ Error intervals ☐ Factorising quadratics ☐ Working with place value ☐ Fractions, decimal, percentages conversion ☐ Identifying factors/multiplies ☐ Order of operations ☐ Fractions, decimals percentages problem solving ☐ Mean, mode, median range from a range of numbers and problem solving ☐ Probability scales ☐ Speed problem solving ☐ Finding the midpoint of a line segment ☐ Plotting special graphs (eg. $y=x$, $y=3$, $x=6$) ☐ Ordering numbers (fractions, decimals and negative) ☐ Reflection ☐ Ratios and fractions - problem solving	

Maths	<u>Higher Paper 1 - Non- Calculator</u> ☐ 4 operations with fractions and decimals ☐ Simultaneous equations ☐ Arc length ☐ Sine and cosine rule ☐ Working with surds (including simplifying and rationalising) ☐ Circle theorems ☐ Algebraic fractions ☐ Congruency ☐ Probability including algebra (grade 7/8) ☐ Volume of a sphere and cone problem solving ☐ Index laws (including fractional and negative) ☐ Enlarging by a negative scale factor (including negative fractional scale factors) ☐ Quadratic simultaneous equations ☐ Front and side elevation of 3D shapes ☐ Fractions, decimals, percentages - problem solving ☐ Stratified sampling ☐ Pressure questions ☐ Reverse percentages ☐ Mean problem solving questions ☐ Plotting cubic graphs ☐ Ratio problem solving involving algebra ☐ Box plots ☐ Functions ☐ Upper/lower bounds in the context of area and volume ☐ Algebraic index laws ☐ Sine and cosine rule ☐ Standard form ☐ Trigonometry and Pythagoras' theorem problem solving ☐ Expand and simplifying expressions ☐ Completing probability trees
Maths	<u>Foundation: Paper 2 - Calculator</u> ☐ Stem and leaf diagram ☐ Simple direct proportion - completing a table ☐ Mean, mode, median and range from a frequency table for discrete data ☐ Exchange rate - problem solving ☐ Expand and factorise more complex expressions (including quadratics) ☐ Transformations (enlargement, reflection, rotations, vector translation) ☐ Reciprocals ☐ Index rules ☐ Venn diagrams ☐ Reverse percentages ☐ Solving inequalities ☐ Surface area of a triangular prisms ☐ Plotting quadratic graphs ☐ Rounding to nearest 10s, 100s, 100s ☐ Rounding to a given significant figure or decimal place ☐ Converting fractions, decimals and percentages ☐ Naming 3D shapes ☐ Identifying prime numbers, even and odd numbers, square number, cube numbers, multiples, and factors ☐ Listing combinations ☐ Money problem solving ☐ Fractions, decimals and percentages - problem solving ☐ Unit conversion graphs ☐ Ratios and scale factors ☐ Speed/distance/time problem solving ☐ Angle rules

Maths	<u>Higher: Paper 2 - Calculator</u> ☐ Estimating the median and the interquartile range from cumulative frequency ☐ Standard form problem solving ☐ Equation of parallel lines ☐ Working with area of sectors - problems solving ☐ Algebraic proof ☐ Circle theorems ☐ Pressure/force/area - problem solving ☐ Congruency ☐ Expanding triple brackets ☐ Plotting and solving quadratics graphically ☐ Circle theorems (grade 8/9) ☐ Finding reciprocals ☐ Index rules ☐ Fractions and percentages problem solving ☐ Solving inequalities ☐ Representing inequalities on a number line ☐ Reverse percentages ☐ Working with volume of prisms - problem solving ☐ Speed/distance/time problem solving
Maths	<u>Foundation Paper 3 - Calculator</u> ☐ Working on the x and y coordinate plane ☐ Best buy problems ☐ Calculating simple probabilities ☐ Accurately drawing a diagram (using a compass and a protractor) ☐ Percentage calculations - problem solving ☐ Conversion graphs ☐ Two-way tables ☐ Using probabilities to calculate estimations ☐ Share an amount in a given ratio (two and three parts) ☐ Probability trees ☐ Index laws Standard form ☐ Interpreting pictograms ☐ Money problems - problem solving ☐ Four operations with fractions and decimals ☐ Arithmetic sequences (finding the nth term, finding the next term, using the nth term to find a term) ☐ Perimeter and area problem solving ☐ Collecting like terms and simplifying expressions ☐ Trigonometry and Pythagoras' theorem - problem solving ☐ Simultaneous equations ☐ Simplifying algebraic ratios ☐ Converting fractions, decimals and percentages ☐ Ordering numbers ☐ Simplifying simple expressions ☐ Unit conversion (metric and imperial) ☐ Finding the mean, mode, median and range from a list of numbers
Maths	<u>Higher- Paper 3 - Calculator</u> ☐ Transformations (enlarging, reflection, rotation and vector translation) ☐ Cumulative frequency (tables and graphs) ☐ Solving inequalities graphically ☐ Product rule for counting ☐ Recurring decimals ☐ Sharing an amount in ratios ☐ Fractions, decimals, and percentages ☐ Problem solving involving area and perimeter ☐ Probability tree ☐ Laws of indices ☐ Inverse proportion ☐ Compound interest ☐ Solving quadratic inequalities ☐ Speed/Time diagrams (including acceleration) ☐ Functions ☐ Upper/lower bounds in the context of area and volume ☐ Algebraic index laws ☐ Sine and cosine rule ☐ Standard form ☐ Trigonometry and Pythagoras' theorem problem solving ☐ Expand and simplifying expressions ☐ Completing probability trees

Science	Combined Science: Biology ☐ CB1 - Key Concepts in Biology ☐ CB2 - Cells and Control ☐ CB3 - Genetics Chemistry ☐ CC1-CC2 - Separating Techniques ☐ CC3-CC4 - Atomic Structure and Periodic Table ☐ CC5-CC7 - Bonding ☐ CC8 - Acids and Alkalis ☐ CC9 - Calculations ☐ CC10-CC11 - Metal Extraction Physics ☐ CP1-CP2 - Forces and Motion ☐ CP3 - Energy ☐ CP4 - Waves ☐ CP5 - Electromagnetic Spectrum	Separate Science: Biology ☐ SB1 - Key Concepts in Biology ☐ SB2 - Cells and Control ☐ SB3 - Genetics ☐ SB4 - Natural Selection and Genetic Engineering ☐ SB5 - Health and Disease Chemistry ☐ SC1-SC2 - Separating Techniques ☐ SC3-SC4 - Atomic Structure and Periodic Table ☐ SC5-SC7 - Bonding ☐ SC8 - Acids and Alkalis ☐ SC9 - Calculations ☐ SC10-SC11 - Metal Extraction ☐ SC13 - Transition Metals Physics ☐ SP1-SP2 - Forces and Motion ☐ SP3 - Energy ☐ SP4 - Waves ☐ SP5 - Electromagnetic Spectrum ☐ SP6 - Radioactivity
History	Section A: Whitechapel Historical Environment ☐ 5.1 Context: policing the nation ☐ Police organization, types of sources, Criminal Investigation Department, Sir Charles Warren ☐ 5.2 The local context of Whitechapel ☐ Pollution, overcrowded housing, Peabody Estate, working, the workhouse, Dr Barnardo's orphanages ☐ 5.3 Tensions in Whitechapel ☐ Irish immigration, Fenians, Eastern European Jewish immigration, socialism, anarchism, local hostility to immigrants ☐ 5.4 Police Organisation in Whitechapel ☐ H Division, constable's beat, prostitution, alcohol, protection rackets, attitudes to police in Whitechapel ☐ 5.5 Investigative policing in Whitechapel ☐ The Jack the Ripper murders, ☐ Problems media: media, police rivalry, forensics, Vigilance Committee, Detection methods. ☐ Improvements: Bertillon system, communication, environment Section B: Crime and Punishment 1000-Present C1000-C1500 Crime, punishment, and law enforcement in medieval England ☐ Crime, punishment, and law enforcement in Anglo-Saxon England.	C1500-C1700: Crime, punishment, and law enforcement in early modern England ☐ 2.1 Changing definitions of crime C1500-C1700 ☐ Religious changes to definitions of crime (heresy and treason), Excommunication, Changes in society (vagabondage etc), witchcraft, smuggling, Puritan rule and 'moral laws' in the 1650s ☐ 2.2 Law enforcement and punishment C1500-C1700 ☐ Continuity and change from C1500, Towns (constables), Types of crimes and respective punishments, early prisons, Transportation, ☐ 2.3 Case study: The crimes and punishments of the Gunpowder Plotters, 1605 ☐ Goals and aims of the plotters, The plan, Key events, short and long-term consequences. ☐ 2.4 Witchcraft and the law, C1500-C1700 ☐ Attitudes to witchcraft and the law, Punishments, Matthew Hopkins, Attitudes to women C1700-C1900: Crime, punishment, and law enforcement in the 18th and 19th centuries ☐ 3.1 Changing definitions of crime C1700-C1900 ☐ Smuggling: continuity and change, Highwaymen, Poaching, decriminalisation of witchcraft, Tolpuddle martyrs, 3.2 Law enforcement and punishment C1700-C1900 ☐ Transportation to Australia, End of public executions, Prison reform, growing government involvement, ☐ 3.3 Law enforcement, C1700-C1900 ☐ Crime prevention and catching criminals in the early 18th C., The Bow Street Runners, Developments in Police Forces, ☐ 3.4 Case Study: The separate system at Pentonville Prison

	☐ The role of Kings, Anglo-Saxon laws, Anglo Saxon enforcements, Anglo-Saxon punishments, Different crimes and how they were each punished ☐ Crime, punishment, and law enforcement in Norman England. ☐ Feudal system, Norman Laws, Norman enforcement, Norman punishment, trial by combat ☐ Crime, punishment, and law enforcement in the later middle ages. ☐ Change and continuity, Parliament and new laws, New enforcement, New punishments ☐ Case Study: Influence of the church on crime and punishment ☐ Benefit of clergy, Church courts, Sanctuary,	☐ Growth of the prison system, Separate system at Pentonville, Views of the separate system, Harsh treatment of prisoners in late 19th C. ☐ 3.5 Case Study: The reforms of Robert Peel ☐ Peel's penal reforms in the 1820s, Formation of the Metropolitan Police, Criticisms of the new police force, Interpretations of Peel. ☐ C1900-present: Crime, Punishment, and law enforcement in recent times. ☐ 4.1 Crime and definitions of crime C1900-present Changing definitions of crime (new crimes), Attitudes towards social crimes, New opportunities for old crimes ☐ 4.2 Law enforcement C1900-present Developments in policing (Science and technology), Preventing and solving crime, Increasing specialisation of police roles, Crime prevention ☐ 4.3 Changes in punishment, C1900-present Abolition of the death penalty, Role of the government, changing attitudes, Changes in the prison system, Specialised treatment of young offenders, ☐ 4.4 Case study: Conscientious objectors in the First and Second World War Conscription in WW1, Conscientious objectors and attitudes towards them in WW1, Conscientious objectors in WW2, Treatment of conscientious objectors in WW2 ☐ 4.5 Case Study: The Derek Bentley case and the abolition of capital punishment. Events of the case, Public opinion of the Bentley Case, Impact in parliament.
Geography Full paper 1 including fieldwork.	<u>Topic 1a: Global Hazards - Weather Hazards</u> ☐ I understand how global circulation of the atmosphere causes extremes in weather conditions in different parts of the world and high low pressure. ☐ I know where tropical storms and droughts are located around the world and how the number of them have changed over time. ☐ I know how tropical storms are caused. ☐ I know how El Nino and La Nina cause drought <u>Case studies:</u> ☐ I know the causes, consequences and responses to the flash flood in Cumbria, 2015 ☐ I know the causes, consequences and responses to the drought in Australia. 2002-2009 <u>Topic 1b: Global Hazards - Tectonic Hazards</u> ☐ I know the structure of the Earth and how convection currents are linked to plate tectonics and cause plates to move. ☐ I know what happens at: Destructive plate boundaries, Constructive plate boundaries, Collision plate boundaries, Hotspots ☐ I know how the movement of plates can cause earthquakes and volcanoes <u>Case studies:</u> ☐ Nepal earthquake 2015. Causes, impacts, responses, and technological developments. <u>Topic 2: Changing Climate</u> ☐ I know the evidence and how reliable it is for climate change: Ice cores, Sea ice positions, Global temperature data, Paintings and diaries	<u>Topic 3: Distinctive landscapes</u> ☐ I can describe the distribution of upland, lowland and glaciated landscapes in the UK. ☐ I can describe the characteristics of these landscapes which make them distinctive including their geology, climate and human activity. ☐ I know Geomorphic processes - weathering, erosion, transport, and deposition. ☐ I know how coastal landforms are made - crack, cave, arch, stack, stump, headlands and bays, spits ☐ I know how river landforms are made - waterfalls, meanders, oxbow lakes, levees, and floodplains <u>Case studies:</u> ☐ Dorset Coastline - ☐ River Tees ☐ Formations, geology, impact of humans and climate change. ☐ River and coastal management <u>Topic 4: Sustaining Ecosystems.</u> ☐ I understand the importance of ecosystems, where they are located, their climate, flora, and fauna. ☐ I understand The importance of Tropical rainforests - climate, nutrient cycle, soil profile, water cycle. ☐ I know the value of goods and services from the rainforest and the impacts humans have - mining, logging, agriculture, and tourism. ☐ I know the distinctive characteristics of the Arctic and Antarctica. ☐ I know the impacts of humans on polar regions - fishing, whaling, mining, tourism, research. <u>Case studies:</u> ☐ I can examine one small scale example of sustainable management in the Arctic - Tourism in Svalbard ☐ I can examine one global example of sustainable management in Antarctica - Antarctic Treaty.

	☐ I know the natural causes of climate change: Sun spots, Milankovitch Cycle, Volcanic eruptions ☐ I know what the difference is between the natural greenhouse effect and the enhanced greenhouse effect. ☐ I know the global impacts of climate change such as extreme weather events and sea level rise. ☐ I know the impacts of climate change on the UK such as the impact on weather patterns, seasonality and industry.	<u>Coastal Fieldwork (Physical).</u> ☐ I understand the steps of a fieldwork investigation - hypothesis, data collection, data presentation, conclusions, evaluation.
RE	<u>Christianity</u> Beliefs and Teachings ☐ Nature of God: omnipotent, loving, just; the problem of evil and suffering ☐ The Trinity: Father, Son, Holy Spirit ☐ Creation: different Christian views; role of Word and Spirit (Genesis 1, John 1) ☐ Afterlife: resurrection, judgement, heaven and hell; importance of life after death ☐ Jesus Christ: incarnation, crucifixion, resurrection, ascension ☐ Sin: original sin, salvation through law, grace and Spirit ☐ Role of Christ in salvation: atonement Practices Worship and Prayer ☐ Forms of worship: liturgical, non-liturgical, informal; use of the Bible ☐ Private worship ☐ Prayer: significance of the Lord's Prayer, set prayers and informal prayer Sacraments ☐ Meaning of sacrament ☐ Baptism: infant vs. believer's baptism; significance and different beliefs ☐ Holy Communion (Eucharist): meanings, celebrations, interpretations Pilgrimage and Festivals ☐ Pilgrimage: Lourdes and Iona - contrasting examples ☐ Festivals: Christmas and Easter - meaning and importance in Britain today The Church in the Community ☐ Local: food banks, street pastors ☐ Mission and evangelism: spreading faith, Church growth ☐ Worldwide Church: reconciliation, responses to persecution ☐ Aid organisations: CAFOD, Christian Aid, Tearfund	<u>Islam</u> Beliefs and Teachings ☐ Six Articles of Faith (Sunni) and Five Roots of Usul ad-Din (Shi'a): similarities and differences ☐ Tawhid (Oneness of God) - Surah 112 ☐ Nature of God: omnipotence, beneficence, mercy, fairness, justice (Adalat in Shi'a), immanence and transcendence ☐ Angels: nature and roles, including Jibril and Mika'il ☐ Predestination and free will; connection to Day of Judgement ☐ Akhirah (life after death): resurrection, accountability, heaven and hell Authority ☐ Risalah (Prophethood): Adam, Ibrahim, Muhammad ☐ Holy books: Qur'an (revelation and authority), Torah, Psalms, Gospel, Scrolls of Abraham ☐ Imamate in Shi'a Islam: role and significance Practices Worship ☐ Five Pillars (Sunni) and Ten Obligatory Acts (Shi'a) ☐ Shahadah: declaration of faith and its role in practice ☐ Salah: times, direction, wudu, rak'ahs, recitations, Jummah, home/mosque prayer, Sunni and Shi'a differences Duties and Festivals ☐ Sawm: Ramadan, duties, benefits, exceptions, Night of Power (Qur'an 96:1-5) ☐ Zakah: giving alms, purpose, benefits; Khums in Shi'a Islam ☐ Hajj: purpose, rituals and locations - Ka'aba, Mina, Arafat, Muzdalifah ☐ Jihad: greater and lesser jihad, meanings, conditions, significance ☐ Festivals: Id-ul-Adha, Id-ul-Fitr, Ashura - origins, meanings, importance in Britain today

Citizenship	Life in Modern Britain 3.2.1 Principles and Values in British Society ☐ Key principles and values underpinning British society today ☐ Human, moral, legal and political rights and duties ☐ Freedoms, equalities and responsibilities of citizens ☐ Identity factors: individual, group, national and global 3.2.2 Identity in the UK ☐ The four nations of the UK and their impact on identity ☐ Population changes and migration: historical and modern impacts ☐ Immigration, emigration, and community change ☐ Diversity, mutual respect and democratic values ☐ Multiple and complex identities in modern UK society 3.2.3 Role of the Media and Free Press ☐ Media rights and responsibilities: informing, influencing, holding power to account ☐ Freedom of the press: accuracy, privacy, dignity ☐ Press regulation and examples of censorship ☐ Media as a platform for public debate and opinion 3.2.4 UK and International Organisations ☐ UK's role in global organisations: UN, NATO, EU, Commonwealth, WTO, Council of Europe ☐ Impact of Brexit on the UK and continuing EU influence ☐ UK responses to international conflict and dispute resolution ☐ NGO responses to humanitarian crises	Rights and responsibilities 3.3.1 What laws does a society require and why? ☐ Principles of law: rights, freedoms, presumption of innocence, equality ☐ Role of rules and laws in fairness, justice, and dealing with discrimination ☐ Rights and responsibilities in areas of conflict (local to global) 3.3.2 Citizens' Rights and Responsibilities within the Legal System ☐ Justice system roles: police, judiciary, legal representatives ☐ Structure and function of criminal and civil courts ☐ Role of tribunals and alternative dispute resolution ☐ Legal rights at different ages: criminal responsibility, voting, marriage, driving ☐ Differences between civil and criminal law ☐ Legal systems in England & Wales, Northern Ireland, and Scotland 3.3.3 Development of Law and Protection of Citizens ☐ Legal evolution: Magna Carta to the Human Rights Act (1998) ☐ Difference between common law and legislation ☐ Right to representation and role of trade unions and employers' associations ☐ Nature of crime in the UK: types, profiles, factors, and crime prevention ☐ Dealing with offenders: punishments, sentencing purposes, sentence effectiveness ☐ Youth justice system: structure and purpose 3.3.4 Universal Human Rights and Their Protection ☐ Key human rights agreements: ☐ UN Universal Declaration of Human Rights ☐ European Convention on Human Rights ☐ UN Convention on the Rights of the Child ☐ Human Rights Act (1998) ☐ International law and conflict: protection of victims and rules of war ☐ Role of humanitarian law in global conflict situations
Art	Chosen exam Theme: Portraits Assessed using the 4 Assessment Objectives: AO1: DEVELOP your ideas through investigation informed by contextual and other sources demonstrating analytical and cultural understanding ☐ Mind Map: exploring chosen theme ☐ Artist Pages: keywords, analysis using the Formal Elements, visual examples, your opinion about the work, a copy & an interpretation ☐ Research throughout the project: online, books / magazines, gallery / exhibition visits, workshops. AO2: REFINE your ideas through experimenting and selecting appropriate resources, media, materials, techniques and processes ☐ Use of different materials & techniques - ICT & editing, collage, pencil, pen, coloured pencil, oil pastels, chalks, paint, textiles, 3D...etc. ☐ Development of artists style or techniques used within your personal work ☐ Combining ideas and materials ☐ Evidence of improvement or development of techniques/processes/ideas	

Year 10 GCSE Mock Exams Topic List

Assessments begin 16/6/25

	AO3: RECORD ideas, observations and insights relevant to your intentions in visual/or other forms ☐ Observational drawings using different materials ☐ Recording from Primary & secondary resources ☐ Insights related to your personal work and the work of others, shown either in writing or visually	AO4: PRESENT a personal, informed and meaningful response demonstrating analytical and critical understanding, realising intentions and where appropriate, making connections between visual, written, oral or other elements. A culmination of everything you have learned in AO's 1,2 & 3 ☐ Written personal comments ☐ Analysing various artists' work ☐ Reviewing and developing your ideas ☐ Making connections between artists work and your personal ideas ☐ Final piece - which shows a clear connection to research work & your artist(s)
Photography	<u>Chosen Exam Theme: Portrait, Fragmentation, Symmetry or Groups.</u> Assessed using the 4 Assessment Objectives:	
	AO1: DEVELOP your ideas through investigation informed by contextual and other sources demonstrating analytical and cultural understanding ☐ Mind Map: exploring chosen theme ☐ Artist Pages: keywords, analysis using the Formal Elements, visual examples, your opinion about the work, a copy & an interpretation ☐ Research throughout the project: online, books / magazines, gallery / exhibition visits, workshops.	AO2: REFINE your ideas through experimenting and selecting appropriate resources, media, materials, techniques and processes ☐ Use of different materials & techniques - ICT & editing, collage, pencil, pen, coloured pencil, oil pastels, chalks, paint, textiles, 3D...etc. ☐ Development of artists style or techniques used within your personal work ☐ Combining ideas and materials ☐ Evidence of improvement or development of techniques/processes/ideas
	AO3: RECORD ideas, observations and insights relevant to your intentions in visual/or other forms ☐ Range of photographs recording your ideas - contact sheets, most successful photos ☐ Observational drawings using different materials ☐ Photoshoot Plans & Photoshoots ☐ Brainstorms & written notes about your work	AO4: PRESENT a personal, informed and meaningful response demonstrating analytical and critical understanding, realising intentions and where appropriate, making connections between visual, written, oral or other elements. A culmination of everything you have learned in AO's 1,2 & 3 ☐ Written personal comments ☐ Analysing various artists' work ☐ Reviewing and developing your ideas ☐ Making connections between artists work and your personal ideas ☐ Final piece - which shows a clear connection to research work & your artist(s)
French	☐ Family and friendships ☐ Media and technology ☐ School life ☐ Health and Wellbeing ☐ Holidays ☐ Grammar - present, passe compose, imperfect and future tense ☐ Object pronouns ☐ Comparatives and superlatives ☐ All negative forms	Spanish ☐ Family and friendships ☐ Media and technology ☐ School life ☐ Health and Wellbeing ☐ Holidays ☐ present, preterite, and future tense ☐ Object pronouns ☐ Comparatives and superlatives ☐ All negative forms

Film	Paper 2 Full Exam: ☐ Slumdog Millionaire - narrative theory (Todorov, Propp, enigma codes, binary oppositions) ☐ Tsotsi - Representation, Apartheid ☐ Attack the Block - Aesthetics, Sci-fi, Horror, Urban Realism. ☐ Key elements of film form: cinematography, lighting, editing, mise-en-scene, sound (CLEMS) ☐ What How Why structure to answer questions. ☐ Context for all films	
BTEC Sport	C5 Provision for taking part in fitness training methods ☐ Public provision - advantages and disadvantages. ☐ Private provision - advantages and disadvantages. ☐ Voluntary provision - advantages and disadvantages. C6 The effects of long-term fitness training on the body systems ☐ Aerobic endurance training: o adaptations to the cardiovascular and respiratory systems ☐ cardiac hypertrophy ☐ decreased resting heart rate ☐ increased strength of respiratory muscles ☐ capillarisation around alveoli. • Flexibility training: ☐ adaptations to the muscular and skeletal systems ☐ increased range of movement permitted at a joint ☐ increased flexibility of ligament and tendons ☐ increased muscle length. • Muscular endurance training: ☐ adaptations to the muscular system ☐ capillarisation around muscle tissues • Muscular strength and power training: ☐ adaptations to the muscular and skeletal systems ☐ muscle hypertrophy o increased tendon and ligament strength ☐ increased bone density. • Speed training: ☐ adaptations to the muscular system ☐ increased tolerance to lactic acid.	Investigate fitness programming to improve fitness and sports performance D1 Personal information to aid fitness training programme design Aims - details of what they would like to achieve for the selected sport. ☐ Objectives - how they intend to meet their aims using an appropriate component of fitness and method of training. • Lifestyle and physical activity history. ☐ Attitudes, the mind and personal motivation for training. D2 Fitness programme design ☐ Use personal information to aid training programme design. ☐ Selection of appropriate training method/activity for improving/maintaining the selected components of physical and/or skill-related fitness. ☐ Application of the FITT principles and additional principles of training. D3 Motivational techniques for fitness programming ☐ Definition of motivation - the internal mechanisms and external stimuli that arouse and direct behaviour. ☐ Types of motivation: intrinsic or extrinsic. ☐ Principles of setting goals to increase and direct motivation. ☐ Personal goals - specific, measurable, achievable, realistic, time-related, exciting, recorded (SMARTER): ☐ short-term goals (set over a short period of time, between one day and one month) ☐ long-term goals (what they want to achieve in the long term, and the best way of doing this). ☐ Influence of goal setting on motivation: o provide direction for behaviour o maintain focus on the task in hand. ☐ Benefits of motivation on the sports performer: o increase participation o maintain training and intensity o increased fitness o improved performance.
Computer Science Combined paper 80 marks 90mins	<u>Component 1.1 - Systems architecture</u> ☐ The purpose of the CPU: ☐ The fetch-execute cycle ☐ Common CPU components and their function: ☐ ALU (Arithmetic Logic Unit) ☐ CU (Control Unit) ☐ Cache ☐ Registers ☐ Von Neumann architecture: ☐ MAR (Memory Address Register) ☐ MDR (Memory Data Register) ☐ Program Counter ☐ Accumulator	<u>1.2 - Memory and storage</u> ☐ How common characteristics of CPUs affect their performance: ☐ Clock speed ☐ Cache size ☐ Number of cores ☐ The purpose and characteristics of embedded systems ☐ Examples of embedded systems ☐ The need for primary storage ☐ The difference between RAM and ROM ☐ The purpose of ROM in a computer system ☐ The purpose of RAM in a computer system ☐ Virtual memory ☐ Common types of storage:

- ☐ How common characteristics of CPUs affect their performance:
- ☐ Clock speed
- ☐ Cache size
- ☐ Number of cores
- ☐ The purpose and characteristics of embedded systems
- ☐ Examples of embedded systems

Required- Component 1.1 - Systems architecture

- ☐ What actions occur at each stage of the fetch-execute cycle
- ☐ The role/purpose of each component and what it manages, stores, or controls during the fetch-execute cycle
- ☐ The purpose of each register, what it stores (data or address)
- ☐ The difference between storing data and an address

- o Optical
- o Magnetic
- o Solid state

- ☐ Suitable storage devices and storage media for a given application
- ☐ The advantages and disadvantages of different storage devices and storage media relating to these characteristics:
- ☐ o Capacity
- ☐ o Speed
- ☐ o Portability
- ☐ o Durability
- ☐ o Reliability
- ☐ o Cost

Required 1.2 - Memory and storage

- ☐ Understanding of each characteristic listed
- ☐ The effects of changing any of the common characteristics on system performance, either individually or in combination
- ☐ What embedded systems are
- ☐ Typical characteristics of embedded systems
- ☐ Familiarity with a range of different embedded systems
- ☐ Why computers have primary storage (memory)
- How this usually consists of RAM and ROM
- ☐ Key characteristics of RAM and ROM
- ☐ Why virtual memory may be needed in a system
- ☐ How virtual memory works
- ☐ Transfer of data between RAM and HDD when RAM is full
- ☐ Why computers have secondary storage
- ☐ Recognise a range of secondary storage devices/media
- ☐ Differences between each type of storage device/medium
- ☐ Compare advantages/disadvantages for each storage device
- ☐ Be able to apply their knowledge in context within scenarios

Not required for 1.2 - Memory and storage

Understanding of the component parts of these types of storage

1.6 -Ethical, legal, cultural and environmental impacts of digital technology

Impacts of digital technology on wider society including

- ☐ Ethical issues
- ☐ Legal issues
- ☐ Cultural issues
- ☐ Environment issues
- ☐ Privacy issues

Legislation relevant to Computer Science

- ☐ The Data Protection Act 2018
- ☐ Computer Misuse Act 1990
- ☐ Copyright Designs and Patents Act 1988
- ☐ Software licences (i.open source and proprietary)

Required- 1.6 -Ethical, legal, cultural and environmental impacts of digital technology

- ☐ Technology introduces ethical, legal, cultural, environmental and privacy issues

2.1.1 Computational thinking

- ☐ Principles of computational thinking:
- ☐ Abstraction
- ☐ Decomposition
- ☐ Algorithmic thinking
- ☐ Identify the inputs, processes, and outputs for a problem
- ☐ Structure diagrams
- ☐ Create, interpret, correct, complete, and refine algorithms using:
- ☐ Pseudocode
- ☐ Flowcharts
- ☐ Reference language/high-level programming language
- ☐ Identify common errors
- ☐ Trace tables

Required- 2.1.1 Computational thinking

- ☐ Produce simple diagrams to show:

- ☐ Knowledge of a variety of examples of digital technology and how this impacts on society
- ☐ An ability to discuss the impact of technology based around the issues listed
- ☐ The purpose of each piece of legislation and the specific actions it allows or prohibits
- ☐ The need to licence software and the purpose of a software licence
- ☐ Features of Open Source (providing access to the source code and ability to change the software)
- ☐ Features of propriety (no access to the source code, purchased commonly as off the shelf)
- ☐ Recommend a type of licence for a given scenario including benefits and drawbacks
- ☐ Understanding of these principles and how they are used to define and refine problem

- ☐ The structure of a problem
- ☐ Subsections and their links to other subsections
- ☐ Complete, write or refine an algorithm using the techniques listed
- ☐ Identify syntax/logic errors in code and suggest fixes
- ☐ Create and use trace tables to follow an algorithm
- ☐ Use of nesting for selection and iteration

2.1.2 Designing, creating and refining algorithms

- ☐ Identify the inputs, processes, and outputs for a problem
- ☐ Structure diagrams
- ☐ Create, interpret, correct, complete, and refine algorithms using:
 - o Pseudocode
 - o Flowcharts
 - o Reference language/high-level programming language
- ☐ Identify common errors
- ☐ Trace tables
- ☐ Standard searching algorithms:
 - o Binary search
 - o Linear search
- ☐ Standard sorting algorithms:
 - o Bubble sort
 - o Merge sort
 - o Insertion sort
- ☐ The use of variables, constants, operators, inputs, outputs and assignments
- ☐ The use of the three basic programming constructs used to control the flow of a program:
 - o Sequence
 - o Selection
 - o Iteration (count- and condition-controlled loops)
- ☐ The common arithmetic operators
- ☐ The common Boolean operators AND, OR and NOT

Required: 2.1.2 Designing, creating and refining algorithms

- ☐ Produce simple diagrams to show:
 - § The structure of a problem
 - § Subsections and their links to other subsections
- ☐ Complete, write or refine an algorithm using the techniques listed
- ☐ Identify syntax/logic errors in code and suggest fixes
- ☐ Create and use trace tables to follow an algorithm
- ☐ Use of nesting for selection and iteration
- ☐ Understand the main steps of the algorithm and the segments of code in it

2.1.3 - Searching and sorting algorithms

- ☐ Principles of computational thinking:
- ☐ Abstraction
- ☐ Decomposition
- ☐ Algorithmic thinking
- ☐ Identify the inputs, processes, and outputs for a problem
- ☐ Structure diagrams
- ☐ Create, interpret, correct, complete, and refine algorithms using:
 - o Pseudocode
 - o Flowcharts
 - o Reference language/high-level programming language
- ☐ Identify common errors
- ☐ Trace tables

2.2 - Programming fundamentals

- ☐ The use of variables, constants, operators, inputs, outputs and assignments
- ☐ The use of the three basic programming constructs used to control the flow of a program:
 - o Sequence
 - o Selection
 - o Iteration (count- and condition-controlled loops)
- ☐ The common arithmetic operators
- ☐ The common Boolean operators AND, OR and NOT

	☐ Understand any pre-requisites of an algorithm ☐ Apply the algorithm to a data set ☐ Identify an algorithm if given the code, pseudocode or Exam Reference Language for it <u>Not required</u> ☐ To remember the code, pseudocode or Exam Reference Language for these algorithms		Required- 2.2 - Programming fundamentals ☐ Practical use of the techniques in a high-level language within the classroom ☐ Understanding of each technique ☐ Recognise and use the following operators: ☐ Comparison operators Arithmetic operators ☐ == Equal to + Addition ☐ != Not equal to - Subtraction ☐ < Less than * Multiplication ☐ <= Less than or equal to / Division ☐ > Greater than MOD Modulo ☐ >= Greater than or equal to DIV Quotient ☐ ^ Exponentiation (to the power) ☐ Knowledge of the truth tables for each logic gate ☐ Recognition of each gate symbol ☐ Understanding of how to create, complete or edit logic diagrams and truth tables for given scenarios ☐ Ability to work with more than one gate in a logic diagram
	<u>2.4 - Boolean logic</u> ☐ Simple logic diagrams using the operators AND, OR and NOT ☐ Truth tables ☐ Combining Boolean operators using AND, OR and NOT ☐ Applying logical operators in truth tables to solve problems	Required- 2.4 - Boolean logic ☐ Practical use of the techniques in a high-level language within the classroom ☐ Understanding of each technique ☐ Recognise and use the following operators: ☐ Comparison operators Arithmetic operators ☐ == Equal to + Addition ☐ != Not equal to - Subtraction ☐ < Less than * Multiplication ☐ <= Less than or equal to / Division ☐ > Greater than MOD Modulo ☐ >= Greater than or equal to DIV Quotient ☐ ^ Exponentiation (to the power) ☐ Knowledge of the truth tables for each logic gate ☐ Recognition of each gate symbol ☐ Understanding of how to create, complete or edit logic diagrams and truth tables for given scenarios ☐ Ability to work with more than one gate in a logic diagram	
Drama	<u>Component 3 - Theatre Makers in Practice (Written Assessment)</u> ☐ Section 1: Questions on the play DNA by Dennis Kelly from the perspective of an actor, director and designer ☐ Section 2: 1 question on The Curious case of Benjamin Button ☐ Revise notes on both plays and revise drama vocabulary and performance skills (physical and vocal)		

Business	<u>Theme 1: Investigating small business</u> 1.1 Enterprise and entrepreneurship ☐ 1.1.1. The dynamic nature of business ☐ 1.1.2 Risk and reward ☐ 1.1.3 The role of business enterprise 1.2 Spotting a business opportunity ☐ 1.2.1 Customer needs ☐ 1.2.2 Market research ☐ 1.2.3 Market segregation ☐ 1.2.4 The competitive market 1.3 Putting a business idea into practice ☐ 1.3.1 Business aims and objectives ☐ 1.3.2 Business revenues, costs and profits ☐ 1.3.3 Cash and cash flow ☐ 1.3.4 Source of business finance 1.4 Making the business effective ☐ 1.4.1 The options for startup and small businesses ☐ 1.4.2 Business location ☐ 1.4.3 The marketing mix ☐ 1.4.4. Business plans 1.5 Understanding external influences on business ☐ 1.5.1 Business stakeholders ☐ 1.5.2 Technology and business ☐ 1.5.3 Legislation and business ☐ 1.5.4 The economy and business ☐ 1.5.5 External influence
3D Design	<u>Project: Inspired Jewellery Box</u> ☐ A01: Develop ideas through investigations, demonstrating critical understanding of sources. ☐ Research: Design inspiration, materials, processes etc. ☐ A02: Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes. ☐ Designs, developments and prototypes ☐ A03: Record ideas, observations and insights relevant to intentions as work progresses. ☐ Designs, developments and prototypes ☐ A04: Present a personal and meaningful response that realises intentions and demonstrates understanding of visual language. ☐ Prototypes (including final prototype/outcome)