

Art at the Archer Academy

Students will have the opportunity to explore and experiment with new materials on a regular basis by analysing the work of various artists. Students will be using a range of techniques, recording observations in sketchbooks and other media as a basis for exploring different genres and for developing refined drawing and making skills.

Art at Year 10

Students will begin the course with a Texture project. This will give them an opportunity to show the moderator that they have taken the time to refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes. This will be followed by an independent project where students will develop ideas through investigating relevant artists, exploring appropriate media, demonstrating critical understanding of sources, and record ideas and observations and insights relevant to intentions as work progresses. Students will make a final piece of work, under exam conditions, which will present a personal and meaningful response that realises intentions and demonstrates understanding of visual language.

	Key Content	Supporting Resources
Half-terms 1-2	Texture projects: A focus on a varied range of relevant artists.	Pencil accuracy, clay, lino printing, 3D abstract collage, acrylic paint skin tone techniques, multimedia sculpture.
Half-terms 3-4	Independent project: An investigation of at least two artists individually selected to suit each student's abilities and interests. Homage work may be developed into a final piece. Skills to be exhibited: Artist analysis, refined recording skills, varied appropriately selected media. Development toward an original final piece.	Appropriate materials
Half-terms 5-6	A continuation of the independent project-development.	Appropriate materials

GCSE Dance at the Archer Academy

Through their study of dance, a broad range of creative, collaborative, physical and critical thinking skills will be explored and developed. Dance is as engaging as it is challenging, both physically and mentally at KS4.

The GCSE Dance course aims to develop skills across three key areas – Choreography, Performance and Critical Appreciation. As students develop their understanding of different types of dance, they are able to identify stylistic features and develop understanding of the choreographic context of professional works.

Throughout the course, they will build on their physical, expressive, technical and mental performance skills, expand on their knowledge & understanding of choreography and examine a range of professional works and study practitioners within the field. Additionally, the course looks to improve understanding of dance specific terminology and literacy and develop resilience, independence, discipline and creativity.

GCSE dance will focus on students developing their practical understanding of contemporary performance technique and the craft of choreography. Practical dance repertoire created and learned will allow students to build on their coursework in year 10. The students will study the basics in theory and analyse the GCSE Dance Anthology of professional dance works to assist them making effective progress in their written examination.

Lessons will be a mixture of practical performance technique, choreography and theory sessions. Year 10 students will study Dance for 3 hours per week.

What does the course require?

- Imagination and creativity
- Commitment to attending lessons and after school rehearsals on a weekly basis
- Some previous dance experience or the ability to show potential and enthusiasm in dance
- Positive approaches to choreography and challenging dance stimuli
- Willingness to work in groups and participate in other students' choreography
- Resilience and high levels of discipline

Dance at Year 10

Set Phrases

Performance in a duet/trio

A Linha Curva

Shadows

Within Her Eyes

Infra

Topic	Key Content
Set Phrases	Contemporary performance technique: Breathe, Shift, Scoop, Flux
Performance in a duet/trio	Communication of choreographic intent, sensitivity to other dancers, musicality
A Linha Curva	Critical Appreciation: Contemporary, Capoeira, Samba, Brazilian Culture
Shadows	Critical Appreciation: Neo Classical dance, political content
Within Her Eyes	Critical Appreciation: dance for film, contemporary contact
Infra	Critical Appreciation: Contemporary Ballet, human themes

Design and Technology at the Archer Academy

The Art, Design, and Technology department believes that every student is a creative learner and has an innate ability to design and create. We aim to inspire young people to become confident, fluent and innovative artist and designers.

Our curriculum is relevant to all our students; it incorporates contemporary artists and designers and current exhibitions, as well as more traditional ways of working. All schemes of work encourage independent learning and decision-making, which allows students to build on skills that are introduced in Year 7 throughout the rest of their school life and beyond. Students are encouraged to be confident and versatile in their use of materials and techniques as well as to understand their properties and use in real world contexts.

Realising potential and inspiring creativity is at the heart of what we do. Students will explore challenging project briefs, which they will work through in order to conceptualise their design and artistic thinking. Students will also be able to engage with local artists and designers from the community through a range of projects, visits, competitions and opportunities throughout their years at the Archer.

DT at Year 10

Students will begin their GCSE coursework portfolio whilst completing the NEA contextual challenge. Students will follow the design process to design, make and evaluate their proposal to judge whether it is suitable for a specific user of their product. This is worth 50% of their overall GCSE. Students will also complete theory lessons for one hour a week where they will investigate theory linked to design and manufacturing of products.

	Key Content	Supporting Resources
Ergonomic toothbrush project	Ergonomic and anthropometrics. Sketching and modelling. Use of digital design	https://www.technologystudent.com/ https://www.bbc.co.uk/bitesize/examspecs/zdvv2sq
Mini wooden gift	Knowledge of materials and their properties. Sketching, modelling and manufacture of products.	https://www.technologystudent.com/ https://www.bbc.co.uk/bitesize/examspecs/zdvv2sq
Laser cut desk storage	Sketching and modelling. Use of CAD/CAM to manufacture a product.	https://www.technologystudent.com/ https://www.bbc.co.uk/bitesize/examspecs/zdvv2sq

Practice NEA challenge	Identifying primary users and stakeholders, design ideas and modelling of ideas.	https://www.technologystudent.com/ https://www.bbc.co.uk/bitesize/examspecs/zdvp2sg
Practice NEA challenge	Use of tools and equipment to manufacture a working prototype. Quality control. Problem solving.	https://www.technologystudent.com/ https://www.bbc.co.uk/bitesize/examspecs/zdvp2sg
GCSE NEA contextual challenge	Research section of contextual challenge.	https://www.technologystudent.com/ https://www.bbc.co.uk/bitesize/examspecs/zdvp2sg

English at the Archer Academy

Through the study of English, students will explore the ways in which the world around them is represented through images created through language. They will develop their sense of empathy through the exploration of characters and themes in various different poems, novels and short stories. These span a wide range of periods, genres, and authors to build a secure foundation of key concepts in English. Through discussion and collaborative activities students will reflect on their own perspectives and learn to appreciate the views of others.

English will develop students' analytical and reflective skills through the exploration of language at word level and through structural level.

English Literature and English Language at Year 10

Students will be awarded two GCSEs in English Literature and English Language on successful completion of the final exams. Students will continue to have four hours of lessons per week. Assessments will occur at the end of each half term. They will take the form of a mock exam-style question on the module that has been studied that half term.

Students will begin year 10 by exploring the central building blocks of fiction through analysis of language, form and structure of texts. They will experiment with these features by constructing their own narrative and descriptive pieces of fiction. Through the study of the modern 20th century play *An Inspector Calls* by J.B. Priestley students will examine how cultural, historical, social and economic revolutions can be represented through Literature. Students will compare themes within AQA's Love and Relationships anthology of fifteen poems. The study of nonfiction texts will be explored through a range of historic and modern speeches, letters, diary entries, newspapers and nonfiction essays. At the end of year 10 students will prepare and complete their spoken language coursework. This is a speech which will take the form of a debate and will be no longer than five minutes. Prior to completion students will write a draft speech that will be depth marked by the class teacher before their final performance.

	Key Content	Supporting Resources
Half-term 1 English Language Paper 1	Analysing a piece of fiction comprehension. Writing short narrative stories and descriptive writing.	<i>How Fiction Works</i> by James Wood <i>The Art of Fiction</i> by David Lodge <i>Such a Fun Age</i> by Kiley Reid <i>Normal People</i> by Sally Rooney
Half-term 2 English Literature Paper 2	Exploring characters and themes in the play.	<i>An Inspector Calls</i> by J.B.Priestley Digital Theatre recording

<i>An Inspector Calls</i>	Understanding historical and contextual influences on the play.	Seneca learning revision activities
Half-term 3 English Literature Paper 2 Poetry: Love and relationships	Analysing the representation of relationships in each poem. Comparing the representation of themes between poems.	AQA Anthology – Provided <i>How Poetry Works</i> by Phil Roberts <i>The Rattle Bag: An Anthology of Poetry</i>
Half-term 4 English Literature Paper 2 Poetry: Unseen Analysis	Exploration of unseen poems and central poetic devices.	<i>The School Bag</i> – Faber Poetry Anthology <i>Poetry by Heart</i> by Andrew Motion <i>How to Read a Poem</i> by Terry Eagleton
Half-term 2 English Language Paper 2 Non-Fiction comparison	Interpreting a range of contemporary and historic nonfiction texts. Making inferences and deduction from language of nonfiction texts.	<i>How to Write Non-Fiction</i> by Joanna Penn <i>21 Lessons for the 21st Century</i> by Yuval Noah Harai <i>The Psychopath Test</i> by Jon Ronson
Half-term 6 English Language coursework: Speaking and Listening	Analysis of famous speeches to develop understanding of genre.	<i>The Penguin Book of Modern Speeches</i> by Brian MacArthur <i>Quercus -Speeches That Changed the World</i>

French at the Archer Academy

Our Modern Foreign Languages curriculum aims to equip students with languages as a skill for life: the ability to communicate in French for further study, future work or for leisure and travel abroad, truly engaging with their community and beyond. Students will develop their cultural awareness and have a more open-minded attitude towards other cultures. Students will be encouraged to embrace the fact that we live in a rich and diverse world. Through learning a foreign language, students develop a deeper understanding of how language works, building a more powerful understanding of their own language.

French at Year 10

Students continue to work through the AQA Studio French GCSE course in Year 10. Curriculum time is increased to 3 hours per week; one hour of which is a 'pit stop' lesson, with a focus on developing core exam skills and consolidating grammar. Students have one hour of homework per week using Memrise and the AQA French Grammar and Translation workbook.

	Key Content	Assessment	Grammar	Supporting resources
Half-term 1	Module 4: De la ville à la campagne – describing where you live, talking about different regions, talking about what to see and do	Listening Grammar	Grammar covered in Years 7, 8 and 9 is revisited and built upon.	Websites: www.memrise.com www.languagesonline.org www.pearsonactivelearn.com www.wordreference.com Books: <ul style="list-style-type: none"> • Studio AQA GCSE textbook • Studio AQA grammar and translation workbook • French dictionary
Half-term 2	Module 4: De la ville à la campagne – plans and the weather, community projects	Reading Writing Speaking	In addition, Year 10 students will learn :	
Half-term 3	Module 5: Le grand large – typical holidays, ideal holidays, hotels, restaurants	Listening Grammar	<ul style="list-style-type: none"> • the pronoun y • the future tense • reflexive verbs in the past 	
Half-term 4	Module 5: Le grand large – modes of transport, souvenirs,	Reading Writing Speaking	<ul style="list-style-type: none"> • the pluperfect tense 	

	holiday disasters		<ul style="list-style-type: none"> • avant de + infinitive 	
Half-term 5	Module 6: Au collège – talking about school in the UK and in France, school rules	All skills		
Half-term 6	Module 6: Au collège – healthy lifestyles, vices, school exchanges	Mock speaking exam		

Geography at the Archer Academy

Geography allows students to explore the realms of time, space and place.

Students should understand the significance of location in the context of evolving society. As this changes over time, all students should recognise the influence of the past on the present and should be able to use this to inform their thoughts and ideas about the future geographical issues.

In studying economic, social, environmental and political motives, impacts and consequences, students should be able to understand the complexities of both the human and physical world at a range of different scales. Geography should develop students with enquiring minds, able to approach ideas analytically to make well informed decisions about the changing world around them. Students should be able to question the viewpoints of different stakeholders involved in geographical decision making and form their own opinions on topical matters showing mutual respect and understanding.

Through exploring local and global issues, students should foster a sense of care and compassion for the world in which they live. They should understand the importance of sustainability and be impassioned to make a difference. Geography should empower students to become active global citizens and make a positive impact to the world in which they live.

Geography at Year 10

Development Dynamics
Challenges of an urbanising world
UK's evolving physical landscape
UK's evolving human landscape
Geographical investigations

	Key Content	Supporting Resources
Half-term 1: Paper 1: Development Dynamics	<p>Enquiry question: What is the scale of global inequality and how can it be reduced?</p> <p>Skills:</p> <p>(1) Comparing the relative ranking of countries using single versus composite (indices) development measures</p> <p>(2) Interpreting population pyramid graphs for countries at different levels of development</p> <p>(3) Using income quintiles to analyse global inequality</p> <p>Enquiry question: How is one of the world's emerging countries managing to develop?</p>	<p>Seneca Learning > Geography: Edexcel B GCSE > 2 Development Dynamics</p> <p>https://senecalearning.com/en-GB/</p>

	<p>Skills:</p> <p>(4) Using numerical economic data to profile the chosen country</p> <p>(5) Using proportional flow-line maps to visualise trade patterns and flows</p> <p>(6) Using socio-economic data to calculate difference from the mean, for core and periphery regions</p>	
<p>Half-term 2: Paper 1: Challenges of an urbanising world</p>	<p>Enquiry question: What are the causes and challenges of rapid urban change?</p> <p>Skills:</p> <p>(1) Use and interpretation of line graphs and calculating rate of change/annual or decadal percentage growth</p> <p>(2) Using satellite images to identify different land use zones in urban areas</p> <p>Enquiry question: Why does quality of life vary so much within one megacity in a developing country or emerging country?</p> <p>Skills:</p> <p>(3) Using GIS/satellite images, historic images and maps to investigate spatial growth</p> <p>(4) Using quantitative and qualitative information to judge the scale of variations in quality of life</p>	<p>Seneca Learning > Geography: Edexcel B GCSE > 3 Challenges of an Urbanising world</p> <p>https://senecalearninq.com/en-GB/</p>
<p>Half-term 3: Paper 2: UK's evolving physical landscape</p>	<p>Enquiry question: Why does the physical landscape of the UK vary from place to place?</p> <p>Skills:</p> <p>(1) Photograph analysis of common glacial, fluvial and coastal landscapes and features</p> <p>(2) Using simple geological cross-sections to show the relationship between geology and relief</p> <p>(3) Locating key physical features (uplands, lowland basins, rivers) on outline UK maps</p> <p>(4) Recognition of physical and human geography features on 1:25000 and 1:50000 OS maps</p> <p>Enquiry question: Why is there a variety of distinctive coastal landscapes in the UK and what are the processes that shape them?</p> <p>Skills:</p> <p>(5) Explore the kinds of questions capable of being investigated through fieldwork</p> <p>(6) Calculation of mean rates of erosion using a multi-year data set</p> <p>(7) Use of BGS Geology maps (paper or online) to</p>	<p>Seneca Learning > Geography: Edexcel B GCSE > 4 The UK's evolving physical landscape</p> <p>https://senecalearninq.com/en-GB/</p>

	<p>link coastal form to geology (8) Recognition of coastal landforms on 1:25000 and 1:50000 OS maps</p> <p>Enquiry question: What are the challenges for coastal landscapes and communities and why is there conflict about how to manage them?</p> <p>Skills: (9) Explore the kinds of questions that can be investigated through fieldwork (10) Use of 1:25000 and 1:50000 OS maps and GIS, to investigate what is threatened by rapid erosion (11) Use of simple cost-benefit analysis to investigate coastal defence options (12) Use of 1:25000 and 1:50000 OS maps and GIS, to investigate the impact of policy decisions</p> <p>Enquiry question: Why is there a variety of river landscapes in the UK and what are the processes that shape them?</p> <p>Skills: (13) Explore the kinds of questions that can be investigated through fieldwork (14) Use 1:25000 and 1:50000 OS maps to determine valley cross-section from contour lines (15) Use of BGS Geology maps (paper or online) to link river-long profiles to geology (16) Recognition of river landforms on 1:25000 and 1:50000 OS maps (17) Drawing simple storm hydrographs using rainfall and discharge data</p> <p>Enquiry question: What are the challenges for river landscapes, people and property and how can they be managed?</p> <p>Skills: (18) Explore the kinds of questions that can be investigated through fieldwork (19) Use of simple cost-benefit analysis to investigate river management options (20) Use of 1:25000 and 1:50000 OS maps and GIS, to investigate the impact of policy decisions</p>	
Half-term 4: Geographical	Investigating coastal change and conflict: Investigate the impact of coastal management on coastal processes and communities.	Seneca Learning > Geography: Edexcel B GCSE

investigation s	Investigating dynamic urban areas: Investigate how and why quality of life varies within urban areas.	https://senecalearnin g.com/en-GB/
Half-term 5: Revision and one year to go exams	A structured revision programme to support student learning for subject knowledge and exam technique. Structured materials and tools are embedded to support students with the demands of linear assessments.	Seneca Learning > Geography: Edexcel B GCSE https://senecalearnin g.com/en-GB/
Half-term 6: UK's human landscape	<p>Enquiry question: Why are people and places changing in the UK?</p> <p>Skills:</p> <p>(1) Use and interpretation of UK population pyramids from different time periods</p> <p>(2) Use of census data sets to understand changes to the UK's population</p> <p>(3) Use of Eurostat to investigate FDI and immigration to the UK</p> <p>Enquiry question: How is one major UK city changing?</p> <p>Skills:</p> <p>(1) Explore the kinds of questions capable of being investigated through fieldwork</p> <p>(2) Using census data sets to compare areas within inner cities</p> <p>(3) Use of 1:25000 and 1:50000 OS maps to identify different land use types</p> <p>(4) Using crime and IMD databases to investigate the extent of inner-city problems</p>	<p>Seneca Learning > Geography: Edexcel B GCSE > 5 The UK's evolving human landscape</p> <p>https://senecalearnin g.com/en-GB/</p>

History at the Archer Academy

In Year 10, students start their GCSE course. Students focus on securing knowledge for Paper 1 which is worth 50% of their overall GCSE qualification.

The first unit is international relations. The focus of this study is on the unfolding narrative of international relations from 1918–2001. Learners will study substantial developments and issues associated with this period, in order to understand the events which shaped the 20th century. Learners will also explore the historical debate surrounding these events and assess how and why these interpretations have changed over time. Learners will study a range of interpretations in order to develop required analytical and evaluation skills.

Following this, students begin a unit on Germany. This depth study focuses on the relationship between the German people and the Nazi regime that ruled Germany from 1933–1945. Beginning with the Weimar Republic, this study focuses on how the Nazi's gained a foothold in Germany, the function of the Nazi State and impact of World War Two. Students will also explore process of denazification between 1945 and 1955.

Programme of study in year 10:

1. International Relations, 1919 – 2001
2. Germany, 1925 – 1955

Time	Topic	Key content	Extra Learning Opportunities
Autumn Term 1	International Relations, 1919 - 2001	<p>This section of the course includes the following key topics:</p> <p>The Versailles Peace Settlement; the League of Nations in the 1920s; international agreements in the 1920s (Dawes Plan 1924, Locarno 1925, Kellogg-Briand 1928, Young Plan 1929); attempts at disarmament. The impact of the worldwide economic depression. Tension in Europe in the 1930s, including the failure of the League of Nations, the policy of Appeasement and outbreak of war in 1939. Historical interpretations of World War One.</p>	<p>Useful websites: https://www.bbc.co.uk/bitesize/guides/ztydcwx/revision/1 https://www.nationalarchives.gov.uk/education/resources/chamberlain-and-hitler/ https://www.iwm.org.uk/history/how-britain-hoped-to-avoid-war-with-germany-in-the-1930s</p> <p>Book titles: OCR Modern World Textbook</p>
Autumn Term 2	International Relations, 1919 - 2001	<p>This section of the course includes the following key topics:</p> <p>Emerging super-power rivalry 1945–1949; actions of the USSR in Eastern Europe 1945–1948 and response of USA and its allies. Cold War confrontations: Berlin Wall 1961 and the Cuban Missile Crisis 1962; Cold War conflicts: Vietnam War, the Soviet war in Afghanistan.</p>	<p>Useful websites: https://www.johndclare.net/cold_warA1.htm https://www.bbc.co.uk/bitesize/guides/z3t42p3/revision/1</p> <p>Book titles: OCR Modern World Textbook</p>

Time	Topic	Key content	Extra Learning Opportunities
Spring Term 1	International Relations, 1919 - 2001	<p>This section of the course includes the following key topics:</p> <p>The Cold War 1945–c.1989 The changing international order after 1945 and its consequences Emerging super-power rivalry 1945–1949; actions of the USSR in Eastern Europe 1945–1948 and response of USA and its allies. Cold War confrontations: Berlin Wall 1961 and the Cuban Missile Crisis 1962; Cold War conflicts: Vietnam War. Historical interpretations of the Cold War.</p>	<p>Useful websites: https://www.ijohndclare.net/cold_war16.htm https://www.bbc.co.uk/bitesize/guides/zyh9mnb/revision/1</p> <p>Book titles: OCR Modern World Textbook</p>
Spring Term 2	Nazi Germany, 1925 - 1955	<p>This section of the course includes the following key topics:</p> <p>The rise and consolidation of the Nazi regime 1925–1934 Strengths and weaknesses of the Weimar Republic 1925–1928, including Nazi policies in the 1920s and the position of the party in 1928; the impact of the Depression on different groups in Germany; the political, social and economic crisis of 1929–1933; rising support for Nazis 1929–1933; the Nazi consolidation of power 1933–1934, including the Reichstag Fire, the suspension of the Weimar constitution and the Enabling Act, the elections of March 1933, the takeover of/ or collaboration with key institutions (particularly the army), and the elimination of opposition (including trade unions, opposition parties and the SA)</p>	<p>Useful websites: https://www.bbc.co.uk/bitesize/guides/zp3p82p/revision/1 https://www.bbc.co.uk/bitesize/topics/zymqwxs</p> <p>Book titles: OCR Modern World Textbook</p>

Time	Topic	Key content	Extra Learning Opportunities
Summer Term 1	Nazi Germany, 1925 - 1955	<p>Nazi Germany and its people 1933–1939</p> <p>Elements of the Nazi terror state, including the SA, SS, Gestapo, SD, courts and police; Nazi use of culture and propaganda; personal popularity of Hitler; attempts to create a National Community; economic policies of Nazi regime and their effects on sections of German society (winners and losers); Nazi social policies, including policies on women and youth; the lack of effective opposition to the regime; persecution of Jews and other groups, including Roma, Jehovah's Witnesses and homosexuals; eugenics policies.</p>	<p>Useful websites: https://www.bbc.co.uk/bitesize/guides/zp3p82p/revision/1 https://www.bbc.co.uk/bitesize/topics/zymqwx</p> <p>Book titles: OCR Modern World Textbook</p>
Summer Term 2	Nazi Germany, 1925 - 1955	<p>War and its legacy 1939–1955</p> <p>Initial reaction to outbreak of war; changing fortunes of Germany in the war (initial gains and colonisation in East); growing impact of war, including bombing; extent of support for war effort; opposition during war; escalation of racial persecution leading to the Final Solution; defeat and occupation; Allied policy of denazification (methods and impact); the differing experiences of people in East and West Germany 1945– 1955.</p>	<p>Useful websites: https://www.bbc.co.uk/bitesize/guides/zp3p82p/revision/1 https://www.bbc.co.uk/bitesize/topics/zymqwx</p> <p>Book titles: OCR Modern World Textbook</p>

Maths at the Archer Academy

Our vision for Maths at The Archer Academy is that students learn to think and act as real mathematicians, developing exceptional creativity and resilience in tackling challenging mathematical problems, deep conceptual understanding of the curriculum underpinned by rich imagery, and most of all, the love of learning mathematics that every true mathematician has.

Maths at Year 10

In Year 10, students continue to work on the same Big Ideas (Number, Algebra, Ratio and Proportion, Geometry, Probability and Statistics). Students have an opportunity to take up extra GCSE's in Further Maths or Statistics in Years 10 and 11. The course develops in complexity, and students continue to focus on:

- Developing resilience
- Fluency
- Problem solving
- Reasoning
- Developing a love of learning with an inspirational curriculum, while also developing their exam technique and the structure of their work.

Opportunities to develop students' understanding are available through the Passport to Success system, securing the key skills which open doors to more challenging topics. Extensive support is available throughout students' school careers to ensure every child is stretched and challenged, and receives tailored support where necessary.

Students take their Maths GCSE with Edexcel, which consists of three 90-minute exams, one without a calculator, and two with a calculator.

	Key Content	Supporting Resources
Half-term 1	<p>01 Trigonometry: Find missing lengths and angles in right angled triangles; establish the exact value of $\sin(\theta)$, $\cos(\theta)$ and $\tan(\theta)$.</p> <p>02 Calculations: Memorise the first 20 square numbers and the first 10 cube numbers; estimate powers and square roots; use the fact of $x^{-a} = \frac{1}{x^a}$; calculation with surds; upper and lower bounds calculation.</p> <p>03 Simultaneous Equations: Solve simultaneous equations using elimination and substitution method; decide and derive two simultaneous equations and which method to be used.</p>	Hegarty Maths Dr Frost Just Maths

	<p>03 Iteration: Rearrange an equation to form a given iterative formula; use an iterative formula to find approximate solutions.</p>	
Half-term 2	<p>04 Transformations: Use scale factor (both whole number and fractional) to enlarge a shape in a cartesian coordinate plane; recap on translation, rotation, and reflection on a cartesian coordinate plane, able to describe transformation; solve problems involving similarity.</p> <p>05 Algebraic Proficiency: Add, subtract, multiply and divide algebraic fractions (with quadratics); solving algebraic fractions; simplify algebraic fractions; expanding, factorising and solving polynomials; change the subject of a formula.</p> <p>06 Proportional Reasoning: Recognise and interpret a graph that illustrate direct or inverse proportion; interpret equations that describe direct or inverse proportion; finding the multiplier in a situation involving direct or inverse proportion.</p>	Hegarty Maths Dr Frost Just Maths
Half-term 3	<p>07 Quadratic Sequence: Find the n^{th} term of arithmetic sequence; find the n^{th} term of a quadratic sequence; recognise, describe and find the next three terms of a simple geometric progression; recognise and find the next few terms of a Fibonacci sequence.</p> <p>08 Graphing Inequalities: Able to shade region or describe the inequality represented on a graph; know when to use dotted or solid line as a boundary for an inequality graph; able to solve inequality.</p> <p>09 Mensuration and Enlargement: Find the slant, find the surface area of a sphere, pyramid and composite solid; find the volume of a sphere, surface area and composite solid; able to find the area and volume of a shape after enlargement.</p>	Hegarty Maths Dr Frost Just Maths
Half-term 4	<p>10 Circle Theorems: Know the 8 circle theorems; use the circle theorems to solve and find the angles in a given problem; create logical steps and proof using mathematical language.</p> <p>11 Tangents, Kinematics and Area Under a Graph: Plot and use graphs of non-standard functions; know the definition of a tangent in a</p>	Hegarty Maths Dr Frost Just Maths

	<p>curve; estimate the gradient of a tangent; able to find the area under the graph; know that the area under a speed-time graph gives the distance.</p>	
Half-term 5	<p>12 Percentages and Recurring Decimals: Understand the notation for recurring decimals; able to convert a fraction to a recurring decimal; able to convert a recurring decimal to fraction; able to recognise and calculate compound interest; able to calculate the result of a repeated percentage change.</p> <p>13 Solving Quadratics: Able to factorise and solve quadratic equations, able to solve quadratic equations using a graph, able to deduce roots of quadratic functions.</p> <p>14 Sets, Venn and Product Rule: Able to apply the product rule for counting; able to use Venn diagram to sort and calculate probabilities; able to use two-way tables to sort and calculate probabilities.</p>	Hegarty Maths Dr Frost Just Maths
Half-term 6	<p>15 Cumulative Frequency: Understand the limitations of sampling; know the meaning and find lower, and upper quartiles and interquartile range; able to complete and construct a cumulative frequency table and curve; able to draw box plots.</p> <p>16 Coordinate Geometry: Know the perpendicular lines have gradients with a product of -1; identify perpendicular lines using algebraic methods; know the equation of a circle with centre at the origin; identify the equation of a circle from its graph; able to use the equation of a circle to draw its graph; find the equation of a tangent to circle at a given point; solve algebraic problems involving tangents to a circle.</p> <p>17 Vectors: Understand the concept of a vector; use diagrammatic representation of vectors; know and use different notations for vectors; add (subtract) vectors; multiply a vector by a scalar; solve simple geometrical problems involving vectors.</p>	Hegarty Maths Dr Frost Just Maths

Music at the Archer Academy

Students who aspire to achieve a GCSE in Music will enjoy a course which celebrates individual musical achievement.

Theoretical Content: At GCSE the theoretical content is broad, with students learning greater detail about harmony, texture, dynamics, structures and instrumental techniques. They also learn about the differences between live and recorded music, and the relationship between music and technology.

Performance: Performance is not as prevalent in the classroom as it is in KS3 – but for the GCSE qualification it is still very important. 1-1 tuition in their given study (voice, clarinet etc) is vital, and we will support with instrumental lessons wherever possible to ensure a secure Solo Performance. Group performances (ensemble) will be organised during lesson time. 2 performances (minimum 2 mins each) must be produced, worth 30% of the GCSE grade. A performance of a Grade 4 piece with flair could earn you a 9 here.

Composition: Composition will begin with an education in music technology, primarily the Sibelius or Garageband software. With a full orchestra, a jazz band or even a steel pans group at their fingertips GCSE students can utilise their compositional skills without limit. This is a big change to begin with, but by the end they are always amazed by what they can compose. Music students in Year 10 study 2 hours of Composition and 1 hour of Theory.

Music at Year 10

Composition using Music Technology
J. S. Bach and the Baroque Era
H. Purcell and Word Painting
Beethoven and the developing Romantic Era
Killer Queen and Vocal Music
Esperanza Spalding and Fusion Music
Solo and Ensemble Performance
Listening and Appraisal exam skills

Topic	Key Content
Composition using Music Technology	Learning to use Sibelius and/or Garageband on the iMacs, instrumentation and structure
J. S. Bach and The Baroque Era	Polyphony, harpsichord, concerto grosso, terraced dynamics, basso continuo
H. Purcell and Word Painting	Ornamentation, melismatic text settings, basso ostinato
Beethoven and the developing Romantic Era	Expression, rubato, dynamics, the modern piano, chromaticism and sonata form
Killer Queen and Vocal Music	Vocal textures, guitar techniques, recording and studio effects, compound time
Esperanza Spalding and Fusion Music	Latin music, instrumentation, improvisation, virtuoso, jazz harmony, syncopation, melody

Solo and Ensemble Performance	Selecting and rehearsing an appropriate piece of recorded assessment
Listening and Appraisal exam skills	Melodic dictation, responses to questions

Psychology at the Archer Academy

Our Psychology curriculum encourages students to have a broad view of the world around them and develop the skills to critically analyse and understand what they see.

We aim to develop this critical awareness through the application of scientific methods to the study of human behaviour. In order to do this, we balance the theoretical and research content with the skill set students need to construct their own pieces of research and evaluate the research of others.

Psychology at Year 10

We follow the OCR GCSE Course and will study the following topics:

1. *Criminal Psychology*
2. *Sleep and Dreaming*
3. *Research Methods*
4. *Cognitive Development*
5. *Psychological Problems*

	Key Content	Supporting Resources
Half-term 1 - Criminal Psychology	<ul style="list-style-type: none">• Defining crime and how we gather crime statistics• Theories of crime: social learning theory and Eysenck's personality theory• Research into this topic from both Cooper and Mackie and Haven• Application: how can we use this knowledge to help make punishment and rehabilitation of criminals more effective?	The OCR textbook and related revision guides will also help as well as the example papers on the OCR website.
Half-term 2 – Sleep and Dreaming	<ul style="list-style-type: none">• The functions of sleep• The stages of sleep• The neuroanatomy of sleep (e.g. which areas of the brain are associated with sleep?)• Theories of dreaming: Freudian and the activation synthesis explanations• Freud's research on dreaming• Applying these ideas to the treatment of sleep disorders	The OCR textbook and related revision guides will also help as well as the example papers on the OCR website.
Half-term 3 – Research methods	<ul style="list-style-type: none">• Planning, conducting and evaluating research	The OCR textbook and related revision guides will also help as well as

	<ul style="list-style-type: none"> • Different methods of research – experiments, self-report, observation • Sampling methods • Research ethics • Forms of data, data presentation and data analysis 	the example papers on the OCR website.
Half-term 4 – Developmental Psychology	<ul style="list-style-type: none"> • Stages of cognitive development • Piaget’s theory of learning and development, contrasted with Dweck’s ideas of growth/fixed mindset • Research to support both of these ideas • The application of these ideas to our own education system and how it can be used to improve classroom experience 	The OCR textbook and related revision guides will also help as well as the example papers on the OCR website.
Half-terms 5 & 6 – Psychological Problems	<ul style="list-style-type: none"> • Defining and categorising mental health problems • Explaining schizophrenia from both a social and biological angle • Explaining depression from cognitive and evolutionary perspectives • Application of these ideas to therapy – how can we better help people cope with these conditions? 	The OCR textbook and related revision guides will also help as well as the example papers on the OCR website.

Science at the Archer Academy

Science provides the foundations for understanding the material world. Scientific understanding is changing our lives and is vital to the world's future prosperity, and all students should be taught essential aspects of the knowledge, methods, processes and uses of science. They should be helped to appreciate how the complex and diverse phenomena of the natural world can be described in terms of a small number of key ideas relating to the sciences which are both inter-linked, and are of universal application.

Science at Year 10

Year 10 students either continue to study the AQA Science Trilogy Combined GCSE or choose to study for AQA separate sciences (Triple Science Option). Students will have the opportunity to hone their practical skills through mastering the required practicals and writing up experiments. Students will study a range of topics in the three sciences which we will contextualise into the real world. We have a range of opportunities for students to develop their understanding even further towards preparing for A-Levels.

Combined Science

	Key Content	Supporting Resources
Half-term 1	Communicable Diseases, Preventing and Treating Diseases Non-Communicable Diseases Electric Currents Electricity in the Home	AQA GCSE Biology Book pages 74-123 AQA GCSE Physics Book pages 50-75
Half-term 2	Structure & Bonding Chemical Calculations	AQA GCSE Chemistry Book pages 36-81
Half-term 3	Molecules & Matter Radioactivity Chemical Changes	AQA GCSE Physics Book pages 76-111 AQA GCSE Chemistry Book pages 84-101
Half-term 4	Photosynthesis Respiration Electrolysis Energy Changes	AQA GCSE Biology Book pages 124-143 AQA GCSE Chemistry Book pages 102-111
Half-term 5	Forces in Balance Motion	AQA GCSE Physics Book pages 114-133
Half-term 6	Adaptations, Interdependence & Competition Organising an Ecosystem Biodiversity & Ecosystems	AQA GCSE Biology Book pages 258-311

Triple Science

	Key Content	Supporting Resources
Half-term 1	<p>Communicable Diseases, Preventing and Treating Diseases</p> <p>Non-Communicable Diseases</p> <p>Photosynthesis</p> <p>Structure & Bonding</p> <p>Electric Circuits</p>	<p>AQA GCSE Biology Book pages 74-133</p> <p>AQA GCSE Chemistry Book pages 36-61</p> <p>AQA GCSE Physics Book pages 50-63</p>
Half-term 2	<p>Respiration</p> <p>Chemical Calculations</p> <p>Chemical Changes</p> <p>Electricity in the Home</p> <p>Molecules & Matter</p>	<p>AQA GCSE Biology Book pages 134-143</p> <p>AQA GCSE Chemistry Book pages 62-101</p> <p>AQA GCSE Physics Book pages 64-91</p>
Half-term 3	<p>Human Nervous System</p> <p>Hormonal Control</p> <p>Electrolysis</p> <p>Radioactivity</p>	<p>AQA GCSE Biology Book pages 146-181</p> <p>AQA GCSE Chemistry Book pages 102-111</p> <p>AQA GCSE Physics Book pages 92-111</p>
Half-term 4	<p>Energy Changes</p> <p>Rates and Equilibrium</p> <p>Crude Oil & Fuels</p> <p>Space</p>	<p>AQA GCSE Chemistry Book pages 112-157</p> <p>AQA GCSE Physics Book pages 232-243</p>
Half-term 5	<p>Homeostasis in Action</p> <p>Chemical Analysis</p>	<p>AQA GCSE Biology Book pages 182-217</p> <p>AQA GCSE Chemistry Book pages 180-193</p>
Half-term 6	<p>Adaptations, Interdependence & Competition</p> <p>Organising an Ecosystem</p> <p>Biodiversity & Ecosystems</p> <p>Earth's Atmosphere & Resources</p>	<p>AQA GCSE Biology Book pages 258-311</p> <p>AQA GCSE Chemistry Book pages 194-205</p>

Sociology at the Archer Academy

In Sociology we encourage students to have a broad view of the world around them and develop the skills to critically analyse and understand what they see. This skill set is developed through a debate between theoretical perspectives and competing positions on how to explain the social phenomena we see around us. This broad spectrum of theory is supported by an understanding of how to construct research and the different methods we can employ in order to gain insight into the motivations and forces underpinning our social behaviour.

Sociology at Year 10

We follow the AQA GCSE specification and will study the following units:

- The Sociological Approach and Research Methods
- Families and Households
- Education

	Key Content	Supporting Resources
Half-term 1 – The Sociological Approach and Research Methods	To consider some of the most influential thinkers in sociology and the social context in which they were creating their theories: <ul style="list-style-type: none"> • Karl Marx (Marxism) • Emile Durkheim (Functionalism) • Max Weber (Interactionism) • Charles Murray (New Right) • Germaine Greer (Feminism) 	<ul style="list-style-type: none"> • AQA GCSE Sociology Textbook • Seneca Learning
Half-terms 2 & 3 – Families and Households	We will be exploring the role of the family in society, how it is changing and to what extent it contributes positively or negatively to its members: <ul style="list-style-type: none"> • Functions of the family • Family forms • Conjugal role relationships • Changing relationships in the family • Divorce • Criticism of the family 	<ul style="list-style-type: none"> • AQA GCSE Sociology Textbook • Seneca Learning
Half-term 4 – Research Methods	<ul style="list-style-type: none"> • Planning, conducting and evaluating research • Different methods of research – experiments, self-report, observation • Sampling methods • Research ethics 	<ul style="list-style-type: none"> • AQA GCSE Sociology Textbook • Seneca Learning

	<ul style="list-style-type: none"> • Forms of data, data presentation and data analysis 	
Half-terms 5 & 6 - Education	<p>What is the point of education? Does school help or hinder students? How is it changing and is it for the better – will it prepare our children for the future? To answer these questions we will be focusing on:</p> <ul style="list-style-type: none"> • Theories of education • Education and capitalism • Achievement data • Processes within schools <p>Throughout the topic, we will be applying the synoptic content of the sociological theories.</p>	<ul style="list-style-type: none"> • AQA GCSE Sociology Textbook • Seneca Learning

Spanish at the Archer Academy

Our Modern Foreign Languages curriculum aims to equip students with languages as a skill for life: the ability to communicate in Spanish for further study, future work or for leisure and travel abroad, truly engaging with their community and beyond. Students will develop their cultural awareness and have a more open-minded attitude towards other cultures. Students will be encouraged to embrace the fact that we live in a rich and diverse world. Through learning a foreign language, students develop a deeper understanding of how language works, building a more powerful understanding of their own language.

Spanish at Year 10

Students continue to work through the AQA Studio Spanish GCSE course in Year 10. Curriculum time is increased to 3 hours per week; one hour of which is a 'pit stop' lesson, with a focus on developing core exam skills and consolidating grammar. Students have one hour of homework per week using Memrise and the AQA Spanish Grammar and Translation workbook.

	Key Content	Assessment	Grammar	Supporting resources
Half-term 1	Module 4: Intereses e influencias – free time, what you usually do, sports.	Listening Grammar	Grammar covered in Years 7, 8 and 9 is revisited and built upon. In addition, Year 10 students will learn: <ul style="list-style-type: none"> • Direct object pronouns • Impersonal • The superlative (el/la/los/las más + adjective) 	Websites: www.memrise.com www.languagesonline.org www.pearsonactivelearn.com www.wordreference.com Books: <ul style="list-style-type: none"> • Studio AQA GCSE textbook • Studio AQA grammar and translation workbook • Spanish dictionary
Half-term 2	Module 4: Intereses e influencias – what is trending, entertainment.	Reading Writing Speaking		
Half-term 3	Module 5: Ciudades – features of a region, planning what to do.	Listening Grammar		
Half-term 4	Module 5: Ciudades – shopping for clothes and presents,	Reading Writing Speaking		

	problems in a town.		<ul style="list-style-type: none"> • How to use the conditional tense • Tener que + infinitive 	
Half-term 5	Module 6: De costumbre – daily routine, illnesses and injuries, typical foods.	All skills		
Half-term 6	Module 6: De costumbre – festivals, special celebrations, restaurants.	Mock speaking exam		

SPPEC (Society, Politics, Philosophy, Economics and Culture)
at the Archer Academy

SPPEC is a unique subject – only Archer does it. Our aim is to equip young people with the skills and knowledge to participate, understand and thrive in modern society. Throughout years 8, 9, 10 & 11, students will explore increasingly in-depth and controversial current-affairs-driven content that will enable them to make sense of the increasingly confusing world around them.

NB: as SPPEC is a current-affairs-driven subject, we will incorporate this into each starter (“what’s in the news” section). We will also include reactive lessons to respond to any major world/UK events that we think need to be addressed. Therefore, the curriculum plan below may be subject to change.

SPPEC at Year 10

Year 10 students start to dig down into more nuanced social debates and we also incorporate life skills into this section in order to help our young people prepare themselves for life “beyond Archer”.

- UK Politics (including processes such as Brexit)
- The Legacy of the British Empire and Colonialism
- Work experience preparation and reflection
- The law and the legal system
- RSHE (Relationships & Sexual Health Education) and D&A (Drugs and Alcohol) education
- Introduction to Philosophy

	Key Content
Half-term 1 - The British Political System	A more in-depth look at how our democracy functions, the controversies of that system and their role as a citizen within it.
Half-term 2 - The Legacy of the British Empire and Colonialism	To understand the impact that religious and political conflict has had on the UK over the last 100 years and how this has affected our sense of what it means to be British. Link to the debates generated by BLM re: legacy of slave owners, statues, etc.
Half-term 3 - The law and the legal system	Equip students with an understanding of the purpose, function and organisation of the law so they understand their rights/responsibilities as citizens and how to thrive within this system.
Half-term 4 - Work experience presentations and feedback (2-3 lessons)	Reflect on their work experience and give a short speech and Q&A about their week.

Half-term 5 - RSHE and D&A	Be confident negotiating situations involving sex and relationships, including who/where to turn for further advice (will involve discussions of consent, pornography, healthy relationships, drugs and alcohol, abortion, menstrual cycle, STIs, FGM, forced marriage and will be updated as we progress to reflect any changes in national curriculum etc).
Half-term 6 - Introduction to Philosophy	Provide students with an overview of the major branches of philosophy so that they are able to understand how this underpins their other subjects and ties their thinking skills together.

VCERT Engineering at the Archer Academy

The Level 1/2 Technical Award in Engineering is designed to provide learners with the skills, knowledge and understanding of the applied study of good engineering practices and an understanding of working in the sector. At the Archer Academy we aim to equip students with the knowledge and skills needed to explore and pursue different vocational and engineering study options as they move to the next stage of their education.

Engineering at Year 10

In Year 10 students will build on their foundation year by completing a wide range of tasks including practical projects as well as theory lessons. Students will be exposed to more complex processes, machinery and manufacturing methods whilst completing making projects. They will also explore theory such as health and safety, mathematics, engineering sectors and tools and equipment used in engineering.

	Key Content
Engineering drawing	Accurate use of orthographic projection. Use of CAD to create engineering drawings.
Acrylic clock	Use of tools and equipment to manufacture a clock. Safe use of tools and equipment. Knowledge of material properties.
Metal work project	Use of tools and equipment to manufacture metal products. Safe use of tools and equipment. Knowledge of material properties.
Vacuum-formed desk tidy	Use of tools and equipment to manufacture a polymer product. Safe use of tools and equipment. Knowledge of material properties.
Timber sculpture project	Use of tools and equipment to manufacture a timber product. Safe use of tools and equipment. Knowledge of material properties.
Practice coursework project	Problem solving, engineering drawings, design, modelling and manufacturing.