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).

Subject	Autumn Term Topics
English	**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: • Narrative voice • Character • Setting and atmosphere • Methods of creating meaning • Context • Language choices • Structural choices **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: • Language • Genre • Intonation • Figurative language • Specific structural features e.g. start, middle, end

	• Engaging openings and endings
Maths	**Equations, Inequalities and Graphs** • Forming and solving equations • Representing and solving inequalities • Linear graphs and parallel lines **Estimating** • Rounding • Estimation • Bounds
Science	**Biology: Genetics** Students learn about how they inherit characteristics from parents through genetic material and how mutations can occur. Inherited characteristics are the result of genetic information, in the form of sections of DNA called genes, being transferred from parents to offspring during reproduction. Chromosomes are long pieces of DNA which contain many genes. Gametes, carrying half the total number of chromosomes of each parent, combine during fertilisation. The DNA of every individual is different, except for identical twins. There are more than one version of each gene e.g. different blood groups. **Biology: Evolution** Students look at how organisms that exist today have evolved, and how scientists are trying to prevent further species from becoming extinct. Natural selection is a theory that explains how species evolve and why extinction occurs. Biodiversity is vital to maintaining populations. Within a species variation helps against environment changes, avoiding extinction. Within an ecosystem, having many different species ensures resources are available for other populations, like humans. **Science in the media** Students are taught to pay attention to objectivity and concern for accuracy, precision, repeatability and reproducibility They understand that scientific methods and theories develop as earlier explanations are modified to take account of new evidence and ideas, together with the importance of publishing results and peer review. **Chemistry: Earth's structure and Rock cycle** Students will look at the formation and classification of Igneous, Metamorphic and Sedimentary rocks. They will look at how biological, physical and chemical weathering and erosion contribute to the rock cycle. **Physics: Sound**

	Students will learn about Frequencies of sound waves, measured in hertz (Hz); echoes, reflection and absorption of sound. They will learn that sound needs a medium to travel and the speed of sound in air, in water, in solids. Sound is produced by vibrations of objects and that sound waves are longitudinal. **Physics: Light** Students will also learn about the similarities and differences between light waves and waves in matter. Light waves travelling through a vacuum; speed of light. The transmission of light through materials: absorption, diffuse scattering and specular reflection at a surface. Students will carry out practicals looking at the use of ray model to explain imaging in mirrors, the pinhole camera, the refraction of light and look at how colours can be seen.
History	Students will learn to understand the causes and consequences of revolutions in Britain, Europe and the wider world 1509-1800. This includes: • 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 **Students will learn to understand the significance of developments in Industrial Britain, Europe and the wider world 1750-1901.** This includes: • 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.
Geography	**Half Term 1:** Students are considering the causes and consequences of climate change at different scales. This includes: • Human causes of climate change

	• Natural causes of climate change • The local, national and global consequences of climate change • The strategies that can be implemented to mitigate/adapt to climate change **Half Term 2:** Students are learning to understand how ice shapes our landscapes. Students are exploring the impacts of climate change on polar regions. This includes: • Different glacial processes that help to shape the landscape. • Glacial landforms, e.g. corrie, arete and pyramidal peak • Case study on impacts (social, economic, environmental) of melting polar ice in Russia • How humans interact with glacial environments
French	**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. This will include: • 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 **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. This will include: • 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
Computer Science	Computational thinking • Student will learn the concepts of Abstraction, computational thinking and decomposition. • How to design, create and read flowcharts. • How to understand vector and bitmap images. • How to edit and create images. They will learn to use computers safely and legally: • 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	**Half Term 1 Theme: Natural Forms** Students will have exposure to a wide range of media and techniques to develop their knowledge of the formal elements through experimental drawing from observation. They will be exploring sea life, shells and still life and will be encouraged to work from images and from direct observation of real subject matter. • Students will gain confidence in using: • Pencil/pen • Chalk/charcoal • Oil pastel Students are learning to develop their annotation, critique and reflection skills and be able to discuss materials and choice. **Half Term 2 Theme: Natural Forms** Students will continue exploring the theme by studying flowers, leaves, mushrooms etc They will be using: • Pencil • Pencil colour • Colour chalk • Oil pastel Students will be exposed to a variety of artists to inspire and develop individual ideas. They will be creating a detailed tonal drawing of a poppy seedhead.

DT	In Year 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. 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. The five core topics of the Design and Technology curriculum are: • **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, block printing, 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. • **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.

	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.
Ethics	Students are considering: 'Where do we come from? Is it "our" world?' 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. 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. 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.
PE	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: • 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. • Apply the knowledge of the physical and skill-related components of fitness and how these are used in a number of sports/activities.
Drama	Students are learning to apply the core skills and styles of Drama. Students will explore: • Collaboration and teamwork skills • Vocal and physical performance skills • Theatre techniques such as levels, proxemics, transitions and status • Epic theatre v's Naturalism (Brecht and Stanislavski)
Music	Students are improving their instrumental and singing skills by focussing on The Blues. • Use of appropriate language • Unison and part singing

	• Intonation • Breath control • Posture • Aural perception • Warming up Students are learning to develop improvisational skills: • Creativity • Confidence • Fluency • Structure Students are learning to develop an understanding of and explain the elements of music (using basic Italian terms): • Pitch (melody) – vocal ranges • Tempo • Rhythm • Dynamics – forte, mezzo, piano • Texture (tonality/harmony) – phonics • Timbre – orchestral sections • Structure – binary, ternary, verse/chorus