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 5 and 6 (Easter – July).

Subject	Summer Term Topics
English	**Half Term 5: Relationship Poetry Anthology** Students will explore a range of writers' ideas and themes from a variety of poems exploring different types of relationships. Students will begin to build comparative poetry skills. They will explore a range of methods employed by writers to convey meaning and influence a reader using: • Poetic devices • Structure • Themes • Context • Writer's intentions Students will explore different forms of poetry to be able to: • Identify, interpret and analyse the effect of poetic devices • Using references to support and develop their responses • Comment on and compare increasingly challenging themes and ideas and how different audiences respond. • Compare ideas and themes across two or more texts **Half Term 6: Literary Shorts Anthology** Students will be exploring and analysing a selection of short stories covering English literary heritage, seminal world literature and contemporary writers. Students will focus on: • Audience and purpose • Tone and style. • Setting and atmosphere • Language and structure

	• Characterisation • Developing critical and evaluative skills • Annotation of extracts/ sections of text
Maths	**Angles and 3D Shapes** • Exterior and interior angles in polygons • Angles in parallel lines • Reasoning with angles • Area and volume • 3D nets and surface area
Science	**Biology: Respiration** 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. **Biology: Photosynthesis** Students will learn that 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. **Chemistry: Metals and Non-metals.** Students will learn that metals and non-metals react with oxygen to form oxides. Metals can be arranged as a reactivity series in order of how readily they react with other substances. Some metals react with acids to produce salts and hydrogen. **Chemistry: Acids and Alkalis.** Students will learn that the pH of a solution depends on the strength of the acid: strong acids have lower pH values than weak acids. Students learn to use indicators to measure the pH of a substance. Mixing an acid and alkali produces a chemical reaction, neutralisation, forming a chemical called a salt and water. **Physics: Electricity and circuits** Students will learn how we can model voltage as an electrical push from the battery. 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) ÷ current (A). 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. **Physics: Electromagnets**

	Students will learn that 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. Two 'like' magnetic poles repel and two 'unlike' magnetic poles attract. Magnetic materials, electromagnets and the Earth create magnetic fields which can be described by drawing field lines to show the strength and direction. Field lines flow from the north-seeking pole to the south-seeking pole.
History	**Students are learning about changes and continuities in the rights of minority groups and creating an inclusive society.** This will include: • Sense of period - Late 19th and 20th centuries • Substantive concepts – social, cultural, political and economic concepts. • Disciplinary concept – change and continuity. • Diversity – Emergence of modern political and social rights. • American Civil Rights- abolition of slavery in USA, Jim Crow era, the murder of Emmett Till, Rosa Parks and the bus boycott, the Bristol bus boycott, Martin Luther King and Malcolm X, the Civil Rights bill of 1964. • British Female suffrage- Suffragists, Suffragettes, Emily Davison. • British Immigration- Post WW1 Britain- race riots and the case study of Charles Wooton, the Windrush generation. • Emergence of LGBTQ and disability rights in Britain.
Geography	**Half Term 5:** Students will explore the human and physical Geography of Asia. This will include: • Social, Economic and Environmental Impacts of rapid urbanisation on a named megacity. • Causes and consequences of flooding. • Case study of a flood event on a named river. • Energy use. • The monsoon climate • Palm oil. • Tectonic hazards. **Half Term 6:** Students will conduct small scale fieldwork. This will include: • Fieldwork techniques linked to the human Geography of the local area e.g. traffic or pedestrian count, land use, environmental quality survey, questionnaires.
French	**Half Term 5 Theme: Town and home** Students will learn to develop their use of different persons of the verb and use modal verbs as well as reflexive verbs in context of daily routine.

	Pupils learn about geographical aspects of France and Francophone countries as well as about famous French painters and their works of art. • Use pouvoir + infinitive • Use devoir • Reflexive verbs • Listen for different persons of the verb • Irregular adjectives (beau, nouveau, vieux) • Use three tenses in writing • Understand questions in different tenses They will also have further practice with three tenses. **Half Term 6 Theme: Sports** Students will learn to develop what they can say about their lives and their likes/ dislikes, including comparatives. To introduce the imperative for asking directions and give further practice with transactional language in context of talking to the doctor. • Students also learn about some famous sportspeople in the Francophone world. • Using 'jouer à' and 'faire de' • Using the comparative • Using the imperative • Using 'il faut' to say 'you must Asking and answering questions in 3 tenses
Computer Science	They will go on to study computer systems Students are learning about representation of data, storage and binary Specifically, students will: • be able to convert binary. • be able to convert between binary and denary. • be able to add 2 8-bit numbers. • understand how modern storage technology works. • Read and create logic gates.
Art	**Theme: Art of 1920's** Pupils will continue produce a range of artworks inspired by a range of artists working across Europe 100 Years ago from today (for example, Matisse, Fauves, Futurists, Picasso) using exploring collage and collagraphy techniques. They will develop cross curricular links through the focus on work from the 1920's and be introduced to the work of exciting artists working today.

DT	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: • **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 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. • **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. 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.
RE	**Topic: What are life's ultimate questions?** Students will learn: • To understand what ultimate questions are • To reflect on many examples using a balanced argument. • To explore the main types of believers and reasons to believe in God. • To explain what is meant by an ultimate question and evaluate some ultimate questions. • To explain what the illuminati is and to evaluate its truth. • To understand and evaluate different rules people follow.

	• To understand the different religious perceptions of God. • To understand some unusual questions and comprehend the answers with reasons.
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. Through a range of sports students will start to develop the following. • 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	Students are focusing on the exploration, analysis and evaluation of a chosen text. Students will explore: • William Shakespeare's Hamlet and The National theatre • Developing their understanding of reading and interpretating a text • Analysing plot and characterisation • Reflecting and justifying what has worked and what hasn't been effective in a performance • Audience reactions • Evaluate the purpose of a moment/action in a performance
Music	Students will develop an understanding of melodic and harmonic devices. This will include: • Phrases • Chord progressions • Texture - phonics • Structure (see Autumn unit) Students will develop aural skills. This will include: • Stylistic awareness of at least a second world tradition, classical and popular style of music • Compare and contrast music

	Students will create a piece of music incorporating musical elements. This will include: • Pitch (melody) • Tempo • Rhythm • Dynamics – forte, mezzo, piano • Texture (tonality/harmony) - phonics • Timbre • Structure – binary, ternary, verse/chorus • Including appropriate record keeping