

# 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.



**ABBNEYFIELD  
SCHOOL**  
*Creative  
Education  
Trust*

Below you will find a detailed overview of what Year 10 students are learning in each of their subjects in Half Term 3 and 4 (January – Easter)

## Year 10 Curriculum – Spring Term 2020-21 - *To support parents and students.*

Subject	Spring Term Topics
English	<p><b>Half Term 3 Theme: Macbeth</b></p> <p>Students will extend their knowledge of Shakespeare's work and engage with paper one texts using the requirements of the exam criteria to be able to produce an evaluative, written response. Students will be extending prior knowledge and understanding of texts to identify, understand and analyse how writer's use:</p> <ul style="list-style-type: none"><li>• Character, structure and setting to communicate their ideas.</li><li>• Their understanding the context of production and reception over time</li><li>• Ideas in the texts are contextually linked and shaped by society at the time.</li><li>• The ability to engage with the whole text and tracking character and theme throughout in order to formulate a perceptive and critical argument.</li></ul> <p><b>Half Term 4 Theme: Non-fiction texts (Paper 2, Section A)</b></p> <p>Students will extend the knowledge of non-fiction for Language paper two texts and use the requirements of the exam criteria to be able to produce an evaluative, written responses. Students are extending prior knowledge of non-fiction texts in order to understand and analyse how the writer's use:</p> <ul style="list-style-type: none"><li>• Implicit and explicit meanings</li></ul>

	<ul style="list-style-type: none"> <li>• Contextual situations to influence their text</li> <li>• Language and structure to create meaning</li> <li>• The structure of a text</li> <li>• Form, tone and a range of other methods to influence reader response</li> <li>• Their ideas and perspectives</li> </ul>
<p>Maths</p>	<p>Students are learning a variety of topics dependent on student ability and what knowledge needs strengthening as a result of lockdown:</p> <p>Students will cover various topics depending on a group they are in for Maths.</p> <p><u>10x1 KWN/AEs</u></p> <ul style="list-style-type: none"> <li>• Indices</li> <li>• Surds</li> <li>• Limits of accuracy</li> <li>• Quadratic graphs</li> <li>• Completing the square</li> </ul> <p><u>10x2 JCr</u></p> <ul style="list-style-type: none"> <li>• Solving equations</li> <li>• Solving Simultaneous equations</li> <li>• Combined events/ Probability</li> <li>• Counting, accuracy, powers and surds</li> </ul> <p><u>10x3 JBH/Tre</u></p> <ul style="list-style-type: none"> <li>• Sampling and more complex data handling diagrams</li> <li>• Counting</li> <li>• Accuracy</li> <li>• Powers</li> <li>• Surds</li> </ul> <p><u>10x4 KPs/SHs</u></p> <ul style="list-style-type: none"> <li>• Rates of pay</li> <li>• Density</li> <li>• Pressure</li> <li>• Simple and compound interest</li> <li>• Reverse percentages</li> <li>• Direct proportion</li> </ul>

- Inverse proportion
- Sampling
- Pie charts
- Scatter diagrams
- Line of best fit
- Grouped data and averages
- Constructing triangles
- Bisecting angles

#### 10x5 HKy

- Compound measures
- Compound interest
- Proportion
- Pie charts
- Scatter diagrams
- Construction
- Curved shapes and pyramids

#### 10y1 DCa

- Equivalent percentages, fractions and decimals
- Calculating a percentage of a quantity
- Increasing and decreasing quantities by a percentage
- Expressing one quantity as a percentage of another
- Compound measures
- Overview of percentages and compound measures
- Topic test
- Rotational symmetry (when returning to school)
- Translations
- Reflections
- Rotations
- Enlargements
- Fractional and negative enlargements
- Using more than one transformation
- Vectors
- Overview of transformations

	<p><u>10y2 AEs</u></p> <ul style="list-style-type: none"> <li>• Review algebraic notation, simplifying, expanding, factorising</li> <li>• Number review</li> <li>• Linear Equations</li> <li>• Geometric Transformations</li> </ul> <p><u>10y3 VKi</u></p> <ul style="list-style-type: none"> <li>• Vol and SA of cube, cuboid, prisms and cylinders</li> <li>• Solving linear equations, with brackets, with variables on both sides</li> <li>• FDP</li> <li>• Calculating percentages</li> </ul> <p><u>10y4 Tre</u></p> <ul style="list-style-type: none"> <li>• Area of shapes</li> <li>• Proportion</li> <li>• Transformations</li> <li>• Probability</li> </ul>
<p>Science</p>	<p><b>Biology: Control- Homeostasis and response</b></p> <p>Students are learning that cells in the body can only survive within narrow physical and chemical limits. They require a constant temperature and pH as well as a constant supply of dissolved food and water. In order to do this the body requires control systems (nervous and hormonal) that constantly monitor and adjust the composition of the blood and tissues. These control systems include receptors which sense changes and effectors that bring about a response. The structure of the nervous system explains how it can bring about fast responses called reflex actions. The hormonal system usually brings about much slower changes by glands secreting hormones that travel in the bloodstream to target organs. Hormonal coordination is particularly important in reproduction since it controls the menstrual cycle. The role of hormones in reproduction has allowed scientists to develop not only contraceptive drugs but also drugs which can increase fertility.</p> <p><b>Chemistry: Energy Changes, Rate and Equilibrium</b></p> <p><b>Energy Changes</b></p> <p>Students are learning that energy changes are an important part of chemical reactions. The interaction of particles often involves transfers of energy due to the breaking and formation of bonds. Reactions in which energy is released to the surroundings are exothermic reactions, while those that take in thermal energy are endothermic. These interactions between particles can produce heating or cooling effects that are used in a range of everyday applications. Some interactions between ions in an electrolyte result in the production of electricity. Cells and batteries use these chemical reactions to provide electricity. Electricity can also be used to decompose ionic substances and is a useful means of producing elements that are too expensive to extract any other way.</p>

**Rates and Equilibrium**

Students are learning that chemical reactions can occur at vastly different rates. Whilst the reactivity of chemicals is a significant factor in how fast chemical reactions proceed, there are many variables that can be manipulated in order to speed them up or slow them down. Chemical reactions may also be reversible and therefore the effect of different variables needs to be established in order to identify how to maximise the yield of desired product. Understanding energy changes that accompany chemical reactions is important for this process. In industry, chemists and chemical engineers determine the effect of different variables on reaction rate and yield of product. Whilst there may be compromises to be made, they carry out optimisation processes to

**Physics: Electricity**

Students are learning:

- What electrical charge is and what is needed for it to flow.
- The rules for current, potential difference and resistance in series and parallel circuits. Use equations, either singly or in combination with each other to calculate I, V and R.
- How resistance changes in ohmic and non ohmic conductors and diodes. Know how to make use of variable resistors such as thermistors and LDRs in circuits and why these circuits work.
- To know and use the equations specified in the syllabus
- The requirements for Mains UK electricity and the 3 wire system that is used.
- How transformers work within the National grid to ensure efficient energy transfer (Triple)
- To describe the production of static electricity, and sparking, by rubbing surfaces.
- To describe evidence that charged objects exert forces of attraction or repulsion on one another when not in contact
- To explain how the transfer of electrons between objects can explain the phenomena of static electricity.

**Theme: Weimar and Nazi Germany, Paper 3**

Students will study Germany 1918-1939. They will review Weimar democracy, the rise of the Nazis and onset of World War II.

History

- The origins of the Republic, 1918–19
- The early challenges to the Weimar Republic, 1919–23
- The recovery of the Republic, 1924–29
- Changes in society, 1924–29
- Early development of the Nazi Party, 1920–22
- The Munich Putsch and the lean years, 1923–29
- The growth in support for the Nazis, 1929–32
- How Hitler became Chancellor, 1932–33
- The creation of a dictatorship, 1933–34
- The police state
- Controlling and influencing attitudes
- Opposition, resistance and conformity

	<ul style="list-style-type: none"><li>• Nazi policies towards women</li><li>• Nazi policies towards the young</li><li>• Employment and living standards</li><li>• The persecution of minorities</li></ul>
Geography	<p><b>Half Term 3 Theme: Paper 1: Coasts/Rivers/Glaciation</b></p> <p>Students will learn to:</p> <ul style="list-style-type: none"><li>• Know what the UK's landscape looks like and the location of the main upland, lowland and river systems.</li><li>• Understand how rivers/coasts/glaciers are responsible for shaping the landscape of the UK and the landforms they create.</li><li>• Explore the opportunities and challenges created by rivers/coasts/glaciers and how they can be managed.</li></ul> <p><b>Half Term 4 Theme: Paper 1: Coasts/Rivers/Glaciation, Paper 2: General Urban Issues</b></p> <p>Students will learn to:</p> <ul style="list-style-type: none"><li>• Understand how rivers/coasts/glaciers are responsible for shaping the landscape of the UK and the landforms they create.</li><li>• Explore the opportunities and challenges created by rivers/coasts/glaciers and how they can be managed.</li><li>• Begin to explore the growth of urban areas.</li></ul>
	<p><b>Half Term 3 Theme: School</b></p> <p>Students are learning to be able to discuss:</p> <ul style="list-style-type: none"><li>• Subjects</li><li>• Opinions</li><li>• Facilities</li><li>• Comparison of English/French school</li><li>• School rules</li><li>• Healthy and unhealthy living</li><li>• Extra-curricular activities</li><li>• School exchange</li><li>• Success at school</li></ul> <p>This includes:</p> <ul style="list-style-type: none"><li>• Telling the time</li><li>• Opinions &amp; reasons</li><li>• Direct object pronouns</li><li>• Using <i>il/s</i> form of the verb</li></ul>

<p>French</p>	<ul style="list-style-type: none"> <li>• Il faut/ il est interdit de</li> <li>• Using adverbs</li> <li>• Imperfect tense</li> <li>• Using 3 tenses + timeframes</li> <li>• The pronoun <i>on</i></li> <li>• The imperative</li> </ul> <p><b>Half Term 4 Theme: Environment</b></p> <p>Students are learning to be able to discuss:</p> <ul style="list-style-type: none"> <li>• Protecting the environment</li> <li>• Ethical shopping</li> <li>• Volunteering</li> <li>• Discussing big events</li> <li>• Weather</li> <li>• Natural disasters</li> <li>• Describing large events.</li> </ul> <p>This includes:</p> <ul style="list-style-type: none"> <li>• Simple future tense</li> <li>• <i>On doit/On peut</i> + infinitive</li> <li>• The passive voice</li> <li>• Emphatic pronouns</li> <li>• Using 3 tenses</li> <li>• Recognising the pluperfect tense</li> <li>• The present participle</li> </ul> <ul style="list-style-type: none"> <li>• <i>Pouvoir &amp; devoir</i> in conditional tense</li> <li>• Indirect object pronouns</li> </ul>
<p>Spanish</p>	<p><b>Theme: Family and Relationships</b></p> <p>Students are learning to discuss Family and relationships and describing people and their hobbies</p> <p>They are revising the present, preterite and future tenses.</p> <p>They will be comparing 'then and now' using the imperfect tense. They are also learning the present continuous.</p>

<p>Computer Science</p>	<p>Students are learning about <b>Algorithms</b>. They will learn:</p> <ul style="list-style-type: none"> <li>• To be able to understand what computational thinking is and to be able to identify and solve problems in a computational manner.</li> <li>• To be able to design, create and refine algorithms to a given problem</li> <li>• To be able to identify and use searching and sorting algorithms</li> </ul> <p>Students are learning about <b>Systems Software</b>. They will learn:</p> <ul style="list-style-type: none"> <li>• To be able to understand the various roles of an operating system</li> <li>• To understand what utility software is and be able to discuss the tasks different utility software might undertake</li> </ul> <p>Students are learning about <b>computer networks, connections and protocols</b>. They will learn:</p> <ul style="list-style-type: none"> <li>• To understand what a network is</li> <li>• To be able to identify different topologies and the advantages and disadvantages of each</li> <li>• To be able to explain the difference between wired and wireless networks and how the various protocols and layers enable the transfer of information</li> </ul>
<p>IT (iMedia)</p>	<p><b>Half Term 3: R082 Coursework</b>  Following the January examination, students will begin development of their R082: Creating Digital Graphics coursework. This will include the following elements:</p> <p>Students are learning to understand the purpose and properties of digital graphics. This will include:</p> <ul style="list-style-type: none"> <li>• Why digital graphics are used (e.g. to entertain, to inform, to advertise, to promote, to educate)</li> <li>• How digital graphics are used (e.g. magazine covers, CD/DVD covers, adverts, web images and graphics, multimedia products, games)</li> <li>• Types of digital graphics</li> <li>• File formats</li> <li>• The properties of digital graphics and their suitability for use in creating images</li> <li>• How different purposes and audiences influence the design and layout of digital graphics</li> </ul> <p><b>Half Term 4: R082 Coursework</b></p> <p>Students are learning to be able to plan the creation of a digital graphic. This will include:</p> <ul style="list-style-type: none"> <li>• Interpret client requirements for a digital graphic based on a specific brief</li> <li>• Understand target audience requirements for a digital graphic</li> <li>• Produce a work plan for an original graphics creation</li> <li>• Produce a visualisation diagram for a digital graphic</li> </ul>

	<ul style="list-style-type: none"> <li>• Identify the assets needed to create a digital graphic</li> <li>• Identify the resources needed to create a digital graphic</li> <li>• How legislation applies to images used in digital graphics, whether sourced or created.</li> </ul>
Art	<p><b>Theme: Cubism (Formal Elements – Line/Tone/Texture/Form)</b></p> <p>Students are learning to be able to confidently select relevant secondary sources to produce sensitive, articulate and detailed observational work that demonstrates an embedded knowledge of the formal elements. They will be learn to critically analyse artists’ work and produce a thought provoking visual analysis in a refined way. Students will be able to exploit the qualities of materials independently and skilfully through experimentation and be able to critically evaluate and articulate the outcomes.</p> <p>Whilst working remotely students will explore a variety of patterns through drawing and research artists renowned for using pattern in their work. They will explore space, completing exercises exploring composition, positive and negative space.</p>
Construction	<p>Students are exploring the health and safety concerns linked to construction and able to identify areas of risk and precautions that can be taken. Including elements such as warning signs, PPE, machine maintenance and training.</p> <p>Students are learning to understand key skirting boards terminology and theory including how to measure accurately and fix a skirting board.</p>
Graphics	<p><b>Theme: Identity</b></p> <p>Students are continuing to explore the theme of identity and considering a range of routes within this that they may wish to explore.</p> <p>Students will learn to generate ideas from a range of contextual sources including the work of artists and designers. Students will explore and make use of a range of a range of art media and processes. They will learn how to use the basics of Photoshop to communicate their ideas. Students will use drawing and other means in order to record ideas as their work progresses.</p> <p>This term, students will be encouraged to take their personal approach even further and to explore wider contexts from their original starting point, they will be introduced to the theory of ‘Typography’ which may be used to develop their project further.</p>

Food	<p><b>Half Term 3:</b></p> <p>Students are learning the theory of nutrition to focus on sources, functions, and symptoms of excess &amp; deficiency of fat-soluble micronutrients A, D, E &amp; K, and micronutrients calcium and fluoride.</p> <p>They are learning about denaturation and preservation of fat-soluble micronutrients caused by cooking methods/storage techniques.</p> <p><b>Half Term 4:</b></p> <p>Students are learning the theory of nutrition to focus on the sources, functions, symptoms of excess &amp; deficiency of macronutrient fat.</p> <p>Students are exploring the differences between types of fats: solid/liquid animal, solid/liquid plant, and their impact on health.</p> <p>Students are exploring the differences between chemical structures: saturated, monounsaturated, polyunsaturated, and their impact on health.</p> <p>They are learning about the amount of fat required at varying life-stages and how this should effect your diet.</p>
PE Core	<p>Students are learning to tackle complex and demanding physical activities. They will get involved in a range of activities that develops personal fitness and promotes an active, healthy lifestyle. Students will be taught to use and develop a variety of tactics and strategies to overcome opponents in team and individual games. They will further develop their technique and improve their performance in other competitive sports. They will take part in a range of environments which present intellectual and physical challenges, which encourage them to work in a team, building on trust and developing skills to solve problems, either individually or as a group. They will evaluate their performances compared to previous ones and demonstrate improvement across a range of physical activities to achieve their personal best.</p>
PE GCSE	<p>Alongside their practical performance, students are learning about Socio-Cultural influences, including:</p> <ul style="list-style-type: none"> <li>• Factors affecting participation in physical activity</li> <li>• Participation rate trends – use of data</li> <li>• Commercialisation and the media</li> <li>• Advantages and disadvantages of commercialisation</li> <li>• Sporting behaviours</li> <li>• Deviance in sport</li> </ul>

<p>Media</p>	<p><b>Half Term 3 –Magazines</b></p> <p>Students will be studying and analysing magazines for Component 1 Section A. During this term students will look at a range of magazines analysing the following:</p> <ul style="list-style-type: none"> <li>- Representation in magazines</li> <li>- Audience</li> <li>- Institutions</li> <li>- Generic conventions</li> <li>- Comparisons between texts</li> </ul> <p><b>Half Term 4 – Sitcom</b></p> <p>Students will study and analyse texts from the sitcom genre. These will include a specific focus on the texts Friends and The IT Crowd. During this term students will look at:</p> <ul style="list-style-type: none"> <li>- Media Language</li> <li>- Analysing a range of representations</li> <li>- Comparing texts from different markets and institutions</li> </ul>
<p>Sociology</p>	<p>Students are learning to understand:</p> <p>Functionalist perspectives.  Marxist perspective on the relationship between education and capitalism.  Educational provision in the UK  Education policies and impact on achievement (CAGE)  Factors affecting educational achievement.  Labelling, subculture, self-fulfilling prophecy, teacher expectation, streaming</p>
<p>Business Studies</p>	<p>Students are continuing with individual coursework unit. They are planning and pitching an enterprise idea.</p> <p>Students will demonstrate own skills by pitching an individual summary of the final plan to an audience. This will include:</p> <ul style="list-style-type: none"> <li>• Pitching a micro-enterprise activity</li> <li>• Presenting a business pitch</li> <li>• Using feedback and review to identify possible changes to the pitch</li> </ul>

Health and  
Social Care

**Theme: How individuals deal with life events**

**Half Term 3:**

Students are exploring how life events are expected or unexpected that occur in an individual's life. This will include:

- Applying the theory learnt to real life scenarios to develop an understanding of expected and unexpected life events.
- Studying a range of case studies

Examples of expected life events:

- Giving birth and parenthood
- Job
- School
- Relationships

Examples of unexpected life events:

- Illness
- Accidents
- Divorce
- Bereavement
- Redundancy

**Half Term 4:**

Students are exploring how individuals can adapt or be supported through changes caused by life events.

This includes:

- Developing a deeper understanding of how a person can cope with life events using both formal and informal support.
- Consider how well individuals can adapt to the changes caused by life events and cope with it by seeking support from various sources.

**Sources of support:**

Formal – support that is received from a professional for example a GP, Counsellor or a Psychiatrist

Informal support – Physical and emotional support received from family and friends.

Dance	<p>Students will study/revise and work on exam techniques in relation to these three set works</p> <ul style="list-style-type: none"><li>• Shadows Within Her Eyes</li><li>• A Linha Curva</li><li>• Emancipation of Expressionsim</li></ul> <p>Students will develop choreographic skills in response to a stimulus. This will include</p> <ul style="list-style-type: none"><li>• Research</li><li>• Improvise</li><li>• Creating motif</li><li>• Developing motifs</li><li>• Structure</li><li>• Refining</li></ul> <p>Students will continue to develop physical skills in preparation for learning the set phrase 'Shift' This will include:</p> <ul style="list-style-type: none"><li>• Posture</li><li>• Alignment</li><li>• Strength</li><li>• Control</li><li>• Flexibility</li></ul>
Drama	<p><b>Half Term 3:</b> Students are continuing to develop understanding of devising techniques. Students will learn how to work in response to given stimulus. how to record ideas and how to write devising log.</p> <p><b>Half Term 4:</b> Students will create a final devised performance based on an exploration of stimuli. Students will learn how to work in response to given stimulus. how to record ideas and how to write devising log.</p>

Music

Students are introduced to ensemble skills. This includes:

- Accuracy
- Fluency
- Technical control
- Intonation
- Projection
- Expression
- Balance of ensemble
- Communication with other performers
- Stylistic awareness
- Confidence

Students are introduced to a composition. This includes:

- Treble and bass clef notation
- Developing more complex rhythms and compound time signatures
- Using more complex harmonic language
- Developing melodies with clear shape and structure
- Composing with stylistic awareness
- Composing for instruments and voices

Students are introduced to popular music (AOS 4):

- Rock and pop styles
- Pop song structures
- Popular harmony, including power chords
- Instrumental and vocal techniques
- Appraising musical elements within AoS 4