

The Academic Curriculum

The intent of our academic curriculum is to deliver **Powerful Knowledge** to our students. At Creative Education Trust this is not contextualised as ‘the knowledge of the powerful’, but specialised knowledge in a range of subject disciplines. This will include both disciplinary knowledge and substantive knowledge within each area of study. This curriculum is not only designed to endow children with the social assets, skills and cultural capital needed to succeed and achieve, but also to instil in our children the power and confidence to question, synthesise and scrutinise in a range of disciplines, a variety of social contexts and in their own lives. Beyond a range of academic qualifications, the intended impact of this curriculum is for our students to be able to integrate into any social, academic or professional environment, as well as to question, instigate change or lead within those environments.



**ABBEEFIELD
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Below you will find a detailed overview of what Year 10 students are learning in each of their subjects in Half Term 1 and 2 (September-December)

Year 10 Curriculum – Autumn Term 2020-21 - To support parents and students.

Subject	Autumn Term Topics
English	<p>Half Term 1 Theme: Jekyll and Hyde Students will learn to extend their knowledge of prose texts and use the requirements of the exam criteria to be able to produce an evaluative, written response. They will also extend their knowledge of the nuances of impactful descriptive and narrative writing techniques. They will be extending prior knowledge and understanding of texts to identify, understand and analyse how writer’s use:</p> <ul style="list-style-type: none"> • Character, structure and setting to communicate their ideas • The context of production and reception over time • Ideas in the texts are contextually linked and shaped by society at the time. • The ability to engage with the text and cross-reference the ideas as a whole to formulate a perceptive and critical argument. <p>Half Term 2 Theme: Narrative and descriptive writing Students will learn to extend their analysis skills by focussing on one 19th Century text and consider the character, themes and ideas presented by the writer. They will also consider how these themes are presented alongside the context. They will be extending prior knowledge and understanding of texts to identify, understand and analyse how writer’s use:</p> <ul style="list-style-type: none"> • Narrative voice • Character • Setting and atmosphere • Methods of creating meaning • Context

	<ul style="list-style-type: none"> • Language choices. • Structural choices. • To convey key ideas and themes throughout a text. <p>In Section B students will be extending prior knowledge of a range of imaginative texts by using:</p> <ul style="list-style-type: none"> • Language • Genre • Intonation • Figurative language • Structural features. <p>Students will learn how to manipulate a reader and create investment in the text.</p>
<p style="text-align: center;">Maths</p>	<p>Students are learning a variety of topics dependent on student ability and gaps in knowledge as a result of lockdown:</p> <p>Topics could include:</p> <ul style="list-style-type: none"> • Powers and standard form • Equations and inequalities • Counting, accuracy, powers and surds • Solving linear equations • Solving simultaneous equations (by elimination, substitution and balancing coefficients) • Using simultaneous equations to solve problems • Solving linear inequalities • Solving inequalities graphically • Trial and improvement • Quadratic graphs • The quadratic formula • Frequency polygons • Cumulative frequency graphs • Box plots and Histogram • Calculating probabilities • Mutually exclusive and exhaustive events • Experimental probability • Expectations, choices and outcomes • Volume of 3D shapes (cuboid, prism, cylinder) • Surface area of 3D shapes (cuboid, prism, cylinder) • Volume and surface area of prisms • Linear equations

	<ul style="list-style-type: none"> • Percentages • Compound measures • Compound interest • Reverse percentage • Proportion • Best buys • Areas of 2D shapes and compound shapes • Circles • Transformations of 2D shapes • Vectors • Probability • Solving linear equations (including brackets and unknown on both sides) • Transformations • Probability and events • Perimeter and area • Transformations
Science	<p>Biology: Bioenergetics (Photosynthesis and Respiration) How plants harness the Sun's energy in photosynthesis in order to make food. This process of photosynthesis liberates oxygen which has built up over millions of years in the Earth's atmosphere. Both animals and plants use this oxygen to oxidise food in a process called aerobic respiration which transfers the energy that the organism needs to perform its functions. Conversely, anaerobic respiration does not require oxygen to transfer energy. During vigorous exercise the human body is unable to supply the cells with sufficient oxygen and it switches to anaerobic respiration. This process will supply energy but also causes the build-up of lactic acid in muscles which causes fatigue.</p> <p>Chemistry: Electrolysis Students are learning that when an ionic compound is melted or dissolved in water, the ions are free to move about within the liquid or solution. These liquids and solutions are able to conduct electricity and are called electrolytes and the ions can be separated by electrolysis. Chemical Calculations Chemists use quantitative analysis to determine the formulae of compounds and the equations for reactions. Given this information, analysts can then use quantitative methods to determine the purity of chemical samples and to monitor the yield from chemical reactions. Chemical reactions can be classified in various ways. Identifying different types of chemical reaction allows chemists to make sense of how different chemicals react together, to establish patterns and to make predictions about the behaviour of other chemicals. Chemical equations provide a means of representing chemical reactions and are a key way for chemists to communicate chemical ideas.</p> <p>Physics: Waves</p>

	<p>Students are learning how waves transfer energy and can be generalised into longitudinal and transverse, definitions are given by comparing the direction of the oscillations to overall energy propagation. Know wave characteristics and be able to recall and use the wave equation.</p> <p>Know that the electromagnetic spectrum is a family of transverse waves. It is divided into seven sections (RMIVUXG). Each part of the spectrum has uses and dangers.</p>
History	<p>Paper 3 topic: Weimar and Nazi Germany</p> <p>Students will learn to develop an in depth understanding how, between the First and Second World Wars, a democratic Germany became a one-party dictatorship and the effect this had on German society. Students will examine various political, economic, social and cultural aspects of this change. They will demonstrate knowledge and understanding of significant events/ people and causes or consequences of events. They will develop an ability to analyse and evaluate contemporary sources and interpretations.</p>
Geography	<p>Half Term 1 Theme: Paper 1: Extreme Weather and climate change</p> <p>Students will learn to:</p> <ul style="list-style-type: none"> • Understand the causes, consequences and management of climate change. • Understand how a small-scale ecosystem operates. • Explore Tropical rainforests, investigating the characteristics, causes and impacts of deforestation, and how they can be managed. • Understand the extreme weather in the UK • Know recent extreme weather event in the UK. • Understand causes of climate change • Understand the impacts of climate change • Consider the management of climate change • Explore a UK small scale ecosystem – interactions between different elements. • Understand the distribution of ecosystems • Understand the characteristics of TRF(Terrestrial Reference Frame): location, structure, importance, plant and animal adaptation. • Explore a case study of causes and impacts of deforestation in TRF <p>Students will understand the characteristics of either hot deserts or cold ecosystems. They will understand how hot/cold environments are being developed and the opportunities and challenges this creates and the risks associated.</p> <p>Half Term 2 Theme: Paper 1: Rainforests & hot/cold environments</p> <p>Students will learn to understand the:</p> <ul style="list-style-type: none"> • Management of TRF • Location of either Hot deserts/Cold environments • Climate of HD/CE • Animal and plant adaptation in HD/CE

	<ul style="list-style-type: none"> • Causes, impacts and management of climate change in HD/CE • Economic development in HD/CE
French	<p>Theme: Family, Friends and Relationships</p> <p>Students are learning to be able to discuss:</p> <ul style="list-style-type: none"> • <i>Descriptions of friends & family</i> • <i>Descriptions of relationships</i> • <i>Places in town, activities making arrangements</i> • <i>Telling the time</i> • <i>Describing a day out</i> <p>Students are learning to develop fluency of:</p> <ul style="list-style-type: none"> • <i>Regular/irregular present tense –er verbs</i> • <i>Reflexives verbs in the present tense</i> • <i>Adjective agreement of irregular adjectives</i> • <i>Perfect tense</i> • <i>Imperfect</i> • <i>Near future tense</i> <p>HIGHER: Relative pronoun <i>qui/que</i></p> <p>Students are learning to be able to discuss:</p> <ul style="list-style-type: none"> • <i>Free time activities</i> • <i>Leisure activities</i> • <i>Cinema, film & TV</i> • <i>Sport</i> • <i>Technology</i> • <i>Reading & music</i> • <i>Socialising with friends</i> <p>Students are learning to develop fluency of:</p> <ul style="list-style-type: none"> • <i>Depuis+present tense</i> • <i>Irregular verbs in the present tense</i> • <i>jouer à and faire de</i> • <i>Negative structures</i> • <i>Comparative adjectives</i> • <i>The perfect tense</i>

	<ul style="list-style-type: none"> • <i>Direct object pronouns</i> • <i>Superlative adjectives</i>
Spanish	<p>Half Term 1 Theme: Holidays</p> <p>Students are learning to describe their holidays and activities. They are learning to state and justify their opinion of holidays.</p> <p>Students are revising the present and preterite tenses. Students will be introduced to the imperfect tense:</p> <p><i>Preterite tense: irregular verb hacer, ir</i></p> <p>Students will learn to use different opinions to add variety to what they say (superlatives, comparisons, negatives)</p> <p>Half Term 2 Theme: School</p> <p>Students will learn to describe their school, school subjects and activities. They will learn to state and justify their opinion.</p> <p>Students are revising the present, preterite and imperfect tenses. Students will be introduced of future tense. Students will learn to use phrases followed by the infinitive.</p> <p><i>Preterite tense: irregular verb hacer, ir</i></p> <p>Students will learn to use different opinions to add variety to what they say (superlatives, comparisons, negatives)</p>
Computer Science	<p>Half Term 1 Theme: CPU/Memory and Storage/Boolean Logic</p> <p>Students are learning and developing in:</p> <ul style="list-style-type: none"> • The effects on performance of changing common characteristics of a CPU • Characteristics of embedded systems • Familiarity with a range of different embedded systems • Why computers have primary storage • Key characteristics of RAM and ROM • Why virtual memory may be needed in a system • Why computers have secondary storage • Differences between each type of storage device/medium • Knowledge of the truth tables for each logic gate

	<ul style="list-style-type: none"> • Recognition of each logic gate symbol • How to create, complete or edit logic diagrams and truth tables for given scenarios <p>Half Term 2 Theme: Systems Architecture</p> <p>Students are learning and developing in:</p> <ul style="list-style-type: none"> • What actions occur at each stage of the FE cycle • The difference between storing data and an address • Why data must be stored in binary format • Familiarity with data units and moving between each • Calculate file sizes of sound, images and text files • Describe common scenarios where compression may be needed
IT	<p>Students are learning how the following methods contribute to pre-production, including how each is created and why it is needed:</p> <p>Mood boards, mind-maps, visualisation diagrams, storyboards, scripts</p> <p>Students are learning how to effectively make a plan for pre-production taking into account:</p> <ol style="list-style-type: none"> 1. The requirements of the client 2. The timescale in which it is to be completed. 3. A work plan that sets out all the stages that needs to be completed in order to reach the final product. 4. H Evaluations of primary and secondary sources and how these feed into the overall work plan and final product. 5. Adapt the final product to the target audience. 6. Understand the differences between hard ware and software. Choose the appropriate hard ware and software that will enable them to complete the final product. 7. Understand the health and safety issues surrounding creating the product and create risk assessments to take this into consideration. 8. Understand current legislation and laws surrounding creating the product ensuring that it is legal and suitable. <p>Students are learning how to produce pre-production documents and successfully reproduce them using the following techniques:</p> <p>File formats, version control, moving images, video formats, graphics formats, audio formats, file structure, making all the pre documents</p> <p>Students are learning to evaluate and review the documents created in pre-production to ensure that they meet the criteria and clients' needs. The review and evaluation follow these stages:</p> <ol style="list-style-type: none"> 1. Review pre-documents

	<ol style="list-style-type: none"> 2. Formats 3. Style 4. Clarity 5. Meet client needs 6. Identify areas for improvements
Art	<p>Term 1 Theme: Cubism (Formal Elements – Line/Tone/Texture/Form)</p> <p>Students are learning to be able to confidently select relevant secondary sources to produce sensitive, articulate and detailed observational work that demonstrates an embedded knowledge of the formal elements. They will be learn to critically analyse artists’ work and produce a thought provoking visual analysis in a refined way. Students will be able to exploit the qualities of materials independently and skilfully through experimentation and be able to critically evaluate and articulate the outcomes.</p>
Construction	<p>Students are learning to be able to wire a plug, install wall sockets and understand key electrics terminology and theory. Students are learning about wiring electrics within a building site including understanding of earth and live wires.</p> <p>Students are learning to understand key woods terminology and theory including practical understanding of a range of wood joints including comb, lap, halving and dovetail.</p>
Graphics	<p>Theme: Identity</p> <p>Students are exploring the theme of identity and considering a range of routes within this that they may wish to explore. Students will learn how to draw an accurate self-portrait both through the use of pencil and digitally.</p> <p>Students will learn to generate ideas from a range of contextual sources including the work of artist and designers. Students will explore and make use of a range of a range of art media and processes. They will learn how to use the basics of Photoshop to communicate their ideas. Students will use drawing and other means in order to record ideas as their work progresses.</p>
	<p>Half Term 1:</p> <p>Students are learning about nutrition with a focus on sources, functions, and symptoms of excess & deficiency of water-soluble micronutrients B & C, and micronutrients iron, phosphorus, Iodine and sodium.</p>

<p>Food</p>	<p>They will learn about denaturation and preservation of water-soluble micronutrients caused by cooking methods/storage techniques.</p> <p>Half Term 2: Students are learning about nutrition with a focus on sources, functions, symptoms of excess & deficiency of macronutrient carbohydrate, and fibre (resistant starch).</p> <p>Students will explore the differences between complex and simple carbohydrates and their effects on health and the amount of carbohydrate required at varying life-stages.</p>
<p>PE Core</p>	<p>Students are learning to tackle complex and demanding physical activities. They will get involved in a range of activities that develops personal fitness and promotes an active, healthy lifestyle. Students will be taught to use and develop a variety of tactics and strategies to overcome opponents in team and individual games. They will further develop their technique and improve their performance in other competitive sports. They will take part in a range of environments which present intellectual and physical challenges, which encourage them to work in a team, building on trust and developing skills to solve problems, either individually or as a group. They will evaluate their performances compared to previous ones and demonstrate improvement across a range of physical activities to achieve their personal best.</p>
<p>PE GCSE</p>	<p>Alongside their practical performance, students are learning about psychological factors that affect performers, including:</p> <ul style="list-style-type: none"> • Goal setting – SMART targets • Classification of skills • Forms of practice – theory and practical application • Types of guidance – theory and practical application • Mental preparation for performance; Types of feedback • Sports psychology – use of data
<p>Media</p>	<p>Students are learning about the five key concepts of Media Studies through a range of media texts.</p> <p>For component A of the course students are studying a range of texts on advertising and marketing.</p> <p>For component B of the course students are studying a range of texts on the film industry with particular focus on James Bond.</p>
	<p>Students are learning about sociological aspects of:</p> <ul style="list-style-type: none"> • Family types

Sociology	<ul style="list-style-type: none"> • The Family • Symmetrical Family • The Education system in the UK • History of the Education System in the UK • Role of the education system • Role of education (the hidden curriculum)
Business Studies	<p>Students are learning to generating ideas and then plan for a micro-enterprise activity. Within this, students will consider and learn:</p> <ul style="list-style-type: none"> • Research skills • Self-awareness • Financial considerations • Communication • Non-verbal communication <p>Students are learning to pitch and present a micro-enterprise activity. Within this, students will consider and learn:</p> <ul style="list-style-type: none"> • Presentation skills – professional behaviour, rehearsed and prepared, time bound • Positive attitude • Enhancing the pitch with visual aids • Communication skills
Health and Social Care	<p>Students are learning to explore different aspects of growth and development across the life stages using the physical, intellectual, emotional and social areas of development (PIES).</p> <p>Students are learning the key aspects of 4 areas of development and the differentiation of the 6 life stages:</p> <ul style="list-style-type: none"> • Infancy (0-2), Childhood (3-8) Adolescence (9-18) • Early adulthood (19-45) • Middle Adulthood (46-65) • Later adulthood (65+) <p>Students will learn the different factors that have affect an individual's growth and development. For example:</p> <ol style="list-style-type: none"> 1. Discussing how poor housing conditions could affect a person's health and wellbeing 2. Understanding how Dementia can affect a person's independence and ability to maintain relationships with others

Dance	<p>Students will develop an deeper understanding of the three set works – ‘Emancipation of Expressionism’, ‘Within Her Eyes’ and ‘A Linha Curva’</p> <p>Learning and performing the set phrase ‘Breathe’</p> <p>Explore methods of choreography.</p>
Drama	<p>Students are learning the theory and practice of devising techniques and the work of ‘Frantic Assembly’ how to apply this to creation of their own work.</p> <p>Students will develop understanding introduced to the text ‘Blood Brothers’ for Section B</p> <p>Students are being introduced to Section A – Theatre job roles, staging configurations, technical terminology, stage placements.</p>
Music	<p>Half Term 1: Students are being introduced to performance skills:</p> <ul style="list-style-type: none"> • Accuracy • Fluency • Technical control • Intonation (where applicable) • Projection • Expression • Stylistic awareness • Confidence <p>Students are reviewing music theory and composition techniques:</p> <ul style="list-style-type: none"> • Treble and bass clef notation • Basic rhythms and simple time signatures • Major and minor triads • Simple chord progressions • Melody writing

Students are reviewing musical elements for AO3 and being introduced to AOS1: Forms and Devices. This includes:

- Tempo; dynamics; texture; rhythm; harmony/tonality; structure
- Short listening tasks to identify the musical elements
- Developing solo performance skills

Half Term 2:

Students are developing music theory to compose a melody:

- Treble, bass and alto clef notation
- Use of basic rhythms and simple time signatures
- Use major and minor triads
- Create a simple chord progressions
- Develop melodies with clear shape and structure

Students will be introduced to AoS1 Set work:

- Musical context
- Melody; sonority/timbre; tempo; dynamics; texture; rhythm/metre; harmony/tonality; structure
- Musical devices
- Instrumental playing techniques
- Simple melodic and rhythmic dictation