DURHAM JOHNSTON
COMPREHENSIVE SCHOOL
DARE TO BE WISE

Year 10

Curriculum Overview

Half Term 3

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	Edexcel	**Geography**	AQA	**Physical Education, Vocational**	WJEC
Business	OCR	**German**	AQA	**Religious Education**	AQA
Computer Science	OCR	**Health & Social Care**	Eduqas	**Science: Biology**	Edexcel
Design Technology	AQA	**History**	AQA	**Science: Chemistry**	Edexcel
Drama	AQA	**Latin**	Eduqas	**Science: Physics**	Edexcel
English	AQA	**Maths**	AQA	**Spanish**	AQA
Engineering	AQA	**Music**	Edexcel	**Vocational Construction**	Eduqas
Food Preparation and Nutrition	Eduqas	**Photography**	Edexcel	**Vocational Engineering**	Eduqas
French	AQA	**Physical Education, GCSE**	AQA		

Art

Topics / tasks:	**Component One- personal projects**
Content and skills:	Students will continue to develop their own personal projects, investigating the work of other artists, experimenting with materials and processes, exploring a wide range of references as part of developing their ideas. Working in sketchbooks and creating live outcomes will demonstrate the student's level of skill and knowledge. The more practice and effort made by the student, the greater the progress. By viewing the development of new sketchbooks pages, it is possible to monitor levels of progress at home.
Assessment:	Pupils work will receive developmental comments to act upon, either in improving an existing piece of work, or areas to develop in the next outcome. This term, pupils will begin to spend more time assessing their own work and work by their peers. Most of the assessment is verbal feedback in lessons, with written comments provided for main outcomes on MS teams.
Stretch and challenge:	Students are encouraged to work very independently and take creative risks. By looking at a wide range of artwork, students can broaden their knowledge, but also their own ideas. Looking at major art museum websites and searching for artists related to their theme/title, will enable students to expand and refine their ideas.

Business

Topics / tasks:	**Students will complete the following topics this term:** **Topic 2 Marketing (role of, research, segmentation and the marketing mix)** **3.1 The role of human resources - The purpose of human resources within business** **3.2 Organisational structures and different ways of working**
Content and skills:	**Be able to discuss:** • The role of the marketing function (department) • How business can conduct their market research using both primary and secondary methods • How and why we segment a market (for marketing purposes) • What the 4 P's are and why they are important • The use (and rise) of social media advertising (amongst certain brands) • The purpose of human resources within business (and its function) • Organisational structures and different ways of working (and the impact on the business, employee and stakeholders) **Data:** • Use and analyse graphical data and statistics • Analyse information from a given scenario. Use key information when compiling an answer (application) **Interpersonal skills:** • Collaborative working, ideas, business and presenting.
Assessment:	Range of exam questions, classwork, homework; Q&A in lessons. Marketing test (50 marks) Topic tests (at end of each unit). Essay style question (at the end of the unit). Use of key terms & application assessed.
Stretch and challenge:	• The Secret Behind Coca-Cola Marketing Strategy: www.youtube.com/watch?v=XhMVWzVXNNk • Marketing trends: www.youtube.com/watch?v=huU_0WYO5Z8 • 4 P's research: neilpatel.com/blog/4-ps-of-marketing/ • BBC Bitesize - Business GCSE: www.bbc.co.uk/bitesize/examspecs/zv8gvk7 • SENECA: www.senecalearning.com/ • Research - BBC Business: www.bbc.co.uk/news/business - Identify potential marketing opportunities / drawbacks based on today's news (opportunity / threat)

Computer Science

Topics / tasks:	**Python Programming Fundamentals (Challenges)** **Operating Systems and Utility Software (including System Software)** **System Security (Identification and Prevention techniques)** **Searching and Sorting Algorithms (Binary and Linear Search)**
Content and skills:	Students will use what they have learnt in Python to tackle a series of Programming Challenges Students will consider the purpose of the Operating System and what key items of software are needed to maintain a computer Students will identify the risks associated when using computers and the software used to tackle these risks Students will investigate the steps of two algorithms used to search the contents of a list
Assessment:	Assessment on System Security Security and Sorting Algorithms /27 Programming Challenges (evidence is assessed, 5 tasks in total) Test on Memory, Binary and the Operating System /40
Stretch and challenge:	Learn the steps used by anti-virus software to identify new threats Learn how an Operating System manages the regular tasks of a computer (learn the different methods of **memory management**) Continue to test your programming ability using Project Euler: projecteuler.net/

Design Technology

Topics / tasks:	Specific theory content
Content and skills:	Student this half term will study their specialist area of wood, metals and polymers. The areas of focus will be: • The uses of wood, metals and polymers • Stock forms • Shaping materials • Shaping techniques • Moulding and joining • Treatments and finishes Students will also working on a mock NEA in preparation for the release of their real NEA. They are designing and making an LED light.
Assessment:	Book marking End of unit test Formal assessment of mock NEA
Stretch and challenge:	Students should consider exploring (researching and evidencing) the theory areas to extend their learning- www.Technologystudent.com is an excellent resource. Students should be actively reviewing theory tasks to help consolidate learning. Students should engage with the class team to access further opportunities for learning.

Drama

Topics / tasks:	**Component 1: Written exam. Section B, Set Text: Reading and researching Blood Brothers.** **Component 2: Devised NEA coursework**
Content and skills:	Continue to explore and understand 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. Continue to respond to the stimulus and task, and start to develop performance
Assessment:	Teacher marked practice questions on the set text. Drafting response written coursework.
Stretch and challenge:	Research text and contextual influences in more depth.

English

Topics / tasks:	AQA GCSE English Language: Paper 1 Reading Fiction	AQA GCSE English Literature: 'Macbeth' William Shakespeare
Content and skills:	• Analysing the conventions of different genres of fiction. • Understanding each of the four exam questions. • Understanding which methods to use to answer each of the four exam questions. • Revising descriptive language methods. • Studying how writers structure narratives. • Evaluating viewpoints and providing personal responses. • Completing individual questions. • Completing a full reading section of the exam.	• Studying 'Macbeth'. • Analysing the Shakespeare's use of language and structure. • Considering the social and historical contexts of the play and how these influence the text. • Analysing characters and themes both in extracts and across the whole play. • Understanding how to answer an exam question. • Learning key quotations from the play.
Assessment:	Answering a full reading section of the exam	Writing exam responses on both characters and themes
Stretch and challenge:	• Reading fiction and examining how writers structure chapters of writing. • Accessing Mr Bruff on YouTube and watch the series of videos on 'English Language Paper 1: reading', whilst making useful revision notes. www.youtube.com/user/mrbruff/featured	• Reading the play more than once. • Watching filmed versions of the play. • Accessing Mr Bruff on YouTube and watching the series of videos on the play whilst making useful revision notes. www.youtube.com/user/mrbruff/featured • Researching more about Shakespeare and his tragedies. • Researching more about Elizabethan theatre. • Reading critical articles from the British Library The Scottish Play and the Real Macbeth - Medieval manuscripts blog

Engineering

Topics / tasks:	**Section 3 : Systems & Control**
Content and skills:	Students will complete section 3 in the text book. 1) Mechanical Systems 2) Electrical Systems Students will begin their practical lessons making a series of projects that focus on Mechanical & Electrical engineering in the engineered world.
Assessment:	Students will be assessed in a test at the end of half term. Students will be assessed throughout the course on written Reponses to questions.
Stretch and challenge:	Students should be actively revising theory tasks completed in term 1 (Teams). Students have been given a digital copy of the revision book so they can read ahead for topics not yet covered (Teams). Students can independently look into employment that involves Mechanical Engineering.

Food Preparation and Nutrition

Topics / tasks:	**Scientific application in practical recipes**
Content and skills:	In this term students will look more in-depth at the scientific content of the course developing knowledge of gluten, plasticity, gelatinisation, caramelisation, dextrinization, enzymes, microorganisms, emulsions, foams and raising agents. As well as continue to build upon their cooking skills creating recipes that show practical applications of the knowledge listed above.
Assessment:	Students will complete an end of unit test using past paper exam questions to help promote good exam technique practice. Student will carry out a mock NEA1 in this half term.
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 can be accessed at https://illuminate.digital/eduqasfood/ 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:	**Students will study the topics of Education and Work. They will then test and revise.**
Content and skills:	**Education and work:** Students will study negative constructions, the conditional tense and complex constructions. Students will continue to practise their oral, writing, reading and aural skills.
Assessment:	In class there will be weekly vocabulary tests, grammar tests and a formal reading and listening assessment.
Stretch and challenge:	Students will be able to make comparisons between the French and English educations systems.

Geography

Topics / tasks:	**Physical Landscapes in the UK**
Content and skills:	Students will study the processes shaping rivers then build on this knowledge to examine the key features formed by rivers in the upper, middle and lower course and study one UK river in detail from source to mouth. Students will then study the causes, impact of and responses to flooding in the UK.
Assessment:	Physical landscapes mid-unit assessment.
Stretch and challenge:	Students can explore the topic further by completing the lessons and quizzes available at: https://www.bbc.co.uk/bitesize/topics/zpypgdm

German

Topics / tasks:	**Education and work**
Content and skills:	Students will learn about the German education system and the world of work. In so doing, they will revisit the topic of jobs. They will also learn to describe activities linked to different career paths. On the grammar front, students will deepen their understanding of the declension system (nominative and accusative), the perfect tense and they will be introduced to the imperfect tense. Furthermore, they will concentrate on syntax, most notably on the place of the verb in subordinate clauses.
Assessment:	Students will be assessed by regular vocabulary and grammar tests. There will also be a formal assessment in Listening, Reading and Translation, covering content from term 1 and 2.
Stretch and challenge:	Students who want to challenge themselves will do so by completing extra Listening, Reading and Translation exercises on these topics.

Health and Social Care

Topics / tasks:	Level 1 / 2 Vocational Award Health and Social Care	Unit 1 and Unit 2 are taught separately by different teachers
Content and skills:	**Unit 1 Core Knowledge & commodities:** **Half Term 3:** **Tasks:** Case study practice, exam practice questions, extended writing **Skills:** Research skills, extended writing, exam craft. Physical indicators – for investigating current demands for care on the HSC sector. Extended writing, questions, taking practice tests for retrieval practice to actively recalling information,	**Unit 2 Core Knowledge & commodities: Half Term 3:** **Tasks:** case studies practice, assignment mock questions, extended writing **Skills:** Research and investigation skills, extended writing
Assessment:	Unit 1: Knowledge test and retrieval practice on the following: 1.3.1 & 1.3.2 - Factors that shape self-concept and the importance of resilience's to achieve personal outcomes. 1.4.1 The definitions of health, illness disease and well-being.	Unit 2: Outcome- focused and person centred practice in health and social care. 2.1.1 Key theories and how they impact on care needs, outcomes and development across the lifespan 2.1.2 Fundamental human needs across the lifespan
Stretch and challenge:	Students should familiarise themselves with the specification for the course and expectations. Students should regularly check the class Team. Students should aim to enhance knowledge of the health and social sector by watching documentaries, programmes about the NHS and reading articles online.	Students should familiarise themselves with the specification for the course and expectations. Students should regularly check the class Team. Students should aim to enhance knowledge of the health and social sector by watching documentaries, programmes about the NHS and reading articles online.

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.
Assessment:	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.	
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:	**The city of Rome and Roman Society**
Content and skills:	Students will continue to work on the passive tenses, as we learn more about life in Rome among the governing class. We will also revise participles and the other tenses encountered so far.
Assessment:	Regular vocabulary and grammar tests, plus practice at translating Latin in test conditions.
Stretch and challenge:	Students should read and research about the city of Rome under the emperors.

Maths

Topics / tasks:	**<u>All students</u>** **Arithmetic, Geometric and Fibonacci Sequences** **Linear Graphs** **Inequalities**	**<u>Higher Tier only</u>** **Quadratic sequences** **Quadratic graphs** **Representing linear inequalities graphically** **Parallel and perpendicular lines** **Quadratic Inequalities**	**<u>Higher Tier Extension</u>** **Turning points of quadratics** **Gradient of a curve (Including interpretation)** **Quadratic Inequalities** **Iteration**
Content and skills:	• Revision and consolidation of previously learned skills • Extension of skills to unfamiliar contexts • Reasoning and problem solving skills		
Assessment:	Half term assessment covering content covered this half term as well as previously covered content.		
Stretch and challenge:	• Complete extra work using www.sparxmaths.com and www.corbettmaths.com • Completing enrichment tasks on www.nrich.maths.org		

Music

	10A	10K
Topics / tasks:	**Ternary Form Composition** **AOS1: Review & Listening** **AOS3: Review & Listening**	**AOS4: Release** **AOS2: Purcell** **Performance**
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 Preparing a sample performance and test recording
Assessment:	Practical composition assessment Exam-style listening questions	Performance recording 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:	**LOCATION.**
Content and skills:	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. This will involve students learning about the Rules of Photography and producing their own photographs that relate to each title. The project will then develop onto work that will be based on their own choice of City/Country. This will include ideas for posters and adaptable to mechanise for promotion of the culture of the country. 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:	**Complete applied anatomy and physiology (Chapter 1) and start Movement analysis (Chapter 2). In practical lessons football, netball and basketball**
Content and skills:	Understand the different classes of levers Understand how muscles work to cause movement. Understand the planes and axes of different movements Understand the types of movement that occur at joints
Assessment:	Regular exam style questions and a Kerboodle on-line end of chapter assessment.
Stretch and challenge:	Become involved in school teams (as they become available) and also train and compete regularly outside of school. Read articles and journals to widen knowledge around sporting issues.

Physical Education (Vocational)

Topics / tasks:	**Design of personal fitness training program (Unit 3)**
Content and skills:	Students will use knowledge already gained from autumn term on components of fitness, training method and fitness testing. They will use this to create their own personal training program setting their own targets.
Assessment:	Students will be assessed using Unit 3 learning aim A official assignment.
Stretch and challenge:	Use Everlearner for exam content. Make use of the BTEC revision guides and past papers.

Religious Education

Topics / tasks:	**GCSE: Focussed study of Jewish belief, teachings and practices.**
Content and skills:	Students should study the beliefs, teachings and practices of Judaism specified below and their basis in Jewish sources of wisdom and authority. They should be able to refer to scripture and/or sacred texts where appropriate. Students should study the influence of the beliefs, teachings and practices studied on individuals, communities and societies. Common and divergent views within Judaism in the way beliefs and teachings are understood and expressed should be included throughout. Students may refer to a range of different Jewish perspectives in their answers, for example, Orthodox, Reform and Liberal Judaism. Jewish Beliefs that will be explored: • The nature of God: God as one, God as Creator, God as Law-giver and Judge, loving and merciful. • The divine presence (Shekhinah). • Beliefs about life after death, including judgement and resurrection. • The nature and role of the Messiah, including different views on the role and importance of the Messiah. • The promised land and the Covenant with Abraham, Genesis 12:1-3. • The Covenant at Sinai and its importance including the role of Moses and the Ten Commandments, Exodus 20:1-17. • Key moral principles including justice, healing the world, charity and kindness to others. • The importance of the sanctity of human life, including the concept of 'saving a life' (Pikuach Nefesh). • The relationship between free will and the 613 mitzvot. • Mitzvot between man and God and mitzvot between man and man, including the difference between them and their importance.
Assessment:	Students will complete one 30 minute in-class assessment which will contain all 5 question skills assessed by AQA.
Stretch and challenge:	Visit online reference sites, Wikipedia, Britannica. BBC Bite Size website. Students may wish to read a general introduction to the religion. Dan Cohn-Sherbok—Judaism Today: An Introduction (Publisher Continuum 2010)

Science: Biology

Topics / tasks:	**Topic 6 – Plant structures and their functions continued, then...** **Topic 7 - Animal co-ordination, control and homeostasis**
Content and skills:	Role of hormones Action of adrenalin (higher only) Action of thyroxine (higher only) Hormonal control of the menstrual cycle Contraception and Assisted Reproductive Technology Thermoregulation (triple only) Hormonal control of blood glucose concentration and diabetes Function of the kidney (triple only)
Assessment:	Past exam questions and end of topic assessment
Stretch and challenge:	Research the current treatments for diabetes

Science: Chemistry

Topics / tasks:	**Fuels, Earth and Atmosphere**
Content and skills:	Extraction, refining and use of fossil fuels from crude oil. Alternative fuels, their development and use.
Assessment:	Short answer questions and more detailed end of topic test at end of half term.
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 4: Waves	Topic 5: Light and the electromagnetic spectrum
Content and skills:	• Describing waves • Wave speeds • Refraction • Wave crossing boundaries (separate sciences only) • Ears and hearing (separate sciences only) • Ultrasound (separate sciences only) Infrasound (separate sciences only)	• Electromagnetic waves • Uses of the electromagnetic spectrum • Dangers of the electromagnetic spectrum • Ray diagrams (separate sciences only) • Colour (separate sciences only) • Lenses (separate sciences only)
Assessment:	End of topic tests compiled by the exam board	
Stretch and challenge:	Completing relevant exercises on Isaac Physics website.	

Spanish

Topics / tasks:	**Education and work: Talking about school life, the good and bad things about school, jobs and looking for work.**
Content and skills:	Making sentences negative; gustar type verbs; uses of the infinitive; the future with will; verbs for giving advice; comparative adjectives; negative expressions; lo+masculine adjective
Assessment:	Listening, reading and translation.
Stretch and challenge:	Contrasting future with will and future with going to; using lo mas/menos to include superlative structures; comparing and contrasting school life in Spain.

Textiles

Topics / tasks:	**Pattern Production & 3D forms**
Content and skills:	Students will pattern making techniques to create 3D garments and products. Students will continue to gain knowledge and understanding of the greater world of design covering the following topics: • Powering systems • Energy storage systems • Process devices • Movement types and Leavers/linkages/gears/cams
Assessment:	Students will carry out a written assessment at the end of the half term covering the topics studied.
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 – Introduction to the Built environment.**
Content and skills:	Unit 1: Students will revise the following areas: • 1.1 The sector • 1.2 The built environment life cycle Unit 3 – workshop we will be starting Carpentry tasks
Assessment:	Students will complete a portfolio of evidence that will prepare them for their final exam next year. **Unit 1 is 40 % of overall grade. Unit 3 is 60% of final grade and starts in June.** All work is set 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 1 – Manufacturing Engineering Products**
Content and skills:	Students will be asked to complete the following tasks 1.1 Understanding engineering drawings 1.2 Planning manufacturing 1.3 Using engineering tools and equipment 1.4 Implementing engineering processes
Assessment:	Students will complete a portfolio of evidence that will prepare them for their final exam next year. **Unit 1 is 40 % of overall grade, Unit 2 is worth 20% and Unit 3 is 40% of final grade and starts in June.** All work is set in Microsoft Teams.
Stretch and challenge:	Students should familiarise themselves with the specification for the course and expectations, this includes completing all set tasks in their assessment booklet. Access the extra-curricular practical sessions to independently manufacture individual parts of their product.