

## Year 11

# Curriculum Overview Half Term 1

#### Dear Parent/Carer,

In the following booklet you should find an overview of what your child will be studying this half term in school. We've included key details on what they will be looking at in each subject, how they'll be assessed and what they might do to further develop their understanding. The aim is for this to make it easier for you to work with the school supporting your child with their work.

All lessons last for one hour. In Year 11, students study the following:

- English and Maths four lessons per week per subject
- Science two lessons per week per Science subject (Biology, Chemistry and Physics)
- Three 'Options' three lessons per week per subject
- Religious Education one lesson per week
- 'Core' PE one lesson per week

The information for each subject is categorised as follows:

**Topics / tasks**: This is the overview of the topics Year 11 students will be covering this half term.

Content and skills: This explains what areas students will be looking at, and the skills they will be

developing during the half term.

**Assessment**: This explains how students will be assessed on their understanding of this topic.

**Stretch and challenge:** This gives suggestions of how students can explore this area in more detail if they wish.

#### Art

Topics / tasks:	Students will be continuing their personal projects required, some students will begin a new project development of a previous personal project, or a once all current work is submitted and assessed by	either based round a provided title, a further more directed project. This will be decided
Content and skills:	This all depends on the nature of projects being created and the individual student's strengths and interests, with guidance by the class teacher.	
Assessment:	Their practical work reviewed and commented on. Basic technical skills will be assessed, but not over the imaginative and creative. Control of materials and understanding of the formal elements mapped.	The assessment objectives (AQA exam board) will be referred to throughout the process.
	Regular verbal feedback by the class teacher and a program of written self-assessment as part of creating the portfolio.	
Stretch and challenge:	Work through the pathways and once pathway three has been reached, extend their work through a greater exploration of materials and processes being used.	Further reading by exploring art museum websites and identifying artists the student likes. To then create outcomes and annotation based on these new artists without teacher direction. To use the literacy guide in moving toward advanced use of questioning.

#### **Business Studies**

Topics / tasks:	Review topics 3.1 & 4.1 & 4.2 Sales & customer service Consumer law Business location Working with suppliers Finance
Content and skills:	Paper 2 content Impact of decision making on Business, both in the UK and internationally. Interdependent nature of Business. Finance - calculating, graphical data. Operating and structure
Assessment:	Range of exam questions, classwork, homework, topic tests (at end of unit). Use of key terms & application.  Exam - Paper 1 (3x topics)  4.3 Customer service & after sales service PPT L3 /12  4.4 Consumer Law Homework / 5  4.5 Business Location / 16  4.5 Classwork case study: 4.5 Location /7 Grade  5.2 Sources of finance exam questions / 12
Stretch and challenge:	A good business students will be aware of current issues - BBC Business pages, news channels, reports, stock market and government decisions. Build this into your daily routine - cause and effect.  TV Shows such as Dragons Den & The Apprentice make great viewing but also teach you the fundamentals!  Follow, analyse, read company reports - look at financial reports - can you review? Can you work out the profit based on the figures?

#### **Computer Science**

Topics / tasks:	Introduction to Networks NEA project outline and checklist for home Network protocols and the Internet Revision preparation for mock Internal programming project
Content and skills:	Students will evaluate the different topologies used in Networks Students will spend allotted time on their NEA project, and outline what is needed for the remaining time at home Students will learn the rules associated with network communication Students will revise their knowledge of Python with an internal project
Assessment:	NEA project Mock (x1) Internal programming project
Stretch and challenge:	Investigate how combining network topologies can produce a better communication system Research the common protocols for communication and look in more detail at the TCP/IP stack

#### **Creative iMedia**

Topics / tasks:	R082 Digital Graphics Assignment (LO1 & LO2)
Content and skills:	Understand the properties and purposes of digital graphics and be able to discuss both in detail, using key technical terms.  Design and develop a vinyl album cover to a set brief, considering audience and purpose throughout.  Create high quality supporting documentation to assist the planning such as a mind map, mood board, work plan and log.
Assessment:	R082 is assessed one section at a time LO1 will be assessed this half term (work is sent off for moderation in October or February series)
Stretch and challenge:	Original content development - images/text/ skills from different units and embed Practise using Photoshop to enhance skills - in turn impacting on the professional appearance of the end product.

#### **Design Technology**

Topics / tasks:	The Autumn Term will be dedicated to the NEA - the most recent guidance from AQA states that the NEA needs to be completed as normal.
Content and skills:	<ul> <li>There are discussions surrounding the physical manufacture of the final outcome. It has been suggested that photographic evidence / teacher witness statements could be used as proof of quality of practical work / ability. All students completed the 'clock' practical project in Y10, so this could be used, if required.</li> <li>As this is currently undecided, along with current restrictions on practical work, I am aiming to complete the folder-side of the NEA during the autumn term. This leaves time for physical manufacture (if guidance does not change) and also leaves time to recap and revise Y10 theory.</li> <li>Some students have completed a variety of NEA tasks during lock down. Students can insert these slides / scans as they progress through each stage of the NEA.</li> <li>Work this term will follow the design process: investigation, designing, developing, and evaluating. Making may be possible depending on how things progress.</li> <li>The main skills students will be developing / using, is the ability to work independently and take ownership of their own NEA project.</li> </ul>
Assessment:	<ul> <li>Theory: Students will complete a 150 question test in forms that covers all theory work set during lockdown. This will be crucial to find out who has done what during lockdown and also the ability to recall theory.</li> <li>NEA: As per AQA guidelines, student NEA work cannot be marked individually, but rather, give generic feedback / guidance to the group as a whole.</li> </ul>
Stretch and challenge:	There are some excellent videos on YouTube that investigate materials in a further detail. Videos are also useful to explore a wide variety of production processes i.e. 'How it's made'.  Students can also complete additional practice questions on <a href="https://www.technologystudent.com">www.technologystudent.com</a> . This website contains a huge amount of information

#### **Drama**

Note: Performance work started in Jan 2020 will be revisited and reworked in order to meet syllabus changes. Practical work will have to meet practical government and school guidance on COVID performance restrictions. Students unable to attend will then be able to rehearse a monologue.

Topics / tasks:	Component 2: Finish developing piece and complete written log (Draft and complete 10%) Practical performance of devised piece (10%) Draft and complete written evaluation of preparation and performance(10%)	
Content and skills:	Practical Skills  Create and develop ideas to communicate meaning in a devised theatrical performance Rehearse, refine and amend work in progress from feedback given. Create and communicate meaning Realise artistic intention in devised drama  Writing Skills Document their devising process by analysing and evaluating contribution.	
Assessment:	Formal assessment of practical work, feedback on draft documentation leading to formal grading of completed written documentation.	
Stretch and challenge:	Use BBC Bitesize for more information on the devising process and how to document work.	

#### **English**

Topics / tasks:	AQA GCSE English Literature: Paper 2 Modern Text (An Inspector Calls or Blood Brothers)	AQA GCSE English Language: Paper 1 Reading Fiction
Content and skills:	<ul> <li>Studying a modern play chosen by class teacher</li> <li>Analysing the writer's use of language and staging.</li> <li>Considering the social and historical context of the play and how these influence the writer</li> <li>Analysing ideas and themes across the play</li> <li>Understanding how to answer an exam question</li> <li>Learning key quotations from the play.</li> </ul>	<ul> <li>Re-visiting the home learning work on Paper 1</li> <li>Understanding each of the four exam questions</li> <li>Understanding which methods to use to answer each of the four exam questions</li> <li>Revising descriptive language methods</li> <li>Studying how writers structure narratives</li> <li>Evaluating viewpoints and providing personal responses.</li> <li>Completing individual questions</li> <li>Completing a full reading section of the exam.</li> </ul>
Assessment:	Writing exam responses on both characters and themes.	Answering a full reading section of the exam
Stretch and challenge:	<ul> <li>Reading the play more than once.</li> <li>Watching filmed versions of the play</li> <li>Accessing Mr Bruff on YouTube and watch the series of videos on the play whilst making useful revision notes. <ul> <li>www.youtube.com/user/mrbruff/featured</li> </ul> </li> <li>Researching more about the writer and their political views.</li> </ul>	<ul> <li>Reading fiction and examining how writers structure chapters of writing</li> <li>Accessing Mr Bruff on YouTube and watch the series of videos on 'English Language Paper 1: reading' whilst making useful revision notes.         www.youtube.com/user/mrbruff/featured     </li> </ul>

#### **Engineering**

Topics / tasks:	Non-Examined Assessment (NEA) Unit. This project is the coursework element of GCSE Engineering and students will begin to produce your design portfolio.	
Content and skills:	<ul> <li>Energy consumption has a huge impact on the environment.</li> <li>Engineers have a responsibility to design products and systems that address environmental and energy issues.</li> <li>Below is a problem that engineers face on a day-to-day basis. Your task is to identify a solution to the problem outlined below and produce an engineered product to help solve the problem.</li> <li>Your solution must include both mechanical and electronic components to provide an integrated product.</li> <li>Problem</li> <li>The decline in the use of fossil fuels has meant that we need to rely on alternative sources of energy. We use energy in many ways: for heating/lighting, for transport, for manufacturing, for leisure. Your task is to engineer a device that uses energy produced by an alternative method to burning fossil fuels.</li> <li>Engineer a prototype device that uses wind power to drive a bird scarer</li> <li>This half term you will be looking to research a variety of mechanical and electrical solutions and begin to design some initial concept drawings.</li> </ul>	
Assessment:	This unit will be graded 1-9 by the teacher and then moderated by the exam board. This will form 40% of the final GCSE grade.	
Stretch and challenge:	Students can access their work and help guides via the schools remote desktop software on the school website <a href="https://www.durhamjohnston.org.uk/e-learning/remote-desktop">www.durhamjohnston.org.uk/e-learning/remote-desktop</a> to complete additional work outside the lesson.	

#### Food

Topics / tasks:	Component 1 – Principles of Food Preparation and Nutrition.	Component 2 – Food Preparation and Nutrition in Action.
Content and skills:	Students will begin by revisiting the knowledge they have covered in Year10 covering food, nutrition and health and how to plan for different groups and RAG rate the content they covered, identifying which topics require further study.  Food, Nutrition and Health of the different life stages will be the first topic covered. Students will look at the different micro and macronutrients the body needs, identifying sources of each nutrient and the role they play in human nutrition.	Leaners will explore and demonstrate the different knowledge and skills required to undertake the two internally assessed parts of the qualification known as non-examination assessments, NEA2. Students will work through exemplar NEA assignments provided by the exam board to underpin how to successfully conduct their own NEA.  NEA2 practice will begin by looking at an exemplar to identify how grading has been applied. Students will then begin their actual NEA2, starting by analysing the tasks and creating a plan of action for their research. Students will complete their research, leading to a specification and a range of suitable dishes being chosen.
Assessment:	Completing a mini mock exam of knowledge covered so far, using past paper exam questions to help promote good exam technique practice.	
Stretch and challenge:	<ul> <li>Students should familiarise themselves with the specification for the course and expectations, this includes using the online textbook to familiarise themselves with the topics covered this half term and examples of NEA1 and NEA2.</li> <li>Students will receive login details for the online textbook which can be accessed at <a href="mailto:illuminate.digital/eduqasfood/">illuminate.digital/eduqasfood/</a></li> <li>Students should watch related TV programmes which will be advised in class and on Teams.</li> <li>Students should aim to practice practical skills at home where possible, ensuring they have both permission and supervision from an adult at home when completing practical tasks.</li> </ul>	

#### **French**

Topics / tasks:	Charity and voluntary work topic and then moving on to global issues.
Content and skills:	Full range of vocabulary; revision of conditional and imperfect tenses; introduction of subjunctive.
Assessment:	Weekly vocabulary tests plus a listening assessment.
Stretch and challenge:	Researching a French charity or an environmental problem in France.

#### Geography

Topics / tasks:	The Living World
Content and skills:	<ul> <li>The distribution and characteristics of large-scale natural global ecosystems.</li> <li>The role of producers, consumers, decomposers, food chain, food web and nutrient cycling in ecosystems.</li> <li>Epping Forest as an example of a small scale UK ecosystem.</li> <li>The balance between ecosystem components and the impact on the ecosystem of changing one component.</li> <li>The reasons for biome location: Latitude; Mountain Ranges; Ocean Currents; Global Air Pressure.</li> <li>The physical characteristics of tropical rainforests.</li> <li>The interdependence of climate, water, soils, plants, animals and people in tropical rainforests.</li> <li>How plants and animals adapt to the physical conditions in tropical rainforests.</li> <li>Issues related to biodiversity in tropical rainforests.</li> <li>Changing rates of deforestation.</li> <li>Causes and impacts of deforestation in the Amazon rainforest.</li> <li>The value of tropical rainforests to people and the environment.</li> <li>Strategies used to manage the rainforest sustainably.</li> <li>The physical characteristics of cold environments.</li> <li>The interdependence of climate, permafrost, soils, plants, animals and people in cold environments.</li> <li>How plants and animals adapt to the physical conditions in cold environments.</li> <li>Issues related to biodiversity in cold environments.</li> <li>Development opportunities and challenges in Alaska.</li> <li>The value of cold environments as wilderness areas and why these fragile environments should be protected.</li> <li>Strategies used to balance the needs of economic development and conservation in cold environments</li> </ul>
Assessment:	A range of GCSE practice questions throughout the half term.  A mid-unit test on content up to and including the tropical rainforest case study.
Stretch and challenge:	Going to the AQA website and downloading past copies of paper 1 and the mark scheme to practice answering GCSE questions on this topic.  Watch the BBC Planet Earth documentary series on 'Jungles' and 'Ice Worlds' (available on BBC iPlayer).  Keeping up to date with recent news stories about tropical rainforests and cold environments.

#### German

Topics / tasks:	Theme 2 – Local, national and international and global areas of interest, including topics on the local area, social issues and global issues. Students will study all of the relevant vocabulary as well as revision of the future, conditional and imperfect tenses, and word order, modal and reflexive verbs.	
Content and skills:	<ul> <li>Ignoring words which are not needed</li> <li>Recognising and using cognates and near-cognates</li> <li>Reading authentic texts, and breaking down longer words to understand them.</li> <li>Students will be working on all four skills (reading, writing, listening and speaking), with a focus on feeling more confident with speaking exercises.</li> </ul>	
Assessment:		
Stretch and challenge:	Researching life in German speaking countries in terms of city life, voluntary work, fitness/sport and the environment, and writing in German about the similarities and differences with Britain.	

#### Health and Social Care (BTEC)

Topics / tasks:	Component 1 Receiving feedback for resubmission for Comp 1 LAA Tasks to embed knowledge for Comp 1 LAB & to prepare for LAB Assignment Completing coursework assignment for Component 1 LAB – Feedback after half term	Component 2 Receiving feedback for resubmission for Comp 2 LAA Embedding their knowledge of care values and their application in a health and social care setting
Content and skills:	Students will cover knowledge on:  Life events – physical, relationships and life circumstances.  Support – How people adapt and cope with an irreversible change in their life and support – both formal and informal can help.  Sources of support – family, friends & partners, professional support, community groups and organisations.  practical and financial support  Types of support: emotional, information and advice, practical help, e.g. financial assistance, childcare, transport Assignment Component 1 LAB - Learning aim B: Investigate how individuals deal with life events  Students will independently produce a report about how two individuals cope with the impact of life event based on two case studies. The deadline will be before half term	Students will cover knowledge of care values and their application in a health and social care setting as well as having the opportunity to demonstrate them in a practical session through role play scenarios.  Knowledge of the 7 care values.  Empowering and promoting independence  Maintaining confidentiality  Safeguarding and duty of care  Promoting anti-discriminatory practice  Effective communication  Preserving dignity  Respect for others  Students will independently produce two role play situations, carry them out and reflect on their demonstration of the care values mentioned. The deadline will be before half term
Assessment:	Completing their Component 1 LAB assignment	Completing their Component 2 LAB assignment.
Stretch and challenge:	They can do the practice assignment which is a different life event to the coursework and based off two different case studies –and receive feedback because it is a practice.  They can watch some of the TV programmes suggest in class and on Teams to back up their argument and use as evidence.  They can speak to people in their circle of family and friends to gain re life experiences and opinions.	Students can role play health and social care situations with their families and reflect on the care values listed above. The can also watch TV programmes to identify the use of care values in practical settings.

### History

Topics / tasks:	The early reign of Elizabeth the First	An environment study of Kenilworth Castle
Content and skills:	Students will investigate the context of early modern Europe, problems that faced Elizabeth upon her accession to the throne, how she governed England, the Religious Settlement and her relationship with Mary, Queen of Scots.	Students will investigate the purposes, change over time, and context of Kenilworth Castle, including a study of notable individuals connected with the location, in preparation for the 16 mark exam question.
Assessment:	Completing exam-style questions that test the ability to construct causal explanatory narratives and test interpretations of the past using evidence.	Planning and writing an essay in the style appropriate to the GCSE examination on how Kenilworth Castle illustrates wider points about the Elizabethan period.
Stretch and challenge:	Reading: Ian Mortimer, The Time Traveller's Guide to Elizabethan England Peter Ackroyd, Tudors: The History of England Vol II Antonia Fraser, Mary, Queen of Scots	Other Media:  BBC Bitesize Elizabeth: The Golden Age (film, 2007) Elizabeth (film, 1998) Mary, Queen of Scots (film, 2018)- not fully accurate (the two Queens never met) but provides excellent context Queen Elizabeth and Robert Dudley – English Heritage Royal Progress to Kenilworth Castle- English Heritage

#### Latin

Topics / tasks:	Magic & Superstition: Texts & Sources.	Active verbs: conjugations, infinitives & irregular verbs
Content and skills:	How to understand and analyse the sources set for Paper 2; how we can use these sources to learn about Magic & Superstition in the Roman world.	Consolidating their knowledge of active verb endings to improve confidence and accuracy in translating and understanding Latin.
Assessment:	Exam-style questions on the sources and a practice language paper, in addition to regular vocabulary & grammar tests.	
Stretch and challenge:	Reading about Roman religion and beliefs. There is a selection of suitable books available for students to borrow.	

#### Mandarin

Topics / tasks:	The identity and culture topic (review) and moving on to Current and future study and employment.	
Content and skills:	<ul> <li>Full range of vocabulary; revision of conditional sentence pattern and future tense</li> <li>Introduce actions in progress using '正在'</li> <li>Introduce 是 的 to indicate emphasis in past.</li> </ul>	
Assessment:	Weekly vocabulary tests plus a listening assessment.	
Stretch and challenge:	Research Chinese 'Gao Kao' and why do exam level students have to board in school.	

#### Maths

Topics / tasks:	Higher Algebraic fractions Equations leading to quadratics Quadratic simultaneous equations (Set 1 may cover additional topics from the Further Maths specification)	Foundation Review of Year 10 algebra Review of Year 10 percentages work. Percentages Ratio and proportion
Content and skills:	Review and extension of Year 10 topics Applications of topics to other areas of Mathematics and across the curriculum. Real life applications. Students will also develop their reasoning skills, examination technique and knowledge of exam marking criteria.	
Assessment:	Half term assessment 1 on work covered in the first 5 weeks.	
Stretch and challenge:	Completing extra work using Hegarty Maths and Corbett Maths websites. Access revision resources and sessions made available by the Maths department.	

#### Music

	11C	11K
Topics / tasks:	<ul> <li>Consolidation and review of AOS2 set works</li> <li>Consolidation and review of AOS4 set works</li> <li>Composition</li> <li>Performance review</li> </ul>	<ul> <li>Consolidation and review of AOS3 set works</li> <li>Consolidation and review of AOS4 set works</li> <li>Composition</li> <li>Performance review</li> </ul>
Content and skills:	<ul> <li>Refining and improving listening skills</li> <li>Developing the ability to write fluently about the set works</li> <li>Refining and editing compositions</li> </ul>	<ul> <li>Refining and improving listening skills</li> <li>Developing the ability to write fluently about the set works</li> <li>Refining and editing compositions</li> </ul>
Assessment:	<ul><li>Exam-style listening questions</li><li>Formative composition feedback</li></ul>	<ul> <li>Exam-style listening questions</li> <li>Formative composition feedback</li> </ul>
Stretch and challenge:	<ul><li>Exam-style listening questions</li><li>Formative composition feedback</li></ul>	<ul> <li>Exam-style listening questions</li> <li>Formative composition feedback</li> </ul>

#### Photography

Topics / tasks:	Students continue to develop their skills using various techniques with Photoshop to produce a range of tasks. The projects will allow further exploration for the students to progress a creative approach to digital photography.	
Content and skills:	With each new task students will be developing creative processes, looking at digital artists and ways of working, helping them build a portfolio of work in response to the AQA assessment objectives	
Assessment:	Their practical work will be regularly reviewed, and feedback given with advice and guidance on how the student can improve and work more independently and effectively. Technical skills using a camera, Photoshop and other photography-assisted programs will be assessed.  The assessment objectives (AQA exam board) will be referred to throughout the process.  Regular verbal feedback by the class teacher and a program of written self-assessment as part of creating the portfolio.	
Stretch and challenge:	Being creative in approached to how they can use their skills and imagination to refine and explore various techniques. Further reading by exploring creative websites and identifying artists the student finds interesting and inspirational. To then create outcomes and annotation based on investigations and present a personal and expressive response that shows self-confidence and conviction.	

#### **Physical Education**

Topics / tasks:	Sport psychology (Chapter 4) and development of practical choices	
Content and skills:	They will look at skill and ability. skill classification, goal setting, information processing, guidance and feedback, arousal, aggression, personality and motivation.	
Assessment:	A Kerboodle and Everlearner on-line end of chapter assessment.	
Stretch and challenge:	Use PE journals and internet sources to read beyond set GCSE text books. Also keep up-to-date with current sporting issues.	

#### Physical Education (BTEC)

Topics / tasks:	Complete Unit 3 (fitness for sport and exercise) assignment	
Content and skills:	Students will develop their understanding of Unit 1 theory needed for the end of year exam and how to answer long answer questions.	
Assessment:	End of unit 3 assessment (P/M/D) and an end of year exam.	
Stretch and challenge:	Continue to use Everlearner for exam content. Make use of the BTEC revision guides and past papers.	

#### **Religious Education**

Topics / tasks:	GCSE focussed study of Christian Beliefs and teachings.
Content and skills:	
Assessment:	Pupils will have a range of GCSE type assessments to complete. These concentrate on accurate understanding of key vocabulary, the ability to link the influence of belief to action, an ability to make detailed comparisons between the two religions studied and to evaluate a point of view and relate their religious knowledge to enrich the answer they make.
Stretch and challenge:	Visit online reference sites such as: Wikipedia, Britannica and the BBC Bite Size website

#### Science: Biology

Topics / tasks:	Topic 9 -Nutrient Cycles and Topic 5 - Health, disease and the development of medicines.	
Content and skills:	<ul> <li>Knowledge</li> <li>Water cycle, Carbon cycle, Nitrogen cycle</li> <li>Physical and chemical body defences</li> <li>Immune system</li> <li>Vaccination and medicines</li> <li>Virus life cycles, monoclonal antibodies and plant defences (Triple)</li> </ul>	<ul> <li>Skills</li> <li>Sampling habitats using quadrats and transects</li> <li>Interpreting vaccination graphs</li> <li>Learning how to grow micro-organisms using aseptic technique (Triple only)</li> </ul>
Assessment:	Biology Paper 2 assessment (to include work from year 10)	
Stretch and challenge:	Researching the history of vaccination (Edward Jenner)	

#### **Science: Chemistry**

Topics / tasks:	Topic 3: Electrolysis and Topic 4: Equilibria (Topic 5: Fuel cells and fertilisers - Triple chemistry only)	
Content and skills:	<ul> <li>Knowledge</li> <li>Electrolysis – of both molten salts and dissolved salts in solution</li> <li>Dynamic equilibria – features of a dynamic equilibrium including the use of compromise conditions to control yield,</li> <li>Fertilisers – manufacture of fertilisers and the importance of the Haber Process (Triple)</li> <li>Fuel cells – design of fuel cells, advantages and disadvantages of fuel cells (Triple)</li> </ul>	<ul> <li>Skills</li> <li>Core practical: Electrolysis of copper sulfate solution</li> <li>Evaluation of data to determine optimum conditions in industrial processes</li> <li>Evaluating strengths and weaknesses in the use of fuel cells</li> </ul>
Assessment:	Full paper 1 in chemistry for combined or separate award GCS	E
Stretch and challenge:	Use of electrolysis in commercial applications including mobile phones; development of fuel cells to improve sustainability in the car industry	

#### **Science: Physics**

Topics / tasks:	Topic 6: Radioactivity (to finish) Topic 8: Energy – Forces doing work Topic 9: forces and their effects Topic 10: Electricity and circuits		
Content and skills:	<ul> <li>Topic 6 - Radioactivity</li> <li>Decay equations (Dual award)</li> <li>Half-life, including calculations (Dual award)</li> <li>Dangers of ionising radiation (Dual award)</li> <li>Radioactivity in medicine - tracers and the gamma camera, PET scanner, radiotherapy. (Triple award only)</li> </ul>	<ul> <li>Topics 8 and 9 – Energy and Forces</li> <li>Work and power</li> <li>Calculations involving efficiency, kinetic and potential energy</li> <li>Forces as vectors.</li> <li>Moments, gears (Triple only)</li> </ul>	<ul> <li>Topic 10: Electricity and circuits</li> <li>Concepts of charge, current, resistance and potential difference</li> <li>Electrical calculations</li> <li>Series and parallel dc circuits</li> </ul>
Assessment:	Full paper 1 in physics for combined or separate award GCSE with additional assessments in Teams and topic tests		
Stretch and challenge:	Completing relevant exercises on Isaac Physics website.		

#### Spanish

Topics / tasks:	2 week review of Units 3 and 4 covered during lockdown. Units 5 and 6 in the AQA Spanish textbook and the topics of local, national, international and global areas of interest, and the first topic of Social Issues on charity and voluntary work.	
Content and skills:	Grammar will include using prepositions (including prepositions of place) and quantifiers, forming more complex questions, using demonstrative and possessive adjectives and pronouns, extending use of connectives, identifying questions in present, past and future tenses, revision of the preterite of common irregular verbs, and forming the conditional tense.  Listening and reading for specific details and opinions, translation and asking questions	
Assessment:	A writing and listening assessment on this topic.	
Stretch and challenge:	Translating all 3 texts about 3 people who live in different areas of Mexico on page 90 of the AQA Spanish textbook to find our about different ways of life in the Hispanic world Researching a famous Spanish city, like Madrid, Barcelona or Valencia, or one from Latin America (e.g. Buenos Aires, Lima) and finding out about the key attractions in those cities.	

#### **Textiles**

Topics / tasks:	NEA development	Theory Development	
Content and skills:	Students are beginning their own response to the NEA tasks set by the exam board (AQA).  This term students should explore:  • The design challenge they have chosen  • Researching their target customer  • Research into the work of others and existing products.  • Consider the environmental implications of textiles products/the product they propose.	Students will recap theory content covered in year 10 in preparation for the exam element of their GCSE. The order of the recap has been chosen to also support specific areas of the NEA:  • Product sustainability • Products in society • Fabrics and their properties • Components and tools • Scales of production	
Assessment:	Students will carry out a written assessment at the end of the half term covering the topics reviewed.		
Stretch and challenge:	NEA: Students are encouraged to gain target customer feedback on their emerging ideas, also first-hand 'primary research' which may include photographs or relevant products or areas of inspiration.  Theory development: Students have been given a revision book with relevant practice questions that they can use for extra preparation for their exam.		

#### **Vocational Construction**

Topics / tasks:	Unit 3 – Planning Construction Projects – Students will learn to plan a construction project.	
Content and skills:	<ul> <li>Students will be able to:</li> <li>Describe responsibilities of those involved in construction projects.</li> <li>Describe outputs of those involved in realising construction projects.</li> <li>Describe processes used in the built environment development projects.</li> <li>Calculate resources to meet requirements for built environment development projects.</li> <li>Assess potential effect factors on a project success</li> <li>Interpret sources of information.</li> </ul>	
Assessment:	Upon completion of this unit their work will be assessed and sent to the exam board for moderation at the end of Year 11 . This will form 25% of their final grade for the course. This work is to be completed independently as per exam board instruction.	
Stretch and challenge:	<ul> <li>Students should familiarise themselves with the specification for the course and expectations, this includes using the textbook to familiarise themselves with the topics covered this half term and examples of Unit 3.</li> <li>Students could source the course textbook WJEC Vocational Award – Constructing The Built Environment, Level 1/2, Howard Davies, Illuminate Publishing, ISBN 978-1-912820-16-0</li> <li>Students should watch related TV programmes such as 'Grand Designs' to understand the process of building a project start to finish.</li> <li>Research CSCS card and complete online tutorials.</li> </ul>	

#### **Vocational Engineering**

Topics / tasks:	Unit 1 – Engineering Design – Students are tasked to design a new generic mobile phone charger.	
Content and skills:	Students will be asked to complete the following tasks:  Design Specification  1. Identify features that contribute to the primary function of existing mobile phone chargers.  2. Identify features of mobile phone chargers and describe whether they do or do not meet requirements of the design brief.  3. Describe how existing mobile phone chargers function.  4. Develop a design specification.  Annotated Sketches  1. Draw three engineering design solutions that meet the criteria in the design specification based upon successful engineered products.  2. Review the suitability of each design and recommend the best option.  Final Drawing  1. Using accepted standards and conventions draw your preferred solution.  Develop a creative solution that meets the criteria in the design specification.	
Assessment:	Upon completion of this Unit the work will be assessed using the WJEC assessment criteria framework graded Level 1 Pass, Level 2 Pass, Level 2 Merit and Level 2 Distinction.	
Stretch and challenge:	<ul> <li>Students should familiarise themselves with the specification for the course and expectations, this includes using the textbook to familiarise themselves with the topics covered this half term and examples of Unit 1.</li> <li>Students could purchase the course textbook WJEC Vocational Award – Engineering Level 1/2, Matthew Wrigley, Illuminate Publishing, ISBN 978-1-912820-15-3.</li> <li>Students should watch related TV programmes which will be advised in class and on Teams.</li> <li>Students should watch the Engineering video clips on Manufacturing Processes and Materials.</li> </ul>	