

# Year 10

# Curriculum Overview Half Term 2

#### 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 10, 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 9 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.

#### **Exam Boards**

Please use the table if you wish to know which exam board the school uses for each qualification.

Click on the name of a subject to be taken directly to that page.

Subject	Awarding Body	Subject	Awarding Body	Subject	Awarding Body
<u>Art</u>	AQA	Geography	AQA	Physical Education, GCSE	AQA
<b>Business Studies</b>	OCR	German	AQA	Religious Education	Eduqas
Computer Science	OCR	Health & Social Care	Edexcel	Science: Biology	Edexcel
Creative iMedia	OCR	<u>History</u>	AQA	Science: Chemistry	Edexcel
Design Technology	AQA	<u>Latin</u>	Eduqas	Science: Physics	Edexcel
<u>Drama</u>	AQA	<u>Mandarin</u>	AQA	<u>Spanish</u>	AQA
<u>English</u>	AQA	<u>Maths</u>	AQA	<u>Textiles</u>	AQA
Engineering	AQA	<u>Music</u>	Edexcel	Vocational Construction	WJEC
Food Preparation and Nutrition	Eduqas	<u>Photography</u>	AQA	Vocational Engineering	WJEC
French	AQA	Physical Education,	Edexcel		

**BTEC** 

#### Art

Topics / tasks:	Students have now all started a personal project, exploring the work of other artists, exploring a range of processes and developing work based on their own investigation.
Content and skills:	This work will continue this half term, with a focus on refining the direction of the personal projects, making strong contextual links to the work of others and other cultures. Individuals will be encouraged to develop new processes suitable to their intentions and a gradual development of portfolios will take place.  Students need to become familiar with the assessment objectives and the course specification, all of which can be found on the AQA website for GCSE Art & Design.  Students have been provided a guide to completing contextual tasks, and they are strongly encourage to become familiar with this. As we move through the term tasks set to be completed outside the lesson will become more individual and we encourage at least one hour of home time to be spent completing tasks.
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.  Parental assessment of progress can easily take place by asking to see the student's journal/sketchbook/art folder on a regular basis. If the parent/carer cannot see any new work being created, progress will likely be slow. It is not necessary to know what the new work is, just that it exists and the coursework is developing.
Stretch and challenge:	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.  We strongly encourage students to create work they enjoy making and we would ask them to show work from home, which they not think is relevant, but that could demonstrate new skills and knowledge to further develop their coursework.

#### **Business Studies**

Topics / tasks:	<ul> <li>1.5 Stakeholders in business</li> <li>1.6 Business growth</li> <li>2.1 The role of marketing: Purpose of marketing within business</li> <li>2.2 Market research</li> <li>Qualitative and quantitative data</li> <li>Marketing Celebrity endorsements (positives and negatives)</li> </ul>
Content and skills:	<ul> <li>Be able to discuss: <ul> <li>How and why objectives might change as businesses evolve</li> <li>Why different businesses may have different objectives</li> <li>The roles and objectives of internal and external stakeholder groups</li> <li>The effect business activity has on stakeholders and the effect stakeholders have on business</li> <li>Organic and external growth</li> <li>Marketing and effective strategies, including the "four P's" and market segmentation</li> </ul> </li> <li>Data: <ul> <li>Use and analyse graphical data and statistics</li> <li>Analyse information from a given scenario. Use key information when compiling an answer (application)</li> </ul> </li> <li>Interpersonal skills: <ul> <li>Collaborative working, ideas, business and presenting.</li> </ul> </li> </ul>
Assessment:	Range of exam questions, classwork, homework. Q&A in lessons. Topic tests (at end of unit). Essay style question (at the end of the unit). Use of key terms & application assessed.
Stretch and challenge:	Types of ownership: <a href="https://www.youtube.com/watch?v=BN2cQNNvg_4">https://www.youtube.com/watch?v=BN2cQNNvg_4</a> Role of marketing: <a href="https://www.youtube.com/watch?v=hX-X4Sndl2w">https://www.youtube.com/watch?v=hX-X4Sndl2w</a> BBC Bitesize - Business GCSE: <a href="https://www.bbc.co.uk/bitesize/examspecs/zv8gvk7">https://www.bbc.co.uk/bitesize/examspecs/zv8gvk7</a> SENECA: <a href="https://www.senecalearning.com/">https://www.bbc.co.uk/news/business</a> - Identify potential marketing opportunities / drawbacks based on today's news (opportunity / threat)

#### **Computer Science**

Topics / tasks:	Python Programming Fundamentals (Selection and Iteration) Number theory (Binary, Denary, and Hexadecimal) Character sets in computers (ASCII and Unicode) Data Representation – Images, sound and Compression		
Content and skills:	Students will apply If statements and Loops to real programming scenarios and understand their purpose.  Students will apply conversion techniques to Binary, Denary and Hexadecimal numbers (and when to use each), as well as understand the need for different number systems.  Students will understand the need of a "character set" and how it is represented by a computer Students will investigate how Images and Sound are represented digitally in a computer (and how space can be saved when storing them), and understand the need for different file formats when storing media.		
Assessment:	Binary, Denary, Hexadecimal Conversions Assessment /30 Assessment on all topics so far /36 PRIMM programming task assessments (6 tasks in total)		
Stretch and challenge:	Attempt to complete the first 5 tasks on the website "project euler" <a href="https://projecteuler.net/archives">https://projecteuler.net/archives</a> Investigate how Binary multiplication is possible using Binary addition <a href="https://www.youtube.com/watch?v=-Ypf2s9_gG0">https://www.youtube.com/watch?v=-Ypf2s9_gG0</a> Look into the Hamming code system for error-checking with ASCII characters <a href="https://en.wikipedia.org/wiki/Hamming(7,4">https://en.wikipedia.org/wiki/Hamming(7,4)</a> Find how it is possible for a video and audio track to be kept in sync when processing <a href="https://www.techsmith.com/blog/sync-audio-and-video-sources/">https://www.techsmith.com/blog/sync-audio-and-video-sources/</a>		

#### **Creative iMedia**

Topics / tasks:	R086 – Creating digital animations coursework unit (25% of final grade)
Content and skills:	Coursework – LO1 – 4  This unit builds on units R081 (theory) and learners will be able to apply the skills, knowledge and understanding gained in those units.  Digital animation is used in a wide range of applications in the creative and digital media sector. Animation can enhance applications, and be used to entertain and inform the viewer. This unit enables learners to understand the basics of digital animation for the creative and digital media sector.  Learners will be able to plan a digital animation to a client brief, use animation software to create the animation and be able to store, export and review the final product.  On completion of this unit, learners will understand different types of digital animation techniques, know where they are
Assessment:	used, be able to plan and create a digital animation and test and review a completed animation against a specific brief.  OCR 2020  Teacher assessed coursework for each section LO1 – 4. Work is then sent for external moderation (February series)
Stretch and challenge:	All coursework must be completed in class under teacher supervision – knowledge, understanding and technical skills can all be revised and practised outside of school – organisation and an in-depth understanding of the topic is key!  Practice using Adobe Animate to hone your skills – this can be accessed outside of school via your <b>own</b> device.  Learning materials: <a href="https://www.ocr.org.uk/qualifications/cambridge-nationals/creative-imedia-level-1-2-award-certificate-j807-j817/">www.ocr.org.uk/qualifications/cambridge-nationals/creative-imedia-level-1-2-award-certificate-j807-j817/</a>

#### **Design Technology**

Topics / tasks:	Specific theory content
Content and skills:	This half term, students will investigate different types, properties and application of the following materials:  This will help embed practical skills, knowledge of tools, materials and equipment. Student this half term will study the following areas:  Product Sustainability Specialist material properties Quality control Production aids Production of materials Key Designers and Companies  Students will also continue to produce one-off prototypes in the workshop.
Assessment:	Each section is recapped and tested in an examination question booklet. These are peer / teacher assessed
Stretch and challenge:	Students should consider exploring (researching and evidencing) the theory areas to extend their learning. Students should be actively reviewing theory tasks to help consolidate learning. Students should be engaged with the class team to access further opportunities for learning.

#### Drama

Topics / tasks:	Component 1: Written exam. Section B, Set Text: Reading and researching set text.
Content and skills:	Explore and understanding the text from a design and performance perspective.  Learn and practice how to write responses for the different questions in the examination, describing and explaining acting and design choices for a given extract from the play.
Assessment:	Teacher marked practice questions on the set text.
Stretch and challenge:	Research text and contextual influences in more depth.

### **Engineering(GCSE)**

Topics / tasks:	Chapter 2 – Engineering manufacturing processes		
Content and skills:	Students will study the following areas:  Additive Manufacturing  Material removal  Shaping, forming and manipulation  Casting and Moulding  Joining and assembly  Heat and chemical treatment  Surface Finishing		
Assessment:	Student complete a portfolio of evidence on manufacturing processes. This is available on Microsoft Teams as are all teacher lesson PowerPoints.  Upon completion of Chapter 2 they will take a test. This will be a combination of multiple choice and longer answer questions.		
Stretch and challenge:	Students can revise ahead on the next chapter which is Chapter 3 Systems.		

#### **English**

Topics/Tasks	AQA GCSE English Literature: Paper 1 'A Christmas Carol' by Charles Dickens	AQA GCSE English Language: Paper 1 Writing to narrate
Content and skills:	<ul> <li>Reading</li> <li>Reading the novella A Christmas Carol.</li> <li>Analysing the writer's use of language in key extracts of the text.</li> <li>Considering the social and historical contexts of the novel and how these influence the writer</li> <li>Understanding how to answer an exam question</li> <li>Learning key quotations from across the text.</li> </ul>	<ul> <li>Writing</li> <li>Writing to narrate</li> <li>Exploring sentences</li> <li>Exploring narrative structure</li> <li>Examining narrative perspectives</li> <li>Crafting openings and endings</li> </ul>
Assessment:	Writing an exam response on a key theme.	Writing an exam response to produce the opening of a story.
Stretch and challenge:	Writing an exam response on a key theme. Reading the text more than once Accessing Mr Bruff on YouTube and watching the series of videos on 'A Christmas Carol' whilst making useful revision notes. https://www.youtube.com/user/mrbruff/featured Reading critical articles via The British Library https://www.bl.uk/works/a-christmas-carol	Writing an exam response to produce the opening of a story. Reading fiction and examining how writers structure their stories Practising narrative writing by using images to spark a short story, Accessing Mr Bruff on YouTube and watching the series of videos on 'English Language Paper 1: writing' whilst making useful revision notes. <a href="https://www.youtube.com/user/mrbruff/featured">https://www.youtube.com/user/mrbruff/featured</a>

#### Food Preparation and Nutrition

Topics / tasks:	Component 1 – Principles of Food Preparation and Nutrition.	Component 2 – Food Preparation and Nutrition in Action.	
Content and skills:	<ol> <li>Learners will explore different aspects of the specification each half term. In Yr10, students will begin by covering knowledge on fruit and vegetables as a commodity</li> <li>Commodities – Meat, fish, poultry and eggs value in the diet, their origins, correct storage, working characteristics exploring physical and chemical changes and how to prepare and cook a range of dishes.</li> <li>Principle of Nutrition looking at the function, sources and value of protein in the diet, including the consequence of not consuming the right amount.</li> <li>Diet and Good Health focusing on the energy requirements and how to plan balanced diets for a range of life stages, including toddlers, teenagers, early, middle and late adulthood.</li> <li>Where Food Comes From and how it is packaged, the impact of packaging on the environment, sustainability of food, food poverty and food security.</li> </ol>	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.  NEA1 focuses on food science and NEA2 focuses on cooking and food preparation.  4. Food Science investigating into protein, focusing on coagulation and form formation.  5. Cooking and Food Preparation whereby students can demonstrate how to make a range of meat, fish, poultry and egg based dishes.	
Assessment:	Students will complete a mini mock exam of knowledge covered so far, using past paper exam questions to help promote good exam technique practice.		
Stretch and challenge:	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. Students have received login details for the online textbook which is accessed at <a href="https://illuminate.digital/eduqasfood/">https://illuminate.digital/eduqasfood/</a> Students should watch related TV programmes which will be advised in class and on Teams. 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.		

#### **French**

Topics / tasks:	Complete revision of Theme 1 topics —technology and free time. Students will then move on to the topic of "Customs and festivals".
Content and skills:	Students will learn about the use of technology in France and how to talk about their own usage. They will also study a range of free time activities and talk about them in present and past tenses. The Customs and Festivals topic includes: considering our traditions and how we celebrate at home; discussing what traditions mean to us; describing international festivals; describing an event / festival. Students will use reflexive verbs in the perfect tense, the perfect infinitive, the imperfect tense of common verbs and using the perfect and imperfect tenses together.
Assessment:	Undertaking a writing assessment.
Stretch and challenge:	Research on festivals celebrated in France or other French speaking countries such as le 14 juillet, le Mardi Gras etc

#### Geography

Topics / tasks:	Urban Issues & Challenges	Physical Landscapes in the UK
Content and skills:	Students will investigate urban challenges in the UK including environmental dereliction, building on brownfield and greenfield sites, the impact of urban sprawl on the rural-urban fringe, the growth of commuter settlements and waste disposal. Students will then examine an example of urban regeneration and sustainable urban living, focusing on water and energy conservation, waste recycling, creating green space and traffic management.	Students will investigate the physical landscapes found in the UK before focusing on the key characteristics of a river drainage basin, long and cross profiles and the processes that shape rivers from source to mouth.
Assessment:	An end of unit test on the Urban Issues & Challenges topic.	A range of GCSE practice questions throughout the half term.
	Going to the AQA website and downloading past copies of paper 2 and the mark scheme to practice answering GCSE questions on this topic.	Going to the AQA website and downloading past copies of paper 1 and the mark scheme to practice answering GCSE questions on this topic.
Stretch and challenge:	Listen to 'Costing the Earth' podcast on BBC radio 4, episodes available at: <a href="www.bbc.co.uk/programmes/b006r4wn">www.bbc.co.uk/programmes/b006r4wn</a> Keeping up to date with recent news stories about urban issues in Mumbai, India and London, UK.	Watch episode 3 'Fresh Water' part of the BBC Planet Earth series and the three 'Sacred Rivers with Simon Reeves' episodes on the Nile, Ganges and Yangtze rivers all available on BBC iPlayer.

#### German

Topics / tasks:	The topic of Family and Technology in everyday life, including a full range of vocabulary linked to these topics. They will deepen their understanding of the imperfect and the perfect tenses, and revise word order in subordinate clauses.	
Content and skills:	How to make the most of near cognates, how to think creatively in speaking, how to tackle a translation from English into German, how to use a variety of vocabulary and different time frames in writing tasks.	
Assessment:	Completing various formative tests and pieces of homework.	
Stretch and challenge:	Bringing all the above elements into their speaking questions and writing tasks.	

#### Health and Social Care (BTEC)

Topics / tasks:	Component 1 – Learning Aim A part 2 taught by Mrs Scott	Component 2 – Learning Aim A taught by Mrs White
Content and skills:	<ul> <li>Learning Aim A part 2: Students will learn and revise the following areas:</li> <li>Review of half term assessment</li> <li>Completion of PIES</li> <li>Learning Aim Assessment part 1 - Half term assessment</li> <li>PART 2: Factors that affect a person's growth and development:</li> <li>Physical factors – including genetic, disease, illness and accidents</li> <li>Lifestyle factors – diet, exercise, lifestyle choices, appearance</li> <li>Social and cultural factors – culture &amp; religion, community, gender roles, educational experiences,</li> <li>Relationships and isolation – personal relationships, social isolation, role models</li> <li>Economic factors – I come and wealth, material possessions</li> <li>Learning Aim Assessment part 2 - Half term assessment</li> </ul>	Learning Aim A part 2: Students will learn and revise the following areas:  Services for adults with specific needs Services for older adults Informal social care Physical barriers Sensory barriers Social, cultural and psychological barriers
Assessment:	Component 1 30% of overall grade. Component 2 30% of overall grade.  Embedded in lessons will be:  Assessment criteria  How to understand coursework  How to present work  Command words and keywords review:  Describe – not just identify but to describe a situation  Explain – how to expand sentences  Compare – how to look at both arguments and support with evidence  Assess – how to justify, add opinion and support argument with evidence  All work is set and collected in Microsoft Teams. Students will complete a mini mock exam of knowledge covered so far, using past paper exam questions to help promote good exam technique practice.	
Stretch and challenge:	Students should familiarise themselves with the specification for the course and expectations.  Students should watch related TV programmes which will be advised in class and on Teams.  Students should speak to people in their circle of family and friends to gain re life experiences and opinions. They will create a person time line and for further understanding of different life stages should do one for someone they know.	

## History

Topics / tasks:	Reasons why a stalemate developed on the Western Front	Reasons why the stalemate on the Western Front finally broke
Content and skills:	Students will investigate: the key battles of the first years of the war (Marne, Mons, Gallipoli, Verdun, Jutland, The Somme, Passchendaele) and be able to explain their purpose and significance. Students will also be studying the development of trench warfare, tactics and governmental responses to the war, including conscription.  Students will develop as historians by practising numerous different exam questions, writing at length, explaining their reasoning using evidence, and reaching analytical judgements through comparing factors.	Students will investigate the different factors that led to the end of trench warfare, including the defeat of the Russians, the role of naval warfare, the impact of the USA joining the war, the Ludendorff Offensive and the fighting in 1918.  Students will be able to assess, analyse and evaluate the role that the different factors played in leading to the end of the First World War.
Assessment:	Completing exam-style questions that test the ability to construct causal explanatory narratives as well as questions that compare and contrast the utility of different sources.	Planning and writing an essay in the style appropriate to the GCSE examination.
Stretch and challenge:	Reading: Jeremy Paxman, Great Britain's Great War Gary Sheffield, A Short History of the First World War Max Hastings, Catastrophe: Europe Goes to War 1914 Max Arthur, Forgotten Voices of the Great War	Other Media:  BBC Bitesize Our World War- A dramatized reimagining of three key episodes from Britain's experience on the Western Front (warning: violence and strong language) They Shall Not Grow Old- a film that colourises and adds sound to original footage from the First World War. Highly recommended.

#### Latin

Topics / tasks:	Uses of the Ablative. Passive verbs	Inscriptions from Roman Britain. The city of Rome
Content and skills:	How to translate the ablative case & revision of usage of other cases; time phrases and numbers.	How to use decipher common inscription types (gravestones & dedications) and how these complement other types of evidence
Assessment:	Assessment test including translation and grammar questions.	
Stretch and challenge:	Background reading about Roman Britain & the city of Rome. A selection of suitable books are available for students to borrow.	

#### Mandarin

Topics / tasks:	Travel (places around city and town)
Content and skills:	Students will study the topic of travel. They will learn vocabulary relevant to this topic and be able to apply this through speaking, listening, reading and writing tasks. Also, they will study the following grammar: the use comparatives and superlatives; the use of question word 'shen me shi hou' the use of 'guo' for past completed action, the use of 'yi qian' 'yi hou' to indicate past and future plan, use of de" after a verb and the use of conjunctions 'chu leyi wai / hai'.
Assessment:	In class there will be weekly vocabulary (characters) tests and assessment of listening, reading/translation and writing skills.
Stretch and challenge:	Students can research the changes in China's big cities in recent years

#### Maths

Topics / tasks:	All students Arithmetic with decimals and fractions Percentages Estimation and rounding Ratio	Higher Tier only Indices Standard form	Higher Tier Extension Sequences Linear graphs Quadratic graphs Linear and quadratic inequalities Iteration
Content and skills:	<ul> <li>Revision and consolidation of previously learned skills</li> <li>Extension of skills to unfamiliar contexts</li> <li>Reasoning and problem solving skills</li> </ul>		
Assessment:	Half term assessment covering content covered this half term as well as previously covered content.		
Stretch and challenge:	<ul> <li>Complete extra work using <a href="www.hegartymaths.com">www.hegartymaths.com</a> and <a href="www.corbettmaths.com">www.corbettmaths.com</a></li> <li>Completing enrichment tasks on <a href="www.nrich.maths.org">www.nrich.maths.org</a></li> </ul>		

#### Music

	10C	10K
Topics / tasks:	Ground Bass Composition AOS1: Beethoven AOS3: Star Wars	Ground Bass Composition Ternary Form Composition AOS1: Beethoven
Content and skills:	Developing listening skills in analysis of set works Developing skills of rhythmic, melodic and harmonic composition	Developing listening skills in analysis of set works Developing skills of rhythmic, melodic and harmonic composition
Assessment:	Practical composition assessment Exam-style listening questions  Practical composition assessment Exam-style listening questions	
Stretch and challenge:	Listening to related works and comparing and contrasting them with the set works	Listening to related works and comparing and contrasting them with the set works

#### Photography

Topics / tasks:	Students will be introduced to various techniques using Photoshop to produce a range of tasks. The projects will introduce the students to Photoshop and enable them to have a creative approach to digital photography. Students will be given set briefs which will introduce them to more complex techniques. After each completed task pupils will receive a marked grade on AO1 AO2 AO3 and AO4.	
Content and skills:	With each new task students will be introduction to new process, new artists and ways of working, helping them build a portfolio of work in response to the AQA assessment objectives. Students will be expected to cover all the AQA Assessment objectives and work to a deadline.	
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:	Extend their work through a greater exploration of materials and processes. 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 (GCSE)

Topics / tasks:	Applied anatomy and physiology (Chapter 1) and in practical lessons football and netball	
Content and skills:	Understand the structure and functions of the skeleton and synovial joints Understand the movements involved at different joints. Understand the structure and functions of the lungs, heart and blood vessels. Understand the mechanics of breathing, gaseous exchange and spirometer traces Understand aerobic and anaerobic exercise, EPOC and the immediate, short term and long term effects of exercise	
Assessment:	Regular exam style questions and a Kerboodle on-line end of chapter assessment.	
Stretch and challenge:	Become involved in school teams and also train and compete regularly outside of school.	

#### Physical Education (BTEC)

Topics / tasks:	Applying Principles of Personal Training (Unit 3)
Content and skills:	Students will design and carry out a personalised training program
Assessment:	Students will be assessed using Everlearner and continue Unit 3 task A.
Stretch and challenge:	Use Everlearner for exam content. Make use of the BTEC revision guides and past papers.

#### **Religious Education**

Topics / tasks:	GCSE Theme 2: Religious responses to issues of life and death.
Content and skills:	Pupils will study this theme looking exclusively at Judaism and Christianity and each religion's teaching about the origins of the world (Creation Story) alongside modern scientific alternative explanations - Big Bang cosmology and the theory of Evolution. They will learn about religious attitudes to key issues of abortion and euthanasia and the sanctity of life. They will explore Jewish and Christian beliefs about death and afterlife.
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 6: Plants structures and their functions
Content and skills:	<ul> <li>Limiting factors in photosynthesis</li> <li>Factors affecting transpiration</li> <li>Translocation</li> <li>Adaptations of plants in extreme environments (Triple only)</li> <li>Plant hormones (Triple only)</li> <li>Investigating rate of photosynthesis</li> <li>Using the inverse square law</li> <li>Describing and Explaining data</li> <li>Plotting line graphs from data</li> <li>Evaluate methods and data</li> </ul>
Assessment:	End of topic test on Topics 1 and 6
Stretch and challenge:	Find out what xerophytes and hydrophytes are.

#### **Science: Chemistry**

Topics / tasks:	TOPIC 1: KEY CONCEPTS IN CHEMISTRY lonic bonding, Covalent bonding, Types of substance, Calculations involving masses
Content and skills:	<ul> <li>lonic bonding and ionic lattices</li> <li>Properties of ionic compounds</li> <li>Covalent bonds</li> <li>Molecular compounds</li> <li>Allotropes of carbon</li> <li>Properties of metals</li> <li>Bonding models</li> <li>Masses and empirical formulae</li> <li>Conservation of mass</li> <li>Moles</li> </ul>
Assessment:	End of topic tests (where appropriate) in addition to a cumulative assessment test covering all of the GCSE material studied so far.
Stretch and challenge:	Find out about SMAs and describe how thermosetting and thermosoftening plastics vary in their structure and bonding.

### Science: Physics

Topics / tasks:	Topic 3 (Revision/recap): Conservation of energy	Topic 4: Waves	Topic 5: Light and the electromagnetic spectrum (dual award)
Content and skills:	<ul> <li>Energy stores and transfers</li> <li>Energy efficiency</li> <li>Keeping warm</li> <li>Stored energies</li> <li>Non-renewable resources</li> <li>Renewable resources</li> </ul>	<ul> <li>Describing waves</li> <li>Wave speeds</li> <li>Refraction</li> <li>Wave crossing boundaries (triple)</li> <li>Ears and hearing (triple)</li> <li>Ultrasound (triple)</li> <li>Infrasound (triple)</li> </ul>	<ul> <li>Electromagnetic waves</li> <li>Uses of the electromagnetic spectrum</li> </ul>
Assessment:	Cumulative assessment test covering topic assessment	cs 1,2 and 3 (Motion, Forces & Conservation	n of Energy), homework and in-class
Stretch and challenge:	Completing relevant exercises on Isaac Ph	nysics website.	

#### Spanish

Topics / tasks:	Complete Unit 5 Home and Local area; Unit 6 of Theme 2 –Social Issues 6.1 Charity and Voluntary work and 6.2 Healthy and Unhealthy living. They will also be looking at Festivals from Unit 4 towards the end of the term as this is a more relevant time of year to do so.
Content and skills:	Using and recognising different tenses, revising use of the conditional and imperfect and learning about the present subjunctive. Identifying tenses in listening as well as reading exercises. Learning how to express agreement and disagreement.
Assessment:	A series of formative assessments done in lessons, regular vocabulary tests and homework
Stretch and challenge:	Completing the interactive activities on Kerboodle in this section – these are auto marking. Students can also read around the topics using online resources/Spanish newspapers and watch programmes in Spanish on channels such as RTVE (free and accessible via internet). BBC GCSE Bitesize is another useful source.

#### **Textiles**

Topics / tasks:	Bag Design & Investigating Textiles Techniques/Processe
Content and skills:	Students will investigate the following Textiles techniques/processes:  Repeat pattern design  Dye sublimation  Tie Dye  Batik  Screen printing  Block printing  Quilting  Decorative techniques  Students will use the information generated to create a bag design, applying the knowledge they have gained.  Students will continue to gain knowledge and understanding of the greater world of design covering the following topics:  Types of manufacture  Process of manufacture  Generation of materials  Product analysis (materials, function, safety, sustainability)
Assessment:	Students will carry out a written assessment at the end of the half term covering the topics studied.  Students completion of the research & design task (bag & textiles techniques) will be assessed holistically, in mirroring the AQA marking criteria.
Stretch and challenge:	Students should consider exploring (researching and evidencing) textiles techniques not explored in lesson time to show further understanding of the subject.  Students should be actively reviewing theory tasks to revise for the end of term test.  Students should be engaged with the class team to access further opportunities for learning.

#### **Vocational Construction**

Topics / tasks:	Unit 1 – Safety and Security Students are preparing for final exams to be taken in June 2021.
Content and skills:	Unit 1: Students will revise the following areas:  • Safety signs  • Fire extinguishers  • Health and Safety Executive  • Construction Legislation  • Risks, Hazards & Control Measures  • Security in Construction
Assessment:	Students will complete a portfolio of evidence that will prepare them for their final exam next year. <b>Unit 1 is 25% of overall grade.</b> All work is set and collected in Microsoft Teams.
Stretch and challenge:	Complete additional revision for mock and final exams which can be accessed via Microsoft Teams.

#### **Vocational Engineering**

Topics / tasks:	Unit 3 – Solving Engineering Problems – this is the theory part of the course for the exam (25%).
Content and skills:	<ul> <li>Students will be asked to complete the following tasks</li> <li>Learning Objective 3 – know forming processes of engineered materials – describe engineering processes and describe applications of engineering processes.</li> <li>Practice mock papers/exam technique.</li> </ul>
Assessment:	This is an externally assessed Unit using the WJEC assessment criteria framework graded Level 1 Pass, Level 2 Pass, Level 2 Merit and Level 2 Distinction. <b>This Unit is 25% of overall grade</b> .
Stretch and challenge:	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 term.  Students could purchase the course textbook WJEC Vocational Award – Engineering Level 1/2, Matthew Wrigley, Illuminate Publishing, ISBN 978-1-912820-15-3.  Students should watch related TV programmes which will be advised in class and on Teams.  Students should watch the Engineering video clips on Manufacturing Processes and Materials.