



DURHAM JOHNSTON
COMPREHENSIVE SCHOOL
— DARE TO BE WISE —

Year 10

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 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 10 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	<u>Geography</u>	AQA	<u>Physical Education, GCSE</u>	AQA
<u>Business Studies</u>	OCR	<u>German</u>	AQA	<u>Religious Education</u>	Eduqas
<u>Computer Science</u>	OCR	<u>Health & Social Care</u>	Edexcel	<u>Science: Biology</u>	Edexcel
<u>Creative iMedia</u>	OCR	<u>History</u>	AQA	<u>Science: Chemistry</u>	Edexcel
<u>Design Technology</u>	AQA	<u>Latin</u>	Eduqas	<u>Science: Physics</u>	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
<u>Engineering</u>	AQA	<u>Music</u>	Edexcel	<u>Vocational Construction</u>	WJEC
<u>Food Preparation and Nutrition</u>	Eduqas	<u>Photography</u>	AQA	<u>Vocational Engineering</u>	WJEC
<u>French</u>	AQA	<u>Physical Education, BTEC</u>	Edexcel		

Art

Topics / tasks:	Component one: Personal projects	
Content and skills:	<p>Students were provided an introduction to GCSE Art & Design in the summer term of Year 9 and were encouraged to start developing work and ideas for a personal project based on the titles on the right. How to start a project was discussed in lessons and students encouraged to make work towards this.</p> <p>At the start of this term, we will revisit and explain the process of starting a personal project and students will receive bespoke/individual suggested areas to investigate. The projects will then develop over time. By the end of this half term, the students' projects will have a clear identity.</p>	<p>Students to select one title or combination of titles to begin a project.</p> <ul style="list-style-type: none"> • Organic Forms • Time • Identity • Decoration • Beneath The Surface Built Environment • Reflections • Political Art • Concept Art
Assessment:	<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>		
Stretch and challenge:	<p>Extend their work through a greater exploration of materials and processes being used. If a student is not making work at home, they making slow progress. The more they make, the more depth and refinement of ideas/outcomes will develop.</p>	<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>

Business Studies

<p>Topics / tasks:</p>	<p>Business enterprise & entrepreneurship Business planning Revenue, cost, profit & loss Business ownership Business aims & objectives</p>
<p>Content and skills:</p>	<p>GCSE Business - the course and the content Collaborative working, ideas, business and presenting. How to analyse, select, interpret, and recognise business acumen in themselves and others!</p>
<p>Assessment:</p>	<p>Range of exam questions, classwork, homework, topic tests (at end of unit). Use of key terms & application. Booklet Role of Business Key Terms - SWOT RAG Exam Q 1.1 The role of business enterprise & entrepreneurship /13 1.2 Business planning / 9 (essay style question) 5.3 Activity 1, 2 and 3 (fixed costs, gross and net profit) /13 1.3 Business ownership team activity (assessed on contribution) 1.3 Business ownership exam questions /21 1.4 Business aims & objectives presentation (assessed on contribution) Homework tasks/sheets for certain topic issued throughout the term.</p>
<p>Stretch and challenge:</p>	<p>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!</p>

Computer Science

Topics / tasks:	Intro to course and OneNote Computational Thinking PC Building (practical + theory) Input / Output Devices Python Introduction
Content and skills:	Students will learn the concept of Abstraction and how problems can be decomposed Students will look at various Input and Output Devices and state their purpose and use Students will apply basic Python programming skills to create simple programs
Assessment:	PC Building Knowledge assessment End of half-term assessment (flowcharts and algorithmic thinking) Storage Homework Test
Stretch and challenge:	Research the need for "trace tables" when checking algorithm completeness Look into the complex operation of common devices such as a laser printer and barcode scanner Research the term "Recursion" and how it can be used correctly to save programmer's time

Creative iMedia

Topics / tasks:	Animation and the entertainment industry Working to a brief Key terms and definitions
Content and skills:	Developing a range of animations to widen their understanding and skills - students will explore and try flick-book, key-frame and stop-motion animation. They will also research CGI and green-screening. Students will be able to use relevant key terms to describe the process of animation and link relevant examples to tasks.
Assessment:	Class work - animations will be assessed. Exam questions Use of key term Q&A
Stretch and challenge:	Develop their animation skills - create a stop motion movie (Wallace and Gromit style), try video recording and editing. Produce a high quality flick-book (similar to those shown) Watch documentaries and videos on how to (Disney+ have some excellent ones)

Design Technology

Topics / tasks:	Introduction to Materials
Content and skills:	<p>This half term, students will investigate different types, properties and application of the following materials:</p> <ul style="list-style-type: none">• Wood• Metals• Polymers• Fabrics <p>Students will also produce one-off prototypes in the workshop. This will help embed practical skills, knowledge of tools, materials and equipment.</p>
Assessment:	<p>There will be a variety of assessments including assessing quality of completed practical work and ability to complete investigation in the form of a product analysis task.</p> <p>Students' work will also be monitored safely throughout each lesson, thus ensuring that students are working to the best of their ability.</p>
Stretch and challenge:	<p>Students can recap / revise theory work covered in lessons in their own time for consolidation.</p> <p>Students can also complete additional practice questions on www.technologystudent.com. This website is an excellent learning resource.</p>

Drama

Topics / tasks:	Component 1 (section A): Knowledge and Understanding of theatre and roles.	Component 1 (section B): Begin study of set play
Content and skills:	Study and learn drama and theatre terminology and how to use it appropriately focusing on: Stage positioning, stage configurations, and the roles and responsibilities of theatre makers in contemporary professional practice. They will then learn how to apply this knowledge to the multiple choice section of the examination.	Students will <ul style="list-style-type: none"> • develop knowledge and understanding of the characteristics and context of the whole play • Explore ideas for how the play may be interpreted practically.
Assessment:	Multiple quizzes on Teams and practice examinations.	Writing responses to Question 1 of Section B of the examination, set on Teams assignments.
Stretch and challenge:	Revise further by using the BBC Bitesize revision.	Research context and performances of the play on YouTube.

English

Topics / tasks:	AQA GCSE English Literature: Paper 1 <i>A Christmas Carol</i> by Charles Dickens	AQA GCSE English Language: Paper 1 Writing to Describe
Content and skills:	<ul style="list-style-type: none"> • Reading the novella <i>A Christmas Carol</i>. • Analysing the writer's use of language in key extracts of the text. • Considering the social and historical contexts of the novel and how these influence the writer • Understanding how to answer an exam question • Learning key quotations from across the text. 	<ul style="list-style-type: none"> • Writing to describe • Exploring the effects of colour imagery • Expanding descriptive vocabulary • Examining how elements of the natural world can be used symbolically • Examining how the seasons are used in fiction writing
Assessment:	Writing an exam response on a key theme.	Writing an exam response to describe an image.
Stretch and challenge:	<ul style="list-style-type: none"> • Reading the text more than once • Accessing Mr Bruff on YouTube and watching the series of videos on <i>A Christmas Carol</i> whilst making useful revision notes. www.youtube.com/user/mrbruff/featured • Reading critical articles via The British Library www.bl.uk/works/a-christmas-carol 	<ul style="list-style-type: none"> • Reading fiction and examining how writers describe places • Practising descriptive writing. Describing images of places or visit places and create descriptions. • Accessing Mr Bruff on YouTube and watching the series of videos on 'English Language Paper 1: writing' whilst making useful revision notes. www.youtube.com/user/mrbruff/featured

Engineering

Topics / tasks:	Examined Unit 1: This unit will introduce students to Engineering Materials and Engineering Processes.
Content and skills:	<p>Students will study the following areas of Engineering:</p> <ul style="list-style-type: none">• Materials properties• Metals & Alloys• Ferrous & Non Ferrous• Changing the properties of metal products• Metal Forms• Metals Key Terms• Polymers: Thermosetting• Polymers Thermoplastics• Composites• Timber & Ceramics• Material Cost & Supply• Material selection• Energy Rudiments• Energy Sources• Engineering lifespans <p>They will learn about all of the above listed areas and how to answer exam questions based on these areas.</p>
Assessment:	This unit will be graded 1-9 by the teacher based on a test after half term. The test will be on all of section 1.
Stretch and challenge:	Students can access their work and help guides via the schools remote desktop software on the school website www.durhamjohnston.org.uk/e-learning/remote-desktop to complete additional work outside the lesson.

Food

Topics / tasks:	Component 1 – Principles of Food Preparation and Nutrition (theory work) Component 2 – Food Preparation and Nutrition in Action (practical work)
Content and skills:	<p>By studying food preparation and nutrition our students will consider the following:</p> <ul style="list-style-type: none">• Cook safely and effectively a variety of dishes• Develop knowledge and understanding of the functional properties and chemical characteristics of food as well as a sound knowledge of its nutritional content• Understand the relationship between diet, nutrition and health, including the physiological and psychological effects of poor diet and health• Understand the economic, environmental, ethical and socio-cultural influences on food availability, production processes, diet and health choices
Assessment:	<p>Each practical will be assessed for formative feedback to allow students to improve their cooking practice. Students sit a half termly assessment to review theory knowledge covered</p>
Stretch and challenge:	<p>Students are encouraged to adapt recipes, they will also gain knowledge of how to increase the skill level of dishes in preparation for year 11. Students are advised to cook at home to practice their expertise (if applicable) Revision materials will be provided regularly to students</p>

French

Topics / tasks:	Revision of three topics from year 9: Family, Technology and Free-time
Content and skills:	Students will revise topic relevant vocabulary as well as grammar including revision of present, past and future tenses. They will also learn how to pick out key information when listening; how to answer unprepared questions in speaking and how to recognise cognates in reading.
Assessment:	Weekly vocabulary tests and a listening assessment on the free time topic
Stretch and challenge:	Research leisure habits in French speaking countries.

Geography

Topics / tasks:	Urban Issues and Challenges
Content and skills:	<p>Students will learn how and why the global urban population is changing and analyse variations between Low Income Countries, Newly Emerging Economies and High Income Countries. They will examine the emergence of megacities and the different factors affecting rates of urbanisation. Students will examine the case study of Mumbai and investigate its location, rapid growth, regional, national and international importance. They will then assess how urban growth has created social and economic opportunities as well as challenges before evaluating how urban planning is improving the quality of life for the urban poor in Mumbai.</p> <p>Students will study the distribution of the population and major cities in the UK. Students will examine the case study of London and investigate its location, importance to the UK and the wider world before assessing the impacts of national and international migration on the growth and character of the city. They will then assess how urban change has created opportunities and challenge in London.</p>
Assessment:	<p>A range of GCSE practice questions throughout the half term. Students must interpret and analyse figures and in essays explain and develop their arguments, support points and counter arguments with evidence before justifying their final decision.</p> <p>A mid-unit test on content up to and including the Mumbai case study, including a range of GCSE questions from one to nine marks.</p>
Stretch and challenge:	<p>Download past copies of the GCSE Geography paper two exam and mark scheme from the AQA website to practise answering exam questions on this topic.</p> <p>Watch Andrew Marr's three part documentary series on megacities for the BBC.</p> <p>Keep up to date with recent news stories about urban issues in Mumbai, India and London, UK.</p>

German

Topics / tasks:	Identity and culture: Me, my family and friends
Content and skills:	Students will learn a full range of vocabulary linked to the topic. They will revise the present and future tenses and pronouns. In addition, they will learn how to distinguish word types and how to spot patterns in German and English. Students will study translation skills; how to recognise cognates in reading; how to answer unprepared questions and how to use a variety of vocabulary and tenses in writing.
Assessment:	Students will be assessed by regular vocabulary and grammar tests. There will also be a formal listening and reading (including translation) assessment on the topic of Family.
Stretch and challenge:	Researching a famous person and writing about their family in German.

Health and Social Care (BTEC)

Topics / tasks:	Component 1 - Human growth and development across life stages.	Component 2 – Health and Social Care Services and Values.
Content and skills:	<p>Students will explore different aspects of growth and development across the life stages using the physical, intellectual, emotional and social (PIES) classification. They will do this through activities, independent research, TV programmes, and case studies.</p> <p>Physical growth and development Intellectual/cognitive development Emotional development Social development</p>	<p>Students will explore the different levels of care services and the barriers that people can face when accessing them in a range of settings</p> <p>Primary care providers. Secondary care Tertiary care providers Allied health professionals</p>
	<p>Students will learn key writing skills – in particular how to write reports and factual pieces: Students will learn to research and investigate and carry out independent learning to enrich their assignments and class work.</p>	
Assessment:	<p>Testing of their writing ability to describe, explain and assess in written tasks based on case studies and questions. Half term test of knowledge.</p>	
Stretch and challenge:	<p>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.</p>	

History

Topics / tasks:	The Causes of the First World War	Reasons why a stalemate developed on the Western Front
Content and skills:	Students will investigate: different international crises (in Morocco and the Balkans); rivalries between the European Empires and Alliances and why they developed; how tensions between the European powers turned into war.	Students will investigate how and why the French and British prevented the German conquest of France in 1914, and the role of military technology and tactics in creating a stalemate on the Western Front.
	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.	
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, <i>Great Britain's Great War</i> Gary Sheffield, <i>A Short History of the First World War</i> Max Hastings, <i>Catastrophe: Europe Goes to War 1914</i> Max Arthur, <i>Forgotten Voices of the Great War</i>	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) <i>They Shall Not Grow Old</i> - a film that colourises and adds sound to original footage from the First World War. Highly recommended.

Latin

Topics / tasks:	Subjunctives & their use in different types of clauses.	Roman Roads in Britain & the legionary fortress at Chester
Content and skills:	How to recognise a subjunctive verb and identify the type of clause in order to translate it correctly; revision of other verb forms, including participles; analysing sentence structure to improve accuracy of translation.	How to use different types of archaeological evidence to build up an understanding of the Roman army in Britain.
Assessment:	Exam-style questions on Roman Britain and a translation assessment, in addition to regular vocabulary & grammar test	
Stretch and challenge:	Reading about Roman Britain, the Roman army & the empire. There is a selection of suitable books available for students to borrow.	

Mandarin

Topics / tasks:	The topic of work
Content and skills:	Students will learn a full range of vocabulary linked to the topic. They will also study grammar including: the future with “Yao”; asking and answering questions; and expressing opinions about jobs. Students will be able to understand key information in listening and reading exercises and to use key characters for the topic.
Assessment:	Students will be assessed by regular vocabulary and grammar tests. There will also be a formal listening assessment on the ideal job topic.
Stretch and challenge:	Students can investigate the ideal job most Chinese parents want their child to have and why and whether Chinese A level students do part time work.

Maths

Topics / tasks:	Review of number topics. Solving equations up to and including quadratics. Algebraic manipulation including simplifying expressions, expansion of brackets, indices and algebraic fractions.
Content and skills:	Review and extension of algebra covered in KS3. Application of algebra in different contexts such as geometry, ratio and proportion and probability. Applying algebra to written problems or real life contexts. 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

	10C	10K
Topics / tasks:	<ul style="list-style-type: none"> • Listening & Analysis – AOS1 set work - Bach and AOS3 set work - Defying Gravity • Composition – Introduction to Composition 	<ul style="list-style-type: none"> • Listening & Analysis – AOS1 set work - Bach • Composition – Introduction to Composition
Content and skills:	<ul style="list-style-type: none"> • Developing listening skills in analysis of set works • Developing skills of rhythmic, melodic and harmonic composition 	<ul style="list-style-type: none"> • Developing listening skills in analysis of set works • Developing skills of rhythmic, melodic and harmonic composition
Assessment:	<ul style="list-style-type: none"> • Practical composition assessment • Exam-style listening questions 	<ul style="list-style-type: none"> • 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.	
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	
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

Topics / tasks:	Physical Training (Chapter 3) and practical fitness testing and invasion games
Content and skills:	They will look at the relationship between health and fitness, the components of fitness, fitness tests, principle of training and how to structure a training session. In practical lessons they will complete the protocols for fitness tests and cover the GCSE skills required in football and netball.
Assessment:	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:	Physical Training (Unit 1 and Unit 3) and practical fitness testing.
Content and skills:	They will look at the relationship between health and fitness, the components of fitness and fitness tests. They will also be introduced to the muscular-skeletal and cardio-respiratory systems
Assessment:	Checkpoint 1 on Everlearner and Unit 3 task B.
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 1: Key Concepts. Recap of Cells and Microscopes, Enzymes, Transport across membranes (Triple - Food tests and calorimetry)	
Content and skills:	Knowledge <ul style="list-style-type: none">• Cells and microscopes• Enzyme theory• Diffusion, osmosis and active transport• Food tests and calorimetry (triple)	Skills <ul style="list-style-type: none">• Collecting enzyme and osmosis data• Describing and Explaining data• Plotting line graphs from data• Starting to evaluate methods and data
Assessment:	Attainment 1 test on Topic 1: Key concepts	
Stretch and challenge:	Finding out how enzymes are used in industrial processes for making washing powders, baby food, slimming foods.	

Science: Chemistry

Topics / tasks:	Topic 1: Key Concepts Atomic structure, Periodic Table and chemical bonding	
Content and skills:	Knowledge <ul style="list-style-type: none">• Atomic Structure including electronic configurations• Periodic Table – history of the atom and links within the periodic table• Bonding and structure to include ionic, covalent and metallic bonding and the properties of substances	Skills <ul style="list-style-type: none">• Using models to explain chemical phenomena• Determining properties of unknown atoms using knowledge of the periodic table• Calculating relative atomic masses of atoms (H level only)• Applying knowledge in unfamiliar contexts to determine chemical formulae
Assessment:	Attainment 1 test on Topic 1: Key concepts in chemistry	
Stretch and challenge:	Researching the history of the atom to produce a full timeline of the challenges and developments encountered	

Science: Physics

Topics / tasks:	Topic 1 Review: Motion Topic 2: Forces and Motion
Content and skills:	Topic 1 (Review): Motion <ul style="list-style-type: none">• Graphs of motion – interpreting distance-time graphs and velocity-time graphs• Acceleration• Scalars and vectors Topic 2: Forces and Motion <ul style="list-style-type: none">• Resultant forces• Newton's 1st law• Mass and weight• Newton's 2nd law• Newton's 3rd law• Momentum (higher only)• Stopping distances• Braking distance and energy (triple only)• Crash hazards
Assessment:	Attainment 1 test on physics
Stretch and challenge:	Completing relevant exercises on Isaac Physics website.

Spanish

Topics / tasks:	Revision of grammar covered in Year 9 and the first three modules covered in the textbook (family, technology and freetime). Start the Home, town, neighbourhood and region topic.
Content and skills:	Students will be developing the 4 core skills of speaking, listening, reading and Writing as well as translation skills. They will study grammar including: <i>tener</i> & <i>ser</i> in present tense; position of adjectives; possessive adjectives; immediate future tense; past tense; present continuous & <i>estar</i> as well as making comparisons 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.
Assessment:	Students will be assessed by regular vocabulary and grammar tests. There will also be a formal listening assessment.
Stretch and challenge:	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

Textiles

Topics / tasks:	Introduction To Textiles
Content and skills:	<p>Students will carry out a range of textile techniques, building up sketch book and swatch book work which will act as a reference to them in year 11.</p> <p>Students carry out a range of projects that will teach them modelling and construction techniques as well as build their confidence in the use of equipment.</p> <p>To underpin practical learning students build up their knowledge of materials and processes as well as a greater understanding of the world of design from manufacture to social- economic issues.</p>
Assessment:	<p>There will be a variety of assessments including assessing quality of completed practical work.</p> <p>Students' work will also be monitored safely throughout each lesson, thus ensuring that students are working to the best of their ability.</p>
Stretch and challenge:	<p>Students can recap / revise theory work covered in lessons in their own time for consolidation. Students can also complete additional practice questions on www.technologystudent.com. This website is an excellent learning resource.</p>

Vocational Construction

Topics / tasks:	Unit 1 – Construction Site and Security – Students will learn about a range of Health and Safety information that is essential to Construction Building sites.
Content and skills:	<p>Students will be asked to explain the following Health and Safety Legislations and concepts:</p> <ul style="list-style-type: none"> • Risk Assessments • Safety Signs • Health and Safety at Work Act 1974 • Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR) • Control of Substances Hazardous to Health Regulations 2002 (COSHH) • Provision and Use of Work Equipment Regulations 1998 (PUWER) • Manual Handling Operations Regulations 1992 • Personal Protective Equipment at Work Regulations 1992 (PPER) • Working at Heights Regulations 2005
Assessment:	<p>Upon completion of this unit their knowledge will be assessed by an external exam at the end of Year 10. This will form 25% of their final grade for the course. Student will have opportunities to complete practice tests through the year prior to this exam.</p>
Stretch and challenge:	<ul style="list-style-type: none"> • 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. • 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 • Students should watch related TV programmes such as 'Grand Designs' to understand the Health and Safety risks the effect a Construction site. • Research CSCS card and complete online tutorials.

Vocational Engineering

Topics / tasks:	Unit 3 – Solving Engineering Problems – this is the theory part of the course for the exam (25%). The purpose of this unit is for learners to use their knowledge and understanding of engineering processes and material properties to solve problems.
Content and skills:	<p>Students will be asked to complete the following tasks:</p> <p>Learning Objective 1 – Understanding effects of engineering achievements – describe engineering developments, explain effects of engineering achievements and explain how environmental achievements affect engineering applications.</p> <p>Learning Objective 2 – Understand properties of engineering achievements – describe properties required of materials for engineered products, explain how materials are tested for properties and select materials for a purpose.</p> <p>Learning Objective 3 – know forming processes of engineered materials – describe engineering processes and describe applications of engineering processes.</p>
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:	<p>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.</p> <p>Students could purchase the course textbook WJEC Vocational Award – Engineering Level 1/2, Matthew Wrigley, Illuminate Publishing, ISBN 978-1-912820-15-3.</p> <p>Students should watch related TV programmes which will be advised in class and on Teams.</p> <p>Students should watch the Engineering video clips on Manufacturing Processes and Materials.</p>