

# 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 achieving 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.

Below you will find a detailed overview of what Year 9 students are learning in each of their subjects in Half Term 3 and 4 (September-Easter).

Subject	Spring Term Topics
English	<p><b>Half Term 3 Theme: Romeo and Juliet</b> Students will embed knowledge about Shakespeare by reading and exploring Romeo and Juliet. They will engage with the use of language, character and plot. They are extending prior knowledge of Shakespearean texts and will understand:</p> <ul style="list-style-type: none"><li>• Elizabethan attitudes</li><li>• The Globe Theatre</li><li>• Stage crafting</li><li>• Character</li><li>• Structure</li><li>• Plot</li><li>• Setting, tone and atmosphere</li><li>• Dialogue</li></ul> <p><b>Half Term 4 Theme: Power of the Pen: Non-fiction writing</b> Students are learning to embed their knowledge of non-fiction texts when writing to argue, persuade and advise. They are embedding prior knowledge of non-fiction texts in order to be able to write in style with knowledge of:</p> <ul style="list-style-type: none"><li>• Vocabulary and sentence structure for purpose and effect</li><li>• Spelling and punctuation</li><li>• Clarity, variety and imagination</li><li>• Tone, style and register</li><li>• Form, purpose and audience - e.g. articles (headline, pictures, columns etc.)</li></ul>

<p><b>Maths</b></p>	<p><b>Ratio and Proportion</b></p> <ul style="list-style-type: none"> <li>• Percentage change problems</li> <li>• Simple interest</li> <li>• Problem solving with ratio and proportion</li> </ul> <p><b>Simultaneous Equations and Powers</b></p> <ul style="list-style-type: none"> <li>• Linear simultaneous equations (graphical and algebraic)</li> <li>• Index laws</li> </ul>
<p><b>Science</b></p>	<p><b>Biology: Cells and Transport</b>  Students are learning about the study of simple prokaryotic and eukaryotic cells from single-cell structures to organisms and how cells have become specialised. They will study the variety of processes that are required to transport substances into and out of cells such as diffusion, osmosis and active transport and that exchange surfaces have become adapted to allow rapid exchange. Students will learn how to prepare a biological sample and use a light microscope to observe it.</p> <p><b>Chemistry: Energy changes</b>  Students develop their understanding of chemical reactions by looking at exothermic and endothermic reactions and energy profiles. They then look at real world applications of catalysts in industry and identify the benefits and disadvantages of them.</p> <p><b>Chemistry: Fundamental chemistry</b>  Students will study atomic structure so that they understand an atom is not a fundamental particle but consists of 3 sub-atomic particles, namely the proton, neutron and electron. They will learn how it is we came to know this and the various models of the atom through time and know the properties of these particles. They will learn about isotopes and the changes that cause atoms to become ions.</p> <p><b>Physics: Further Waves</b>  Students will learn to identify and describe both transverse and longitudinal waves. They will draw and label wave diagrams and use the wave equation to calculate wave speed. They will understand features of waves such as wavelength and frequency and how these affect the properties such as volume, pitch or colour. Students will have a focus on light waves including reflection, refraction and dispersion of light.</p> <p><b>Physics: Electromagnetic waves:</b>  Students will learn 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>
<p><b>History</b></p>	<p>Students will learn to understand the significance of the Second World War and its impact on Europe and the Wider World.</p> <p>This will include:</p> <ul style="list-style-type: none"> <li>• Sense of period – Modern world.</li> </ul>

	<ul style="list-style-type: none"> <li>• Substantive concepts – social, religious, cultural, political, economic and military concepts.</li> <li>• Disciplinary concepts – change and continuity</li> <li>• Diversity – global nature of conflict, understanding concept of genocide and role of different factors in this. Role of empire.</li> <li>• Causes of Second World War – The Treaty of Versailles, the failures of the League of Nations, Hitler’s foreign policy and the policy appeasement (Sudeten Crisis, Munich Agreement, Remilitarisation of Rhineland, invasion of Czechoslovakia and Poland).</li> <li>• Key turning points in Second World War (e.g. Blitzkreig, Dunkirk, Battle of Britain, Invasion of USSR, Pearl Harbour, D-Day, March on Berlin and the Atomic Bomb)</li> </ul>
<p><b>Geography</b></p>	<p><b>Half Term 3: Sustainability</b>  Students will investigate different methods used to create a sustainable future at a local, national and global level.  This will include:</p> <ul style="list-style-type: none"> <li>• Sustainability model</li> <li>• 2 examples from Local/National/Global - sustainability techniques e.g. <i>Bedzed, Olympics, sustainable cities e.g. Dubai, plastic, cloud forest for ecotourism, recycling in China, fracking, Eden Project.</i></li> </ul> <p><b>Half Term 4: Our violent planet (Volcanoes)</b>  Students will be able to recognise features of volcanoes and make comparisons between them. They will understand the effects and responses to volcanic hazards and understand why people still live there.  This will include:</p> <ul style="list-style-type: none"> <li>• What is a hazard?</li> <li>• What factors affect hazards?</li> <li>• Theory of plate tectonics - Structure of the earth, convection currents/Continental drift</li> <li>• Plate boundaries</li> <li>• Structure of volcanoes and the different types.</li> <li>• Distribution of volcanoes.</li> <li>• Impacts of volcanic hazard and responses.</li> <li>• Why do people live in hazardous environments?</li> </ul>
<p><b>Spanish</b></p>	<p><b>Half terms 3 &amp; 4: Healthy lifestyle</b></p> <p>Students will be learning to discuss the importance of a healthy lifestyle relating to diet, active lifestyles and daily routine. They will be introduced to talking about wider issues and will be given an opportunity to introduce some new verbs.</p> <p>Grammar:</p> <ul style="list-style-type: none"> <li>• Stem changing verbs (jugar, preferir)</li> <li>• Reflexive verbs</li> </ul>

	<ul style="list-style-type: none"> <li>• Se debe/no se debe Me duele(n)</li> <li>• The imperative</li> <li>• Direct object pronoun</li> </ul>
<b>Computer Science</b>	<p><b>Creating an Interactive Multimedia product</b></p> <p>Planning and creating an IMP</p> <ul style="list-style-type: none"> <li>• Client brief</li> <li>• Mind map</li> <li>• Visualisation Diagram</li> <li>• Sitemap</li> <li>• Legislation – copyright</li> <li>• Accessibility</li> <li>• Multimedia features</li> <li>• Export as kiosk</li> </ul> <p>How can products we adapted for members of the community with disability or additional needs? e.g. visual impairment</p>
<b>Art</b>	<p>Students will continue to learn about still life by extending and developing ideas and skills learned in term 1 to explore colour and pattern. Students will be introduced to the work of Yayoi Kusama working with colour, pattern and wax resist. They will explore creating mixed media artwork and develop their ideas about composition inspired by Molly Benson</p>
<b>DT</b>	<p>Students develop and build upon the knowledge, skills and understanding they learnt in Year 8. The expectation to work as independently as possible is embedded.</p> <p>They will further consolidate their knowledge of the five core topics which embed the ethos of the Design and Technology curriculum. The curriculum is taught through a range of material disciplines; Food, Timber based materials (Resistant Materials), Papers and Boards (Graphics) and Food Science. The subject title of 'STEM' is also taught within the Year 9 rotation. Students will experience a number of these disciplines throughout the academic year.</p> <p>The five core topics of the Design and Technology curriculum are:</p> <p><b>Design principles:</b> Students will embed understanding of design principles. Students will create a wide range of imaginative and innovative ideas, avoiding design fixation. Students will use primary and secondary data to inform design ideas. They will embed knowledge of design briefs, specifications, technical drawings and functional testing. They will learn to use a wider variety of approaches including annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-aided design. The iterative design</p>

process will be introduced. In Food and Nutrition and Food Science, factors affecting food choice are further explored to identify and understand user needs. Dishes are made in response to scientific briefs.

**Making principles:** Students make a range of products in lessons. The use of more complex materials, equipment and manufacturing techniques are further developed. Students develop skills in using specialist tools and machinery. Students use timbers and a wide range of workshop tools and machinery to skilfully make a product. They are introduced to die-cutting, sublimation printing and will further develop knowledge of vacuum forming by designing and making their own festival merchandise. Students embed their knowledge and skills in computer aided design and computer aided manufacture. Quality control and finishing skills are embedded in Year 9 as well as the ability to work independently when making a product. Students demonstrate excellent standards of health and safety awareness. In Year 9 Food and Food Science, Students cook complex and challenging products such as honeycomb, roux sauces, mayonnaise (emulsion) and Swiss roll. A wider range of ingredients and cooking methods are used. High quality presentation skills are developed. In Food science, Students are introduced to food science investigations and testing. Students respond to a brief and select appropriate ingredients and equipment. Students develop knowledge of recording investigations using graphs, tables, charts and sensory analysis methods.

**Technical principles:** Students embed and apply knowledge of the origins and properties of a wide range of materials including timbers, papers and boards. Students confidently select appropriate materials for different uses. Knowledge of the history of design and design movements are learnt and applied to inform design ideas. Students independently apply colour theory and further develop their knowledge of smart materials, their uses and stimuli. Students develop knowledge of tolerances and material allowances. In Food, Students plan a sequence of tasks with timings. Industrial production methods and the primary and secondary processing of foods are introduced. In Food Science, Students will explore the science behind cooking foods. Key food science terminology such as gelatinisation, dextrinization and fermentation are introduced and applied. The science nature of this module feeds directly into the subject content needed for the Food GCSE and other scientific learning.

**Sustainability and the environment:** Knowledge of sustainability is embedded and applied. Links to current world events are encouraged in lessons. Students are independent at problem solving and should creatively consider the environment when designing and making. Students evaluate their carbon footprint in evaluations and design specifications. Students embed knowledge of the 6R'S and are introduced to the concept of social responsibility. Deforestation, mining, pollution and greenhouse gases are explored. Knowledge of industrial methods are reinforced including one-off, batch, mass and continuous production.

**Analyse and evaluate** – Students evaluate the work of others in detail. They will investigate new and emerging technologies and will understand developments in Design and Technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists. Students will test, evaluate and refine their ideas and products against a specification, considering the views of their client and other targeted groups. Very good conclusions are made when evaluation writing and subject specific vocabulary is used. Knowledge of functional testing and third-party feedback methods are further developed. Students in Food will further develop understanding of sensory testing methods and nutritional analysis. In Food Science, they will attempt to make justified conclusions of the investigation and hypothesis.

	<p>Students further develop their knowledge of the CET Knowledge Connected curriculum. The key concepts are re-introduced with a specific focus on Human Interaction, or the 'client' as the driving concept of every successful designing and making project. Famous designers are introduced and discussed.</p>
<b>RE</b>	<p>Students will get an opportunity to explore a Philosophy and Ethics through studying the big questions of medical ethics. They will look specifically at the discussions around abortion and cloning. They will have an opportunity to grow evaluative and discussion skills whilst learning how to disagree with kindness and develop knowledge of difficult issues that affect people today.</p>
<b>PE</b>	<p>Students will consolidate their skills and knowledge acquired in y7 and 8, being able to demonstrate and apply skills, techniques, tactics and knowledge of rules in competitive game situations, including officiating with greater fluency and more detailed reference to terminology, rules and techniques within a given sport. Students will learn to be able to make independent decisions when playing to help and influence scores and results. Students will be able to work collaboratively in a team or independently depending on the sport that they are participating in. Students will be able to take small leadership roles, such as leading in warm-ups, choosing roles/positions for teammates or being influential in game situations.</p> <p>Students will further develop the key skills and become more able to perform these accurately when put under an increasing amount of pressure. Students will understand the need to use tactics and be capable of implementing these in successfully in gameplay. Students will develop their leadership skills to organise themselves and others and deliver tasks effectively. Students will also build on their ability to analyse their own, and others, performances, identifying areas of strength and weakness, and be capable of suggesting what needs to be done to bring about improvement.</p>
<b>Drama</b>	<p>Students are continuing to study devising and production elements</p> <p>Students will focus on:</p> <ul style="list-style-type: none"> <li>• Creating Physical Theatre from a chosen stimulus</li> <li>• The creation of devising portfolio pages</li> <li>• The abstraction of ideas from a stimulus</li> <li>• Structuring of a performance</li> <li>• Strengthening core skills previously studied</li> <li>• Genre and style within a devised piece</li> <li>• Lighting/sound/set and costume</li> <li>• Exploration of production elements on atmosphere</li> </ul>
<b>Music</b>	<p>Students are expanding upon instrumental and compositional skills. This includes:</p> <ul style="list-style-type: none"> <li>• Use of appropriate language</li> </ul>

- Secure improvisational skills
- Creativity
- Confidence
- Fluency
- Structure
- Increased range of notes
- Dynamic control
- Aural perception
- Exploration of timbre

Students are securing their notation skills where they will apply a form of notation as appropriate.

Students will show an independence in solo and ensemble performance within the classroom setting and be exposed to variety of examples of music.