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.

ABBEYFIELD SCHOOL
Creative Education Trust

Below you will find a detailed overview of what Year 9 students are learning in each of their subjects in Half Term 3 and 4 (September-Easter)

Year 9 Curriculum – Spring Term 2020-21 - *To support parents and students.*

Subject	Spring Term Topics
English	**Half Term 3 Theme: A Midsummer Night's Dream** Students are learning to embed knowledge about Shakespeare by reading and exploring a play by Shakespeare and engage with the writer's use of language, character and plot. They are embedding prior knowledge of Shakespearean texts and will understand: • Elizabethan attitudes • The Globe Theatre • Stage crafting • Character • Structure • Plot • Setting, tone and atmosphere • Dialogue **Half Term 4 Theme: The Sign of Four** Students are learning to embed their knowledge of non-fiction texts when writing to argue, persuade and advise; to use knowledge in a spoken language task. They are embedding prior knowledge of non-fiction texts in order to be able to write in style with knowledge of:

	• Vocabulary and sentence structure for purpose and effect • Spelling and punctuation • Clarity, variety and imagination • Tone, style and register • Form, purpose and audience - e.g. articles (headline, pictures, columns etc.)
Maths	**Half Term 3:** Students are learning to be able to apply their mathematical knowledge to a range of contexts. Specifically, students will have an in depth understanding of algebra techniques including quadratics, probability and geometrical reasoning. **Geometry** • Construction • Congruence • Loci • Pythagoras theorem (including 2D and 3D* - Higher) **Half Term 4:** Students are learning to be able to apply their mathematical knowledge to a range of contexts. Specifically, students will have an in depth understanding of rates of changes, algebraic proportion, solving more complex equations, geometrical reasoning including Pythagoras and an instruction to exact numbers in surd form. **Ratio and Proportion** • Scales and maps • Real life graphs • Rates of change • Ratio notation • Relationship between fraction and ratio • Direct and Inverse proportion (H- Algebraic)
	Biology: Organisation Students are learning that cells join to make tissues, different tissues make up organs, and different organs contribute to organ systems. The digestive system can be used to illustrate this relationship. Digestive enzymes are essential to the functioning of the digestive system. Enzymes work as a key would in a lock, the effectiveness of the enzyme is lessened if conditions move away from the optimal conditions. Different enzymes work within different environmental conditions to take action of different macronutrients. The circulatory system transports

Science	blood around the body. The human circulatory system consists of a heart and 3 types of blood vessel; artery, vein and capillary. These components work together as a double circulatory system. When problems occur within the circulatory system medical procedures may resolve the problem. Plants also have a transport system consisting of the xylem and phloem. Transpiration is the movement of water and mineral ions through a plant. The rate of transpiration is affected by many environmental factors. Water leaves the plant mainly via the stomata. The breathing system allows adequate gaseous exchange to occur at the alveoli through an effective ventilation process. Gas exchange causes differences in composition between inhaled and exhaled air. An individuals' vulnerability to a communicable disease can be affected a number of risk factors. These correlations can be studied using graphs. This can be illustrated by the wide range of cancer types and the risk factors that are associated with each. **Chemistry:** **Structure and Bonding:** Chemists use theories of structure and bonding to explain the physical and chemical properties of materials. Analysis of structures shows that atoms can be arranged in a variety of ways, some of which are molecular while others are giant structures. Theories of bonding explain how atoms are held together in these structures. **Earth's atmosphere and resources:** Students are learning about the use of the Earth's natural resources to manufacture useful products. However, in order to operate sustainably, chemists seek to minimise the use of limited resources, use of energy, waste and environmental impact in the manufacture of these products. Chemists also aim to develop ways of disposing of products at the end of their useful life in ways that ensure that materials and stored energy are utilised. Pollution, disposal of waste products and changing land use has a significant effect on the environment, and environmental chemists study how human activity has affected the Earth's natural cycles, and how damaging effects can be minimised. The Earth's atmosphere is dynamic and forever changing. The causes of these changes are sometimes man-made and sometimes part of many natural cycles. The problems caused by increased levels of air pollutants require scientists and engineers to develop solutions that help to reduce the impact of human activity. **Physics:** **Particle Model of Matter** Students are learning to use the particle model to explain changes in state and link this to total internal energy, specific latent heat and specific heat capacity. They will know that if the temperature of the system increases, the increase in temperature depends on the mass of the substance heated, the type of material and the energy input to the system. Use given equations to calculate SLH and SHC. They will be able to use the density equation to calculate relative densities of materials and link this back to the particle model and conservation of mass. They will use the particle model to explain how increasing the volume in which a gas is contained, at constant temperature, can lead to a decrease in pressure. Use the given equation to calculate changes in gas pressure/temperature or volume.

History	Students will learn to understand the significance of the Second World War and its impact on Europe and the Wider World. This will include: • Sense of period – Modern world. • Substantive concepts – social, religious, cultural, political, economic and military concepts. • Disciplinary concepts – change and continuity • Diversity – global nature of conflict, understanding concept of genocide and role of different factors in this. Role of empire. • Key turning points in Second World War (e.g. Blitzkreig, Dunkirk, Invasion of USSR, D-Day, Atomic Bomb) • Impact of Second World War, including Holocaust. Opportunity for links to Post-colonialism
Geography	**Half Term 3: Sustainability** Students will investigate different methods used to create a sustainable future at a local, national and global level. This will include: • Sustainability model • 2 examples from Local/National/Global - sustainability techniques e.g. *Bedzed, Olympics, sustainable cities e.g. Dubai, plastic, cloud forest for ecotourism, recycling in China, fracking, Eden Project.* **Half Term 4: Our violent planet (Volcanoes)** Students will be able to recognise features of volcanoes and make comparisons between them. They will understand the effects and responses to volcanic hazards and understand why people still live there. This will include: • What is a hazard? • What factors affect hazards? • Theory of plate tectonics - Structure of the earth, convection currents/Continental drift • Plate boundaries • Structure of volcanoes and the different types. • Distribution of volcanoes. • Impacts of volcanic hazard and responses. • Why do people live in hazardous environments? • Case studies of two tectonic hazards events at different levels of development. (Centre decision if earthquakes or volcanic eruptions)

French	**Theme: My Life in Music (Reminiscing)** Students will learn to talk about their tastes in music. They will be able to describe their former selves and interests, compared to their present-day selves. They will be able to describe how music, in particular, has changed over time. Students will cover: • Musical tastes • Describing your former self • Comparing secondary and primary schools • Contrast the past with the present • Interviewing a refugee • Direct object pronouns (le,la, les) • Adjectival agreement • Comparative structures • Imperfect tense, • Present + imperfect tense together • *Vouloir* + infinitive verb
Spanish	Students will be learning to discuss the importance of a healthy lifestyle. They will be introduced to talking about wider issues and will be given an opportunity to introduce some new verbs. **Theme: En forma** • Stem changing verbs (jugar, preferir) • Reflexive verbs • Se debe/no se debe Me duele(n) • The imperative • Direct object pronoun
IT/Computer Science	**Half Term 3: Python Programming** Students are learning to use text-based programming to: • Be able to write input and output statements.

	• Be able to create variables. • Be able to create selection statements. • Be able to create iteration statements. • Be able to use a built-in function. • Be able to create a function. **Half Term 4: Network Topologies** Students are learning about types of networks and encryption to: • Be able understand and identify network topologies • Be able to understand the process of encryption. • Understand advantages and disadvantages of network hardware.
Art	**Half Term 3:** **Theme: Cakes and Sweets** Students will be building upon skills and knowledge developed during Year 7 and 8 and will be introduced to new techniques. These techniques will include: Pencil Biro Charcoal Chalk Students will generate ideas from a range of contextual sources including the work of artist and designers such as Sarah Graham, Wayne Thiebaud, Joel Penkman, Nigel Humphries and Amanda Dedman. Students will explore and make use of a range of a range of art media and processes. Students will use drawing and other means in order to record ideas as their work progresses. Whilst working remotely, students will be using food as a narrative creating a series of drawings which tell a story.
	Half term 3: **Theme: Growth and Decay** Students will be building upon skills and knowledge developed during Year 7 and 8 and will be introduced to new Textile techniques.

Art Textiles	These techniques will include: Felting Embellishment Embroidery Pattern Observational Drawing Mono-printing. Students will generate ideas from a range of contextual sources including the work of artist and designers such as Jenny Pepper, Damian Hirst and William Morris. Students will explore and make use of a range of a range of art media and processes. Students will use drawing and other means in order to record ideas as their work progresses.
DT	Students are learning why and how products are designed. They will be considering the varying needs of the user. Students will be exploring a real-life design problem by: • learning about **designing for a particular user** • learning how to **simplify designs** • learning how to design to ergonomics
Graphics	Students are exploring a variety of media and techniques including ink, print and computer graphic design within the overarching theme of Mythology. This term, students will be bringing their own inspiration and design style into their work by choosing an aspect of Mythology to focus on and use their own preferred materials and style to develop a front cover and advertising standee for an exhibition on Mythology.
	Half Term 3: Students will be learning about Food Science. This will include: • Braising, simmering, blanching, boiling, poaching, roasting, grilling and baking • Investigating foods that require the above

Food	• Understanding why food is cooked Students will learn about the cooking of food and heat transfer This will include: • Why food is cooked and how heat is transferred to food - radiation, conduction, convection. **Half term 4:** Students will be learning about Food Safety, food spoilage and contamination and microorganisms and enzymes. This will include: • Investigating the different types of high risk and low risk foods, how they should be stored and cooked and how food deteriorates over time. • Denaturation, radiation and how to keep food safe whilst cooking.
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 learn: **Football** Key Skills - Passing, Control of the ball, Dribbling, Shooting, Tackling, Movement off the ball, Attacking, Defending 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. **Badminton** Key Skills- overhead drive, movement around the court, shot selection and combinations, doubles play, rules.

	Students will develop on the key skills they learnt in previous years and apply these to practice and competition more effectively, with increased control, accuracy, and consistency. Students will improve their tactical understanding of the sport and learn how to link multiple shots together to have the greatest impact when trying to outwit an opponent. Students will learn to read the game better which will increase decision making skills and impact positively on overall performance. Students will also develop their ability to play as a double, communicating and moving effectively to overcome challenges together. **Fitness** Students will develop a knowledge of the major muscle groups and bones in the body that specifically relate to the sports/activities being studied (using correct terminology – e.g. gastrocnemius, not calf), how to prevent injuries and which major muscle groups/bones are used in specific movements for each sport/activity. Students will be learning the physical and skill-related components of fitness giving examples of how these are used in a number of sports/activities and which sports/activities they are commonly needed for a performer to be successful e.g. a weightlifter would need high levels of muscular strength. Students will understand and carry out different methods of training to improve their fitness across a range of different components, and understand how this would impact their performance in a variety of sports.
Dance	Students are exploring the practitioner Akram Khan & Matthew Bourne Students will learn; • The key characteristics of Akram Khan • Be able to describe key motifs • Create interesting motifs • Develop ideas through motif development • Study Nutcracker Matthew Bourne and learn a key motif from Act 2 Gobstoppers • Develop the Gobstopers motif in group • Develop Technical/ physical/ mental and expressive skills
Drama	Students are continuing to develop, explore and engage with Noughts and Crosses. This term will be focusing on Act 2 of the play and will focus on: • Interpreting a script • Plot development • Character development • Structure of a performance – twists and cliff hangers

Music	*Students are expanding upon instrumental and compositional skills. This includes:* • *Use of appropriate language* • *Secure improvisational skills* • *Creativity* • *Confidence* • *Fluency* • *Structure* • *Increased range of notes* • *Dynamic control* • *Aural perception* • *Exploration of timbre* *Students are securing their notation skills where they will apply a form of notation as appropriate.* *Students will show an independence in solo and ensemble performance within the classroom setting and be exposed to variety of examples of music.*