

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.

Below you will find a detailed overview of what Year 8 students are learning in each of their subjects in Half Term 1 and 2 (September-December)

Year 8 Curriculum – Autumn Term 2021 - *To support parents and students.*

Subject	Autumn Term Topics
English	<p>Half Term 1: The Boy in The Striped Pyjamas by John Boyne or Animal Farm by George Orwell Students are exploring the key themes and ideas within a prose text, whilst beginning to investigate how the writer has built the text to create meaning. They are exploring texts to know and understand the authors craft through reading a challenging variety of literature:</p> <ul style="list-style-type: none">• Narrative voice• Character• Setting and atmosphere• Methods of creating meaning• Context• Language choices• Structural choices <p>Half Term 2: Nautical and Adventure Fiction Students are exploring ways to engage audiences with language, tone and structure when writing imaginatively to explore and entertain. They are exploring a range of imaginative texts and using:</p> <ul style="list-style-type: none">• Language

	<ul style="list-style-type: none"> • Genre • Intonation • Figurative language • Specific structural features e.g. start, middle, end. • Engaging openings and endings
<p style="text-align: center;">Maths</p>	<p>Students are learning to apply their mathematical knowledge to a range of contexts. Specifically, students will have an in depth understanding of the number system and how this links to algebra.</p> <p>Algebra</p> <ul style="list-style-type: none"> • Forming and solving equations and inequalities • Expanding brackets and factorising • Form algebraic expressions • Linear graphs and parallel lines <p>Number</p> <ul style="list-style-type: none"> • Rounding • Estimation • Bounds • Fractions of amounts • Percentages of amounts <p>Shape, space and measure</p> <ul style="list-style-type: none"> • Understand and use angle facts • Solve angle problems • Bounds • Conversion
<p style="text-align: center;">Science</p>	<p>Biology: Breathing and digestion</p> <p>Students will learn how gas exchange, oxygen and carbon dioxide move between alveoli and the blood. Oxygen is transported to cells for aerobic respiration and carbon dioxide, a waste product of respiration, is removed from the body. Breathing occurs through the action of muscles in the ribcage and diaphragm. The amount of oxygen required by body cells determines the rate of breathing.</p> <p>Students will also learn how the body needs a balanced diet with carbohydrates, lipids, proteins, vitamins, minerals, dietary fibre and water, for its cells' energy, growth and maintenance. They will learn how organs of the digestive system are adapted to break large food molecules into small ones which can travel in the blood to cells and are used for life processes. They will learn that iron is a mineral important for red blood cells, that calcium is a mineral needed for strong teeth and bones and that vitamins and minerals are needed in small amounts to keep the body healthy.</p> <p>Chemistry: Climate and Resources</p>

	<p>Students will also learn how carbon is recycled through natural processes in the atmosphere, ecosystems, oceans and the Earth's crust (such as photosynthesis and respiration) as well as human activities (burning fuels). They will learn that scientists have evidence that global warming caused by human activity is causing changes in climate. They will learn that methane and carbon dioxide are greenhouse gases and that the Earth's atmosphere contains around 78% nitrogen, 21% oxygen, <1% carbon dioxide, plus small amounts of other gases. They will understand that only a certain quantity of any resource on Earth, so the faster it is extracted, the sooner it will run out. They will consider how recycling reduces the need to extract resources and that most metals are found combined with other elements, as a compound, in ores. The more reactive a metal, the more difficult it is to separate it from its compound. Carbon displaces less reactive metals, while electrolysis is needed for more reactive metals.</p> <p>Physics: Contact and Pressure Students will learn how when the resultant force on an object is zero, it is in equilibrium and does not move, or remains at constant speed in a straight line. One effect of a force is to change an object's form, causing it to be stretched or compressed. In some materials, the change is proportional to the force applied. They will learn how to sketch the forces acting on an object, and label their size and direction. They will study how pressure acts in a fluid in all directions. It increases with depth due to the increased weight of fluid, and results in an upthrust. Objects sink or float depending on whether the weight of the object is bigger or smaller than the upthrust. Different stresses on a solid object can be used to explain observations where objects scratch, sink into or break surfaces. Know how to use the formula: fluid pressure, or stress on a surface = force (N)/area (m²)</p>
History	<p>Students will learn to understand the causes and consequences of revolutions in Britain, Europe and the wider world 1509-1800.</p> <p>This includes:</p> <ul style="list-style-type: none"> • Sense of period - Early Modern Britain and wider chronological framework. • Substantive concepts – Revolution • Disciplinary concepts – cause and consequence. • Diversity – conflict within nations of different groups and trans-national nature of revolution. Rights and responsibilities. • Stuart England – Gun Powder Plot - religious conflict • The English Civil War and Cromwell's rule • The Scientific revolution • The American Revolution • The French Revolution
Geography	<p>Half Term 1: Students are considering the causes and consequences of climate change at different scales.</p> <p>This includes:</p> <ol style="list-style-type: none"> 1. Human causes of climate change. 2. Natural causes of climate change. 3. The local, national and global consequences of climate change. 4. The strategies that can be implemented to mitigate/adapt to climate change.

	<p>Half Term 2: Students are learning to understand how ice shapes our landscapes. Students are exploring the impacts of climate change on polar regions.</p> <p>This includes:</p> <ol style="list-style-type: none"> 1. Different glacial processes that help to shape the landscape. 2. Glacial landforms, e.g. corrie, arete and pyramidal peak. 3. Case study on impacts (social, economic, environmental) of melting polar ice in Russia. 4. How humans interact with glacial environments.
French	<p>Half Term 1 Theme: Holidays Students are learning to describe a recent summer holiday in detail, using both the present and the perfect tenses. Students are learning to give an account of a past holiday experience, including activities, destination, passengers, key events.</p> <p>This will include:</p> <ul style="list-style-type: none"> • Avoir/ être • Perfect tense of regular er - verbs & irregular verbs • Perfect tense of verbs that takes être • Negative ne...pas with perfect tense • Use present and perfect tenses together <p>Half Term 2 Theme: Festivals and celebrations Students are learning to describe a typical French festival and use transactional language in the context of buying food at a French market. They will also revise the present and near future tenses and continue to practise the perfect tense.</p> <p>This will include:</p> <ul style="list-style-type: none"> • Opinions & justifications • Describing Francophone festivals and celebrations • Buying food at a market • Talking about a future trip • Present tense of regular –ir and –re verbs • The present tense of vouloir • Partitive articles (du/de la/ des/de l') • The near future tense • Forming questions in the near future tense

Spanish	<p>Half Term 1 Holidays Students will be able to talk about the Summer they have just had using the preterite and present tenses together. They will be able to say what they did and express an opinion.</p> <ul style="list-style-type: none"> • Preterite of <i>ir</i> • Preterite of regular –ar, -er and -ir verbs • Preterite of <i>ser</i> • (Extension) Two tenses together <p>Half term 2 Pass times Students will continue to develop what they can say about their lives and their likes/ dislikes, including comparatives. They will talk about their phones, music, tv and what they did yesterday. This will allow them to revise the present tense and continue to practise the preterite.</p>
Computer Science	<p>Students are learning about computer crime and cyber security.</p> <p>Specifically, students will be learning:</p> <ul style="list-style-type: none"> • To be able identify online security threats and understand the principles of the computer misuse act. They will learn to protect themselves online. • How to explain what malware is and give some examples of how it operates and what the impact could be on a device or user (e.g. viruses, trojans, ransomware) • How to explain what cookies are and can give examples of how online browsing can be tracked. They will identify commercial content and scams (e.g. pop-ups, spam) and can discuss simple strategies to manage such content (e.g. pop-up blockers, junk folders, unsubscribing). • How presenting them self in different ways online carries both benefits and risks and they can describe and assess what these could be. They will be able to explain strategies to reduce potential risks. • How relationships can safely begin (on- line dating), develop, be maintained, change and end online. How to make positive contributions to online debates and discussions. How what I write online can also affect my school, family or social group, or future opportunities. They will discuss strategies to manage and protect their ‘digital personality’ <p>They will learn to use computers safely and legally:</p> <ul style="list-style-type: none"> • Identifying the principles of fair use and apply this to case studies and the potential consequences of illegal access or downloading and how it may impact me and my immediate peers • Understanding the computer misuse enables students to operate within the law and understand their rights.
Art	<p>Term 1 Theme: Natural Forms Students will have exposure to a wide range of media and techniques to develop the formal elements through experimental drawing from observation. They will be exploring fruit and shells and will be encouraged to work from images and from direct observation of real subject matter.</p> <ul style="list-style-type: none"> • Students will gain confidence in using: • Pencil/pen

	<ul style="list-style-type: none"> • Chalk/charcoal • Oil pastel <p>Students are learning to develop their annotation, critique and reflection skills and be able to discuss materials and choice.</p> <p>Term 2 Theme: Natural Forms Students will continue exploring the theme by studying flowers, leaves, mushrooms etc They will be using:</p> <ul style="list-style-type: none"> • Watercolour • Acrylic paint • Ink <p>Students will be creating a larger outcome where they will select the media of their choice. They will be exposed to a variety of artists to inspire and develop individual ideas.</p>
DT	<p>In YR 8 Design Technology, pupils develop and build upon the knowledge, skills and understanding they learnt in Year 7. Their innovation and quality control skills are developed as well as their independence when working in lessons.</p> <p>Year 8 pupils will further 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. Year 8 pupils 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> <ul style="list-style-type: none"> • Design principles: Pupils 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, pupils will develop the confidence to adapt and refine a range of dishes in response to dietary choices. Pupils will focus on nutritional, cultural, religious and ethical diets. • Making principles: Pupils in Year 8 Design Technology make a range of products in lessons. The use of more complex materials, equipment and manufacturing techniques are taught. Pupils are introduced to metal dip coating, pewter casting, vacuum forming, batik dyeing, patchwork construction and a range of modelling methods. Pupils 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. Pupils demonstrate good standards of health and safety awareness. In Food, pupils 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.

	<ul style="list-style-type: none"> • Technical principles: Pupils in Year 8 will confidently explain the origins and properties of a range of materials including plastics, fabrics and metals. Pupils will select appropriate materials for different uses. Knowledge of smart materials will be learnt. Students will apply colour theory. In Food, Year 8 pupils will recognise and apply knowledge of temperatures when cooking. Pupils 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. Pupils are encouraged to problem solve and creatively consider the environment when designing and making. Pupils evaluate their carbon footprint in evaluations and design specifications. Pupils develop and apply knowledge of the 6R's. Free range, organic and Fairtrade knowledge is taught. • Analyse and evaluate – Pupils 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. Pupils in Food, pupils develop understanding of sensory analysis. <p>Throughout their time in Year 8, pupils 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>
Ethics	<p>Students are considering: 'Where do we come from? Is it "our" world?'</p> <p>Students study a range of different Creation stories, beginning with the Inuit and Aboriginal stories. This leads into the examination of Christian, Muslim, Hindu and Buddhist Creation stories and identifying their similarities and differences.</p> <p>Students consider whether cultural/religious Creation accounts are compatible with scientific explanations for Creation such as the Big Bang and evolution in addition to reflecting upon their own beliefs about how our universe and humanity came into existence.</p> <p>Using their knowledge of this range of accounts of Creation, students consider what messages they give us about humanity's place in the world and the level of responsibility humans have for taking care of our planet.</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. They will also develop within the following areas:</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. • Apply the knowledge of the key techniques and tactics used in the sports/activities being studied.

	<ul style="list-style-type: none"> • Apply the knowledge of the physical and skill-related components of fitness and how these are used in a number of sports/activities.
Drama	<ul style="list-style-type: none"> • Students will learn the skills and techniques and begin to combine these together to create a piece of Drama. • Students will be introduced to pantomime and explore these elements through practical exploration • Students will develop their vocal and physical performance skills and theatre techniques (levels/proxemics/transitions/status) • Students will learn how the historical context affects the application and appreciation of the key features of a play.
Music	<p>Students are improving their instrumental and singing skills by focussing on The Blues.</p> <ul style="list-style-type: none"> • Use of appropriate language • Unison and part singing • Intonation • Breath control • Posture • Aural perception • Warming up <p>Students are learning to develop improvisational skills:</p> <ul style="list-style-type: none"> • Creativity • Confidence • Fluency • Structure <p>Students are learning to develop an understanding of and explain the elements of music (using basic Italian terms):</p> <ul style="list-style-type: none"> • Pitch (melody) – vocal ranges • Tempo • Rhythm • Dynamics – forte, mezzo, piano • Texture (tonality/harmony) – phonics • Timbre – orchestral sections • Structure – binary, ternary, verse/chorus