

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 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 8 students are learning in each of their subjects in Half Term 3 and 4 (January – Easter).

Subject	Spring Term Topics
English	<p>Half Term 3 Theme: Hamlet Students are learning to explore character, plot and theme to understand how meaning is crafted in a Shakespeare text. They are exploring Shakespearean texts to understand:</p> <ul style="list-style-type: none">• Elizabethan attitudes• The Globe Theatre• Stage crafting• Character• Structure• Plot• Setting, tone and atmosphere• Dialogue <p>Half Term 4 Theme: Non-fiction Texts Students are learning to explore and recognise the conventions of writing to analyse, review and comment across a range of themes such as Science, crime, identity and travel writing They are exploring a range of non-fiction texts and using:</p> <ul style="list-style-type: none">• Register that is matched to audience and purpose• A range of linguistic devices appropriate to the conventions of the forms taught• How to paragraph effectively including the use of accurate punctuation• Uses a variety of sentence forms for effect
Maths	Students will study the following two topics

	<p>Algebra</p> <ul style="list-style-type: none"> • Algebraic manipulation • Forming and solving equations • Sequences • Linear graphs and parallel lines • Representing and solving inequalities <p>Ratio and Proportion</p> <ul style="list-style-type: none"> • Scales and maps • Real life graphs • Rates of change • Ratio notation • Relationship between fraction and ratio
<p>Science</p>	<p>Biology: Respiration and photosynthesis Students will learn that respiration is a series of chemical reactions, in cells, that breaks down glucose to provide energy and form new molecules. Most living things use aerobic respiration but switch to anaerobic respiration, which provides less energy, when oxygen is unavailable. Yeast fermentation is used in brewing and bread making. Plants and algae do not eat, but use energy from light, together with carbon dioxide and water to make glucose (food) through photosynthesis. They either use the glucose as an energy source, to build new tissue, or store it for later use. Plants have specially adapted organs that allow them to obtain resources needed for photosynthesis. Iodine is used to test for the presence of starch.</p> <p>Chemistry: Periodic table and Elements Students will learn how the elements in a group all react in a similar way and sometimes show a pattern in reactivity. As you go down a group and across a period the elements show patterns in physical properties. Metals are generally found on the left side of the table, non-metals on the right. Group 1 contains reactive metals called alkali metals. Group 7 contains non-metals called halogens. Group 0 contains unreactive gases called noble gases. Most substances are not pure elements, but compounds or mixtures containing atoms of different elements. They have different properties to the elements they contain. Particle diagrams are used to classify a substance as an element, mixture or compound and as molecules or atoms. Naming rules for simple compounds: change non-metal to -ide; mono, di, tri prefixes; and symbols of hydroxide, nitrate, sulphate and carbonate. The symbols of hydrogen, oxygen, nitrogen, carbon, hydrogen, iron, zinc, copper, sulphur, aluminium, iodine, bromine, chlorine, sodium, potassium and magnesium.</p> <p>Physics: PD and Current Magnetism and Electromagnetism Students will learn how we can model voltage as an electrical push from the battery, or the amount of energy per unit of charge transferred through the electrical pathway. In a series circuit, voltage is shared between each component. In a parallel circuit, voltage is the same across each loop. Components with resistance reduce the current flowing and shift energy to the surroundings. Calculate resistance using the formula: resistance (Ω) = potential difference (V) \div current (A).</p>

	<p>Current is a movement of electrons and is the same everywhere in a series circuit. Current divides between loops in a parallel circuit, combines when loops meet, lights up bulbs and makes components work. Around a charged object, the electric field affects other charged objects, causing them to be attracted or repelled. The field strength decreases with distance. Two similarly charged objects repel.</p> <p>An electromagnet uses the principle that a current through a wire causes a magnetic field. Its strength depends on the current, the core and the number of coils in the solenoid. The magnetic field of an electromagnet decreases in strength with distance.</p> <p>Magnetic materials, electromagnets and the Earth create magnetic fields which can be described by drawing field lines to show the strength and direction. The stronger the magnet, and the smaller the distance from it, the greater the force a magnetic object in the field experiences. Two 'like' magnetic poles repel and two 'unlike' magnetic poles attract. Field lines flow from the north-seeking pole to the south-seeking pole.</p>
History	<p>Students will learn to understand the significance of developments in Industrial Britain, Europe and the wider world 1750-1901. This includes:</p> <ul style="list-style-type: none"> • Sense of period - Industrial Britain. • Substantive concepts – slavery, empire, industrialisation • Disciplinary concept – significance and interpretation. • Diversity – Britain's role in shaping world history and being shaped by. Legacy of Empire, colonialism and slavery. • Relationship between British Empire and Slavery – emergence of the Transatlantic slave economy • The Transatlantic slave economy - the trade of enslaved Africans, middle passage, plantations, slave auctions. • Abolition of slavery - role of key individuals (e.g. Wilberforce, Clarkson and Equiano) as well as uprisings on plantations by enslaved Africans. <p>Students will learn to understand the changes and continuities in Industrial Britain 1750-1901. This will include:</p> <ul style="list-style-type: none"> • Sense of period - Industrial Britain. • Substantive concepts – social, religious, cultural, political, economic and military concepts. • Disciplinary concept – change and continuity. • Diversity – Britain's role in bringing about industrial economy. Impact of different group in society. Emergence of modern political rights. Developments in public health. • The Agricultural revolution, the emergence of factories, factory conditions and reform. • Public health - Cholera Case Study-John Snow and Epidemiology, the Great Stink, Bazalgette and Sewers, Public Health Acts. • Social reform- Case study of Jack the Ripper and the issues of poverty, crime and women's place in society • Emergence of franchise- Development of voters rights – Peterloo massacre, Chartists, reform acts of 1832, 1867 and 1884.
Geography	<p>Half Term 3: Students are learning to understand how coastal landscapes are formed. This includes:</p> <ul style="list-style-type: none"> • Coastal processes – erosion, transportation and deposition • Coastal landforms – Headland/bay, cave/arch/stack/stump

	<ul style="list-style-type: none"> • Coastal management strategies (hard and soft engineering) <p>Half Term 4: Students are considering the issues surrounding the world's growing population. This includes:</p> <ul style="list-style-type: none"> • Causes of global population increase. • Analysis of population pyramids, using them to explain how a population will change in the future. • How a named country has used a population policy and evaluate the impacts that it had. • Impacts of overpopulation
French	<p>Students are learning to express their opinions of TV and digital technology and further develop their transactional language in the context of arranging to go out. They will use three tenses together. Students will be able to demonstrate an awareness of leisure activities in different Francophone countries. This will include:</p> <ul style="list-style-type: none"> • Singular and plural adjectives agreement • Forming and answering a range of questions • More negative structures • Spotting synonyms • Recognising perfect tense 'signposts' in a text • Using three tenses when speaking • Using key irregular verbs – <i>prendre</i> and <i>lire</i>
Spanish	<p>Students will be able to express likes/dislikes around food and learn transactional language relating to eating out (including <i>usted(es)</i>). They will be introduced to using 3 tenses together. Students are also shown some typical Spanish menus and learn about traditional foods of Central and South America.</p> <ul style="list-style-type: none"> • Negatives (<i>no, nunca, nada</i>) • Near future • Three tenses together • Direct object pronoun
Computer Science	<p>Students will learn about different types of graphics and their purposes. Specifically, students will be able to:</p> <ul style="list-style-type: none"> • recognise the difference between a Vector and a Bitmap graphic. • identify file types and formats. • appropriately format a digital graphic. • recognise key tools and techniques for creating a digital graphic. <p>They will go on to study computer systems Students are learning about representation of data, storage and binary Specifically, students will:</p> <ul style="list-style-type: none"> • be able to convert binary.

	<ul style="list-style-type: none"> • be able to convert between binary and denary. • be able to add 2 8-bit numbers. • understand how modern storage technology works.
Art	<p>Theme: Marion North Students will have exposure to a wide range of media and techniques to develop botanical art Students will:</p> <ul style="list-style-type: none"> • Learn to complete detailed observational drawings • Develop more advanced colour skills • Make contextual and contemporary connections and artist research. • Develop descriptive and analytical language both written and visual
DT	<p>Students will develop and build upon the knowledge, skills and understanding acquired in Year 7. Their innovation and quality control skills are developed as well as their independence. They will develop 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 and Nutrition, Timber based materials (Resistant Materials), Papers and Boards (Graphics) and Textile based materials. They will experience a number of these disciplines throughout the academic year. The five core topics of the Design and Technology curriculum are:</p> <ul style="list-style-type: none"> • Design principles: Students will independently research and explore to develop their own design ideas. They will design a range of ideas in response to a brief and will use feedback from others to develop their ideas. They will learn to use a variety of approaches including isometric and orthographic technical drawings. They will develop the skill of avoiding design fixation. Annotation skills and knowledge of dimensions will be developed. In Food, Students will develop the confidence to adapt and refine a range of dishes in response to dietary choices. Students will focus on nutritional, cultural, religious and ethical diets. • Making principles: Students will make a range of products in lessons. The use of more complex materials, equipment and manufacturing techniques are taught. Students are introduced to metal dip coating, pewter casting, vacuum forming, batik dyeing, patchwork construction and a range of modelling methods. Students develop their knowledge and skills in computer aided design. 2D Design and Illustrator are taught. Quality control skills are developed in Year 8 as well as the ability to work independently when making a product. Students demonstrate good standards of health and safety awareness. In Food, Students develop their knowledge of food safety and hygiene. They develop their food preparation and cooking skills as higher risk foods are cooked and good chopping, shaping and presentation skills are emphasised. • Technical principles: Students in Year 8 will confidently explain the origins and properties of a range of materials including plastics, fabrics and metals. Students will select appropriate materials for different uses. Knowledge of smart materials will be learnt. Students will apply colour theory. In Food, Year 8 Students will recognise and apply knowledge of temperatures when cooking. Students will explain in detail the difference between micronutrients and macronutrients. • Sustainability and the environment – Knowledge of sustainability is developed and applied. Links to current world events are incorporated into lessons. Students are encouraged to problem solve and creatively consider the environment when designing

	<p>and making. Students evaluate their carbon footprint in evaluations and design specifications. Students develop and apply knowledge of the 6R's. Free range, organic and Fairtrade knowledge is taught.</p> <ul style="list-style-type: none"> • Analyse and evaluate – Students develop knowledge of existing products and evaluate the work of others in further detail. Very good conclusions are made when evaluation writing and subject specific vocabulary is used. Functional testing methods are developed, and third-party feedback given. Students in Food, Students develop understanding of sensory analysis. <p>Students will continue to develop their knowledge of the CET Knowledge Connected curriculum. The key concepts are re-introduced with a specific focus on Meaning and Performance. Famous designers are introduced including Alessi, Bisa Butler and Vivienne Westwood.</p>
RE	<p>Students are considering: 'Is death the end?'</p> <p>They will explore a variety of religious and secular ideas about what happens when we die and whether death is the end. Students will consider whether beliefs about the afterlife influence the way people live their lives. By the end of this phase of the religious studies journey students will have a firm understanding of what death means for some people across the world and why it is a significant part of a person's life. This particular unit builds on this sensitive topic touched on in HT1 and also brings in ideas of spirituality and how to live a good life that was introduced in year 7. The notion of death is one that affects everyone and is an issue which students will encounter within their lives if they have not done so already. It is key to allow students to understand why death may not seem to be the end for some people but why for others it is. They are given a comfortable low threat environment in which to ask questions and discuss any experiences that they think may be valuable to this course of study and to the student's wider experience. Students will take away information which allows them to question different views on the afterlife but also a lifelong skill of being able to ask questions and discuss sensitive topics.</p>
PE	<p>Students are learning to develop a broader range of skills and techniques within their sports. They will start to show a deeper understanding of rules and start to apply tactics in games situations. Students are learning to develop an understanding of regulations within sports. Students are learning to lead skills sessions to a small group.</p> <p>Through a range of sports students will start to develop the following.</p> <ul style="list-style-type: none"> • Application of key personal qualities of commitment, resilience, determination, problem solving, fairness and enthusiasm and an appreciation of honest competition and good sportsmanship in a range of different situations or scenarios. • A coherent understanding of more advanced rules, regulations and scoring systems in the sports/activities studied. • A greater comprehension of the major muscle groups and bones in the body and how they specifically relate to the sports/activities being studied (using correct terminology – gastrocnemius not calf). • Apply the knowledge of the key techniques and tactics used in the sports/activities being studied. • Apply the knowledge of the physical and skill-related components of fitness and how these are used in a number of sports/activities.

Drama	<p>Students are focusing on the exploration of a text, <i>Macbeth</i>, and exploring styles and genres of theatre.</p> <p>Students will:</p> <ul style="list-style-type: none"> • Be introduced to the styles of Theatre and develop understanding of the history and key techniques still relevant to today. Students will focus on Boal, Brecht and Stanislavski. • Understand the basic skills of devising original drama • Explore extracts from the Shakespearean play <i>Macbeth</i> and understand how to interpret a script through stage directions and design possibilities • Understanding how to direct a group of peers
Music	<p>Students are learning to develop their instrumental skills through the topic of Film Music:</p> <ul style="list-style-type: none"> • Posture • Instrumental techniques • Dynamic control • Exploration of timbre • Tempo <p>Students are developing their skills in simple notation:</p> <ul style="list-style-type: none"> • Apply a form of notation as appropriate <p>Students will increase their experience of a solo and ensemble performance within the classroom setting. Students will be exposed to variety of examples of music.</p>