



DURHAM JOHNSTON  
COMPREHENSIVE SCHOOL  
— DARE TO BE WISE —

# 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

This table shows which exam board the school uses for each qualification.

Click on the [exam board](#) to view the specification via their website.

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

# Art

<b>Topics / tasks:</b>	<b>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.</b>
<b>Content and skills:</b>	<p>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.</p> <p>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 &amp; Design.</p> <p>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.</p>
<b>Assessment:</b>	<p>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.</p> <p>The assessment objectives (AQA exam board) will be referred to throughout the process.</p> <p>Regular verbal feedback by the class teacher and a program of written self-assessment as part of creating the portfolio.</p> <p>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.</p>
<b>Stretch and challenge:</b>	<p>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.</p> <p>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.</p>

# Business

<p><b>Topics / tasks:</b></p>	<p><b>1.4 Business Aims &amp; Objectives</b>  <b>1.5 Stakeholders in business</b>  <b>1.6 Business growth</b>  <b>2.1 The role of marketing: Purpose of marketing within business</b>  <b>2.2 Market research</b></p> <ul style="list-style-type: none"> <li>• <b>Qualitative and quantitative data</b></li> </ul>
<p><b>Content and skills:</b></p>	<p><b>Be able to discuss:</b></p> <ul style="list-style-type: none"> <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> <p><b>Data:</b></p> <ul style="list-style-type: none"> <li>• Use and analyse graphical data and statistics</li> <li>• Analyse information from a given scenario.</li> <li>• Use key information from the case (industry) when compiling an answer (application)</li> </ul> <p><b>Interpersonal skills:</b></p> <ul style="list-style-type: none"> <li>• Collaborative working, ideas, business and presenting.</li> </ul>
<p><b>Assessment:</b></p>	<p>Range of exam questions, classwork, homework.          Q&amp;A in lessons.          Topic tests (at end of unit).          Essay style question(s) (at the end of the unit). Use of key terms (knowledge) &amp; application assessed. Clear focus on exam technique.</p>
<p><b>Stretch and challenge:</b></p>	<p>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-X4SndI2w">https://www.youtube.com/watch?v=hX-X4SndI2w</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.senecalearning.com/</a>          Research - BBC Business: <a href="https://www.bbc.co.uk/news/business">https://www.bbc.co.uk/news/business</a> - Identify potential marketing opportunities / drawbacks based on today’s news (opportunity / threat)</p>

# Computer Science

<b>Topics / tasks:</b>	<b>Python Programming Fundamentals (Selection and Iteration)</b> <b>Number theory (Binary, Denary, and Hexadecimal)</b> <b>Character sets in computers (ASCII and Unicode)</b> <b>Data Representation – Images, sound and Compression</b>
<b>Content and skills:</b>	<p>Students will apply If statements and Loops to real programming scenarios and understand their purpose.</p> <p>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.</p> <p>Students will understand the need of a “character set” and how it is represented by a computer</p> <p>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.</p>
<b>Assessment:</b>	<p>Binary, Denary, Hexadecimal Conversions Assessment /30</p> <p>Assessment on all topics so far /36</p> <p>PRIMM programming task assessments (6 tasks in total)</p>
<b>Stretch and challenge:</b>	<p>Attempt to complete the first 5 tasks on the website “project euler” <a href="https://projecteuler.net/archives">https://projecteuler.net/archives</a></p> <p>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></p> <p>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></p> <p>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></p>

# Design Technology

<b>Topics / tasks:</b>	<b>Specific theory content</b>
<b>Content and skills:</b>	Students this half term will study the following areas: <ul style="list-style-type: none"><li>• New and emerging technologies</li><li>• Automation in industry</li><li>• Work of others- designers and companies</li><li>• Design, develop and prototype lighting- mini NEA prep</li></ul>
<b>Assessment:</b>	Students will complete a test at the end of the term, books marked throughout and teacher assessment of mini NEA outcome. Practical outcomes are assessed in the back of the exercise book with photographic evidence.
<b>Stretch and challenge:</b>	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

<b>Topics / tasks:</b>	<b>Component 1: Written examination. Section B, Set Text: Reading and researching set text.</b> <b>Component 1: Written examination. Section C: Live Theatre</b>
<b>Content and skills:</b>	<ol style="list-style-type: none"><li>1. 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.</li><li>2. Study text of play, watch performance and learn how to describe, analyse and evaluate.</li></ol>
<b>Assessment:</b>	Teacher marked practice questions on the set text, and live theatre.
<b>Stretch and challenge:</b>	Research text and contextual influences in more depth. Watch more performances on internet.



# Engineering (GCSE)

<b>Topics / tasks:</b>	<b>Chapter 2 – Engineering manufacturing processes</b>
<b>Content and skills:</b>	<p>Students will study the following areas :</p> <ul style="list-style-type: none"><li>• Additive Manufacturing</li><li>• Material removal</li><li>• Shaping, forming and manipulation</li><li>• Casting and Moulding</li><li>• Joining and assembly</li><li>• Heat and chemical treatment</li><li>• Surface Finishing</li></ul>
<b>Assessment:</b>	<p>Student complete a portfolio of evidence on manufacturing processes. This is available on Microsoft Teams as are all teacher lesson PowerPoints.</p> <p>Upon completion of Chapter 2 they will take a test. This will be a combination of multiple choice and longer answer questions.</p>
<b>Stretch and challenge:</b>	<p>Students can revise ahead on the next chapter which is Chapter 3 Systems.</p>

# English

Topics/Tasks	AQA GCSE English Literature: Paper 1 'A Christmas Carol' by Charles Dickens	AQA GCSE English Language: Paper 1 Reading
<b>Content and skills:</b>	<p><b>Reading</b></p> <ul style="list-style-type: none"> <li>• Reading the novella <i>A Christmas Carol</i>.</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 style="list-style-type: none"> <li>• Analysing the conventions of different genres of fiction.</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>
<b>Assessment:</b>	Writing an exam response on a key theme.	Answering a full reading section of the exam.
<b>Stretch and challenge:</b>	<p>Writing an exam response on a key theme.</p> <ul style="list-style-type: none"> <li>• Reading the text more than once</li> <li>• Accessing Mr Bruff on YouTube and watching the series of videos on 'A Christmas Carol' whilst making useful revision notes. <a href="https://www.youtube.com/user/mrbruff/featured">https://www.youtube.com/user/mrbruff/featured</a></li> </ul> <p>Reading critical articles via The British Library <a href="https://www.bl.uk/works/a-christmas-carol">https://www.bl.uk/works/a-christmas-carol</a></p>	<p>Reading fiction and examining how writers structure chapters of writing.</p> <p>Accessing Mr Bruff on YouTube and watch the series of videos on 'English Language Paper 1: reading', whilst making useful revision notes. <a href="https://www.youtube.com/user/mrbruff/featured">www.youtube.com/user/mrbruff/featured</a></p>

# Food Preparation and Nutrition

Topics / tasks:	Component 1 – Principles of Food Preparation and Nutrition.	Component 2 – Food Preparation and Nutrition in Action.
<b>Content and skills:</b>	<ol style="list-style-type: none"> <li>1. <b>Commodities – Meat, fish, poultry and eggs</b> 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>2. <b>Principle of Nutrition</b> looking at the function, sources and value of protein in the diet, including the consequence of not consuming the right amount.</li> <li>3. <b>Diet and Good Health</b> 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>4. <b>Where Food Comes From</b> and how it is packaged, the impact of packaging on the environment, sustainability of food, food poverty and food security.</li> </ol>	<p>Learners 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.</p> <ol style="list-style-type: none"> <li>4. <b>Food Science</b> investigating into protein, focusing on coagulation and form formation.</li> <li>5. <b>Cooking and Food Preparation</b> whereby students can demonstrate how to make a range of meat, fish, poultry and egg based dishes.</li> </ol>
<b>Assessment:</b>	Students will complete a mini mock exam of knowledge covered so far, using past paper exam questions to help promote good exam technique practice.	
<b>Stretch and challenge:</b>	<p>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.</p> <p>Students have received login details for the online textbook which is accessed at <a href="https://illuminate.digital/eduqaasfood/">https://illuminate.digital/eduqaasfood/</a></p> <p>Students should watch related TV programmes which will be advised in class and on Teams.</p> <p>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.</p>	

# French

<b>Topics / tasks:</b>	<b>Students will study healthy lifestyles and healthy living.</b>
<b>Content and skills:</b>	Students will learn about how to maintain a healthy diet and lifestyle and what to avoid. They will discuss and make comparisons with their own habits. Students will focus on the near future tense, using two tenses together, the perfect tense with avoir and irregular present participles.
<b>Assessment:</b>	Weekly vocabulary and grammar assessments.
<b>Stretch and challenge:</b>	Researching the cuisines of French speaking countries and their eating habits.

# Geography

Topics / tasks:	Urban Issues & Challenges	Physical Landscapes in the UK
<b>Content and skills:</b>	Students will assess how urban change has created opportunities and challenge in London. Students will investigate urban challenges 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.
<b>Assessment:</b>	An end of unit test on the Urban Issues & Challenges topic.	GCSE practice questions/fact tests.
<b>Stretch and challenge:</b>	<p>Going to the AQA website and downloading past copies of paper 2 and the mark scheme to practice answering GCSE questions on this topic.</p> <p>Listen to 'Costing the Earth' podcast on BBC radio 4, episodes available at: <a href="http://www.bbc.co.uk/programmes/b006r4wn">www.bbc.co.uk/programmes/b006r4wn</a></p> <p>Keeping up to date with recent news stories about urban issues in Mumbai, India and London, UK.</p>	<p>Going to the AQA website and downloading past copies of paper 1 and the mark scheme to practice answering GCSE questions on this topic.</p> <p>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.</p>

# German

<b>Topics / tasks:</b>	<b>Family (continued) and Healthy Living and Lifestyle.</b>
<b>Content and skills:</b>	Students will complete the study of the topic of Family and start the topic of Healthy living and lifestyle, including a full range of vocabulary linked to these topics. They will deepen their understanding of the imperfect and the perfect tenses, and revise connectives and the formation of the negative. They will learn 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.
<b>Assessment:</b>	Completing various formative tests and pieces of homework.
<b>Stretch and challenge:</b>	Bringing all the above elements into their speaking questions and writing tasks.

# Health and Social Care

Topics / tasks:	Component 1 – Learning Aim A part 2	Component 2 – Learning Aim A
<b>Content and skills:</b>	<p><b>Learning Aim A part 2: Students will learn and revise the following areas:</b></p> <ul style="list-style-type: none"> <li>• Review of half term assessment</li> <li>• Completion of PIES</li> </ul> <p><b>Learning Aim Assessment part 1 - Half term assessment</b></p> <p>PART 2: Factors that affect a person's growth and development:</p> <ul style="list-style-type: none"> <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 – Income and wealth, material possessions</li> </ul>	<p><b>Learning Aim A part 2: Students will learn and revise the following areas:</b></p> <ul style="list-style-type: none"> <li>• Services for adults with specific needs</li> <li>• Services for older adults</li> <li>• Informal social care</li> <li>• Physical barriers</li> <li>• Sensory barriers</li> <li>• Social, cultural and psychological barriers</li> </ul>
<b>Assessment:</b>	<p><b>Learning Aim Assessment part 2 - Half term assessment</b></p> <p><b>Embedded in lessons will be:</b></p> <ul style="list-style-type: none"> <li>• Assessment criteria</li> <li>• How to understand coursework</li> <li>• How to present work</li> <li>• Command words and keywords review:               <ul style="list-style-type: none"> <li>✓ Describe – not just identify but to describe a situation</li> <li>✓ Explain – how to expand sentences</li> <li>✓ Compare – how to look at both arguments and support with evidence</li> <li>✓ Assess – how to justify, add opinion and support argument with evidence</li> </ul> </li> </ul> <p>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.</p>	
<b>Stretch and challenge:</b>	<p>Students should familiarise themselves with the specification for the course and expectations.</p> <p>Students should watch related TV programmes which will be advised in class and on Teams.</p> <p>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.</p>	

# History

Topics / tasks:	The Crises of Government during Elizabeth's reign	Domestic life in Elizabethan England
<b>Content and skills:</b>	Students will investigate the importance of religious opposition (both Catholic and Puritan), the causes and consequences of conflict with Spain, and the events of the Spanish Armada.	Students will investigate the social and cultural history of the period, including fashion, architecture, and the theatre. They will also study the problems of poverty, the rise of the gentry and the Essex Rebellion.
<b>Assessment:</b>	Completing exam-style questions that test the ability to construct causal explanatory narratives and test interpretations of the past using evidence. Students completed a formal mock examination on Conflict and Tension and Democracy and Dictatorship during the previous half term.	There will be an end of unit test on the Elizabethan material either at the very end of this half term or at the beginning of the next.
<b>Stretch and challenge:</b>	<b>Reading:</b> Ian Mortimer, <i>The Time Traveller's Guide to Elizabethan England</i> Peter Ackroyd, <i>Tudors: The History of England Vol II</i> Antonia Fraser, <i>Mary, Queen of Scots</i>	<b>Other Media:</b> 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



# Latin

<b>Topics / tasks:</b>	<b>Uses of the Ablative. Passive verbs</b>	<b>Inscriptions from Roman Britain. The city of Rome</b>
<b>Content and skills:</b>	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
<b>Assessment:</b>	Assessment test including translation and grammar questions.	
<b>Stretch and challenge:</b>	Background reading about Roman Britain & the city of Rome. A selection of suitable books are available for students to borrow.	

# Maths

<b>Topics / tasks:</b>	<u>All students</u> <b>Arithmetic with decimals and fractions</b> <b>Percentages</b> <b>Estimation and rounding</b> <b>Ratio</b>	<u>Higher Tier only</u> <b>Recurring decimals to fractions</b> <b>Indices</b> <b>Standard form</b> <b>Surds</b> <b>Proportion</b>	<u>Higher Level 2 Further Maths</u> <b>The factor theorem including factors of <math>ax + b</math></b> <b>Binomial expansion and Pascal's triangle</b>
<b>Content and skills:</b>	<ul style="list-style-type: none"> <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>		
<b>Assessment:</b>	Half term assessment covering content covered this half term as well as previously covered content.		
<b>Stretch and challenge:</b>	<ul style="list-style-type: none"> <li>• Complete extra work using <a href="https://www.sparxmaths.com">Sparx Maths</a> and <a href="http://www.corbettmaths.com">www.corbettmaths.com</a></li> <li>• Completing enrichment tasks on <a href="http://www.nrich.maths.org">www.nrich.maths.org</a></li> </ul>		

# Music

	10A	10K
<b>Topics / tasks:</b>	<b>Ground Bass Composition</b> <b>AOS1: Beethoven</b> <b>AOS3: Star Wars</b>	<b>Ground Bass Composition</b> <b>Ternary Form Composition</b> <b>AOS1: Beethoven</b>
<b>Content and skills:</b>	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
<b>Assessment:</b>	Practical composition assessment Exam-style listening questions	Practical composition assessment Exam-style listening questions
<b>Stretch and challenge:</b>	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

<b>Topics / tasks:</b>	<b>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.</b>
<b>Content and skills:</b>	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.
<b>Assessment:</b>	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.
<b>Stretch and challenge:</b>	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)

<b>Topics / tasks:</b>	<b>Applied anatomy and physiology (Chapter 1) and in practical lessons basketball and table tennis</b>
<b>Content and skills:</b>	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
<b>Assessment:</b>	Regular exam style questions and a Kerboodle on-line end of chapter assessment.
<b>Stretch and challenge:</b>	Become involved in school teams and also train and compete regularly outside of school.

# Physical Education (Vocational)

<b>Topics / tasks:</b>	<b>Fitness for Sport exam unit (Chapter 1)</b>
<b>Content and skills:</b>	Students will learn about muscular and skeletal systems and the effects of exercise on the body. Also work on assignment unit – Improving Sporting performance including components of fitness and fitness testing.
<b>Assessment:</b>	Students will be assessed using continuous assessment.
<b>Stretch and challenge:</b>	Use course companion textbook to increase knowledge.

# Religious Education

<b>Topics / tasks:</b>	<b>AQA GCSE Theme B: Religion and Life.</b>
<b>Content and skills:</b>	<p>Students study religious teachings, and religious, philosophical and ethical arguments, relating to:</p> <ul style="list-style-type: none"> <li>• The origins of the universe, including: religious teachings about the origins of the universe, and different interpretations of these; the relationship between scientific views, such as the Big Bang theory, and religious views.</li> <li>• The value of the world and the duty of human beings to protect it, including religious teaching about stewardship, dominion, responsibility, awe and wonder.</li> <li>• The use and abuse of the environment, including the use of natural resources, pollution.</li> <li>• The use and abuse of animals, including: animal experimentation and the use of animals for food.</li> <li>• The origins of life, including:             <ul style="list-style-type: none"> <li>○ religious teachings about the origins of human life, and different interpretations of these</li> <li>○ the relationship between scientific views, such as evolution, and religious views.</li> </ul> </li> <li>• The concepts of sanctity of life and the quality of life.</li> <li>• Abortion, including situations when the mother's life is at risk. Ethical arguments related to abortion, including those based on the sanctity of life and quality of life.</li> <li>• Euthanasia.</li> <li>• Beliefs about death and an afterlife, and their impact on beliefs about the value of human life.</li> </ul>
<b>Assessment:</b>	<p>All students will sit a 30-minute in-class assessment under exam conditions which will examine the 5 skills in the AQA examination specification.</p>
<b>Stretch and challenge:</b>	<p>Visit online reference sites such as: Wikipedia, Britannica and the BBC Bite Size website. AQA website has a range of revision materials and stretch and challenge opportunities. The RE Teams folder also contains useful revision materials.</p>

# Science: Biology

<b>Topics / tasks:</b>	<b>Topic 6: Plants structures and their functions</b>
<b>Content and skills:</b>	<ul style="list-style-type: none"><li>• Limiting factors in photosynthesis</li><li>• Factors affecting transpiration</li><li>• Translocation</li><li>• Adaptations of plants in extreme environments (Separate biology only)</li><li>• Plant hormones (Separate biology 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>
<b>Assessment:</b>	End of topic test on Topics 1 and 6
<b>Stretch and challenge:</b>	Find out what xerophytes and hydrophytes are.



# Science: Chemistry

<b>Topics / tasks:</b>	<b>Ionic, Covalent and Metallic Bonding</b>
<b>Content and skills:</b>	<ul style="list-style-type: none"><li>• Predict the type of bonding present in a compound, based on its constituent elements.</li><li>• Draw "dot-cross" diagrams to represent the bonding present in a compound</li><li>• Predict the properties of a compound based on its bonding</li><li>• Explore uses and properties of different types of materials</li></ul>
<b>Assessment:</b>	Short answer questions and more detailed end of topic test at end of half term.
<b>Stretch and challenge:</b>	Find out about SMAs and describe how thermosetting and thermosoftening plastics vary in their structure and bonding.

# Science: Physics

Topics / tasks:	<b>Separate sciences:</b> <b>Topic 2: Forces and motion</b> <b>Topic 4: Waves</b>	<b>Combined science:</b> <b>Topic 2: Forces and motion</b> <b>Topic 4: Waves</b> <b>Topic 5: Light and the electromagnetic spectrum</b>
<b>Content and skills:</b>	<b>Topic 2: Forces and motion</b> <ul style="list-style-type: none"> <li>• Momentum</li> <li>• Stopping distances</li> <li>• Braking distance and energy</li> <li>• Crash hazards</li> </ul> <b>Topic 4 : Waves</b> <ul style="list-style-type: none"> <li>• Describing waves</li> <li>• Wave speeds</li> <li>• Refraction</li> <li>• Wave crossing boundaries</li> <li>• Ears and hearing</li> <li>• Ultrasound</li> <li>• Infrasound</li> </ul>	<b>Topic 2: Forces and motion</b> <ul style="list-style-type: none"> <li>• Momentum (higher only)</li> <li>• Stopping distances</li> <li>• Crash hazards</li> </ul> <b>Topic 4 : Waves</b> <ul style="list-style-type: none"> <li>• Describing waves</li> <li>• Wave speeds</li> <li>• Refraction</li> </ul> <b>Topic 5: Light and the electromagnetic spectrum</b> <ul style="list-style-type: none"> <li>• Electromagnetic waves</li> <li>• Uses of the electromagnetic spectrum</li> <li>• Dangers of the electromagnetic spectrum</li> </ul>
<b>Assessment:</b>	Homework, in-class assessment, end of topic tests.	
<b>Stretch and challenge:</b>	Completing relevant exercises on Isaac Physics website.	

# Spanish

<b>Topics / tasks:</b>	<b>Unit 2- Healthy living and lifestyle</b> <b>2.1F- Staying in shape</b> <b>2.1H- Taking care of your health</b> <b>2.2F- Diet</b> <b>2.3H- Life in Spain</b>
<b>Content and skills:</b>	Students will develop the 4 core skills of speaking, listening, reading and Writing as well as translation skills. They will study grammar including: radical-changing verbs; expressions using <i>tener</i> , the immediate future tense, <i>al</i> and <i>de</i> , subject pronouns and adjectives of nationality; they will be able to respond to conversation questions surrounding the topics above with a degree of spontaneity and will work on developing fluency and pronunciation skills.
<b>Assessment:</b>	Students will be assessed by regular vocabulary and grammar tests.
<b>Stretch and challenge:</b>	Using the interactive online exercises accessible to all students via Kerboodle. Continual revision of grammar points Developing an interest in current affairs in Spanish speaking countries Listening to Spanish radio and TV online

# Vocational Construction

<b>Topics / tasks:</b>	<b>Unit 1 – Safety and Security</b> <b>Students are preparing for final exams to be taken in June 2021.</b>
<b>Content and skills:</b>	Unit 1: Students will revise the following areas: <ul style="list-style-type: none"><li>• Safety signs</li><li>• Fire extinguishers</li><li>• Health and Safety Executive</li><li>• Construction Legislation</li><li>• Risks, Hazards &amp; Control Measures</li><li>• Security in Construction</li></ul>
<b>Assessment:</b>	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.
<b>Stretch and challenge:</b>	Complete additional revision for mock and final exams which can be accessed via Microsoft Teams.

# Vocational Engineering

<b>Topics / tasks:</b>	<b>Unit 3 – Solving Engineering Problems – this is the theory part of the course for the exam</b>
<b>Content and skills:</b>	Students will be asked to complete the following tasks <ul style="list-style-type: none"><li>• <b>Learning Objective 3 – know forming processes of engineered materials</b> – describe engineering processes and describe applications of engineering processes.</li><li>• Practice mock papers/exam technique.</li></ul>
<b>Assessment:</b>	This is an externally assessed Unit using the WJEC assessment criteria framework graded Level 1 Pass- Level 2 Distinction*
<b>Stretch and challenge:</b>	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.