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 9 students are learning in each of their subjects in Half Term 5 and 6 (Easter – July).

Subject	Summer Term Topics
English	**Half Term 5: Tainted Love Comparative Poetry Anthology** Students will be exploring a range of methods employed by poets to convey meaning and influence a reader using: • Form and Structure • Themes • Context • Poet's intentions • Language analysis • Extended writing • Analysis and annotations of poems • Developing comparative skills **Half Term 6: DNA by Dennis Kelly** Students are learning to explore and recognise dramatic conventions and how writers use the dramatic form to present their own ideas and viewpoints in a modern play using: • Wider reading • Contextual study • Characterisation • The influence of contextual situations • Close analysis and annotation of key scenes • Close analysis of authorial method • Evaluating texts critically with the support of textual references

Maths	**Similarity and Trigonometry** • Similar shapes • Area and volume of similar shapes • Right angled trigonometry **Numbers in context** • Standard Form • Problem solving with number
Science	**Biology: Ecology** Students will learn about human impact on the environment (both positive and negative). Ecosystems provide essential services that support human life and continued development. To continue to benefit from these services humans need to engage with the environment in a sustainable way. Students will explore how humans are threatening biodiversity as well as the natural systems that support it. They also consider some actions needed to take to ensure future health, prosperity and well-being. **Biology: Ecosystems** Students will build on their learning from year 7, studying pyramids of number and biomass, trophic levels, predator prey cycles. They will learn about adaptations of plants and animals, and how these link to the biotic and abiotic factors within an environment. Students learn how abiotic and biotic factors influence the environment around them. They use this information to carry out an ecology investigation developing their disciplinary skills including systematic and random sampling. **Chemistry: The Periodic Table:** Students will learn that the periodic table provides chemists with a structured organisation of the known chemical elements from which they can make sense of their physical and chemical properties. They will study the historical development of the periodic table and how models of atomic structure provide good examples of how scientific ideas and explanations develop over time as new evidence emerges. Students will understand how the arrangement of elements in the modern periodic table can be explained in terms of atomic structure which provides evidence for the model of a nuclear atom with electrons in energy levels. **Physics: Forces and their effects** Students will build on learning from previous years to explain that a force causes an object to undergo a specific change. Unbalanced forces cause changes in speed, shape or direction. Students will be able to calculate work done. Students will complete a practical linked at Hooke's Law and apply their knowledge of elastic limit to this. Students then look at pressure in fluids and how this can be used to make hydraulic machines. **Physics: Fundamentals of Electricity**

	Students will build on their learning from previous years and be able to describe what electrical charge is and what is needed for it to flow. They will learn the rules for current, potential difference and resistance in both series and parallel circuits and use equations to calculate I, V and R. Students will learn about different components such as thermistors and diodes.
History	Students will learn to understand the significance, cause and consequences of events and human action in relation to the Holocaust. This will include: • Sense of period – 20th century. • Substantive concepts – social, religious, cultural, political, economic and military concepts. • Disciplinary concept – change and continuity, significance. • Diversity – The persecution of the European Jewish population. • The Holocaust- antisemitism through time, Nuremburg laws, Kristallnacht, Ghettos, case study of Battalion 101, the 'Final Solution' (genocide), resistance. Students will learn to understand the change and continuities in medicine and health from the Medieval period to the present day. This will include: • Sense of period – Medieval, Renaissance, Industrial, Modern. • Substantive concepts – social, religious, cultural, political, economic and military concepts. • Disciplinary concept – change and continuity, significance. • Diversity – The differences in access to healthcare in relation to wealth and education. • Medicine through time (end of KS3 thematic study)- the study of ideas about the cause of disease, treatments and prevention from 1250-present.
Geography	**Half term 5: Our Violent Planet (Earthquakes)** Students will be able to recognise features of earthquakes and make comparisons between them. They will understand the effects and responses to earthquakes and understand why people still live there. This will include: • Distribution of earthquakes • Impacts of earthquakes in countries at different levels of development • Responses to earthquake hazards • Case studies of two earthquake events in countries at different levels of development. • How to manage earthquake hazards. **Half term 6: Our Violent Planet (Tropical Storms)** Students will be able to recognise features of tropical storms. They will understand their global distribution and focus on a specific case study. Pupils will understand the primary and secondary impacts, prediction and management of a named storm.

Spanish	**Half Term 5: Youth in action** Students will learn about children's rights, fair trade, recycling and world issues. They will relate this to how their town has changed. They have an opportunity ahead of GCSE to talk about wider, global issues and to develop language for expressing their beliefs. Also, an introduction to the imperfect. Plus, opportunity to read two poems by the Spanish poet, Gloria Fuertes and a traditional Peruvian folk tale. Grammar: • Stem-changing verbs (poder) • Present tense verbs in the 3rd person (s/p) • Se debería Imperfect tense **Half Term 6: My adventure in Madrid** Students will learn to talk about visiting Madrid and buying souvenirs. They will discuss what they will do tomorrow using the simple future tense. They will also explore the two tenses together. • Expressions with tener • Simple future tense • The superlative • The comparative
Computer Science	**AI** **Ethics, reliability and bias** What is artificial intelligence, and how does it differ from traditional computer programming? Can you give an example of how AI is used in everyday life? • Machine learning – how does AI work & challenges • How is intelligence measured • Turing test What are some ethical concerns surrounding the use of AI?
Art	**Theme: Portraiture** Students will learn about the proportions of the human face and how to draw facial features accurately. They will create portraits inspired by the work of three contemporary portrait artists. Students will produce a final portrait inspired by their favourite of the three artists.

DT	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. 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. The five core topics of the Design and Technology curriculum are: **Design principles:** 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 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. 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.
RE	Students will spend their time in this unit building on the discursive and evaluative skills developed in the previous half term. This knowledge will focus on prejudice and discrimination. The topics start with Human rights, cover Racism and Homophobia. The aim is to broaden the students' knowledge of people who have faced discrimination as well as developing skills of empathy with the aim of developing into well rounded young people.
PE	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. 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. Summer sports include – Cricket, Rounders, Softball, Tennis, Athletics
Drama	Students are exploring, analysing and evaluating a text They will focus on: • DNA by Dennis Kelly and Live Theatre review • Performance skills, physical and vocal skills applied to a challenging modern text • Blocking, staging and delivering lines • Taking direction to enhance performance

	• Analysis of plot and character • Justification and review of a performance • Audience thoughts and reactions • Evaluate purpose of a moment/action • Evaluate the production elements within a performance
Music	Students will be creating their own music using the software Soundtrap Students are securing an understanding of melodic and harmonic devices: • Extended Phrases • Chord progressions • Texture - phonics • Structure (see Autumn unit) Students are developing more complex aural skills. They are developing stylistic awareness of music from unfamiliar traditions. Students are creating a piece of music where the musical elements enhance the composition. This includes: • Pitch (melody) • Tempo • Rhythm • Dynamics – diminuendo, crescendo • Texture (tonality/harmony) - phonics • Timbre • Structure – as Year 8 + rondo • Including appropriate record keeping