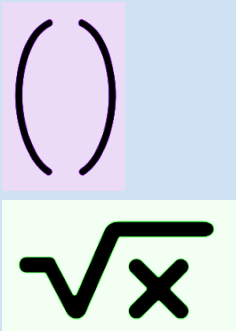
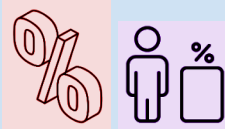
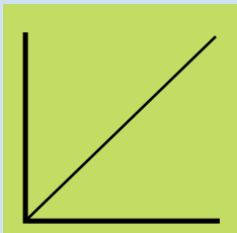
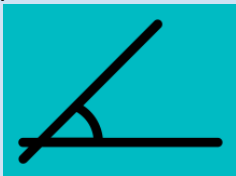
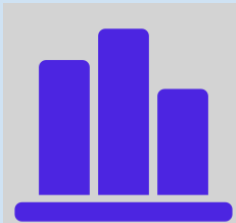
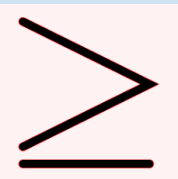
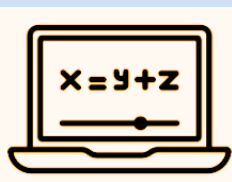




Bredon School

Year 10 Curriculum Map

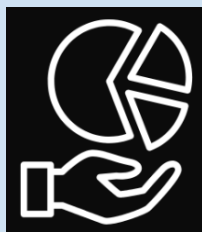
Subject	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Mathematics - Foundation iGCSE	Algebraic Manipulation - key algebra skills used in the iGCSE.  Equations, inequalities and formulae - finding solutions using algebra, including links to real life situations.	Percentages - work with percentages of amounts, percentage change and interest calculations.  Ratio and Scale - understand how amounts can be divided in ratios and their connection to scales.	Straight-line Graphs - plot and interpret lines of the form $y = mx + c$  Probability - find the probability of one or two events and use probability trees to show multiple possible outcomes.	Perimeter, area and volume - find the area and perimeter of 2D shapes including circles and compound shapes. Find the surface area and volume of prisms.  Interpret and represent data - use tables to represent data and calculate key information.	Angles - calculate the angles within polygons and parallel lines.  Graphs and diagrams - draw a range of diagrams to represent data. 	Factors and Powers - understand and use factors, multiples and primes to find highest common factors and lowest common multiples and simplify expressions. 



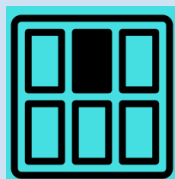
Quadratic equations and expressions (extension topic) - working with more complex algebra.

$$x^2 - 8x + 12 = 0$$

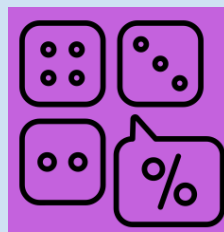
Useful resources available at:
<https://whiteroseeducation.com/parent-pupil-resources/maths/home-learning?year=year-10>



Work with fractions - calculate fractions of amounts and use the four operations (+, -, x and ÷) with fractions.



Useful resources available at:
<https://whiteroseeducation.com/parent-pupil-resources/maths/home-learning?year=year-10>



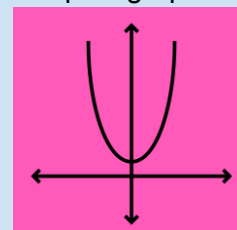
Rounding and Estimation - use rounding to estimate calculations and find error intervals.



Useful resources available at:
<https://whiteroseeducation.com/parent-pupil-resources/maths/home-learning?year=year-10>

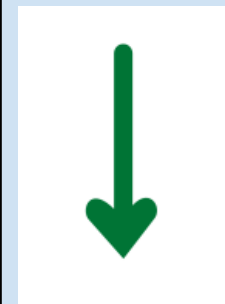


Non-linear graphs (extension topic) - draw and interpret more complex graphs.



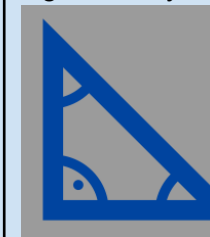
Useful resources available at:
<https://whiteroseeducation.com/parent-pupil-resources/maths/home-learning?year=year-10>

Vectors (extension topic) - understand and use vector notation to translate shapes and multiple translations.



Useful resources available at:
<https://whiteroseeducation.com/parent-pupil-resources/maths/home-learning?year=year-10>

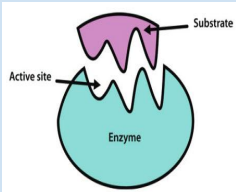
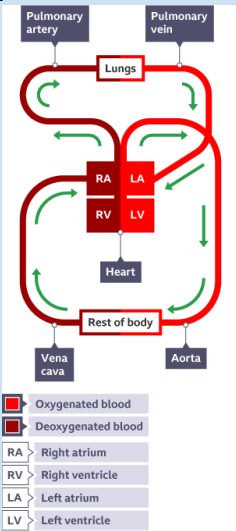
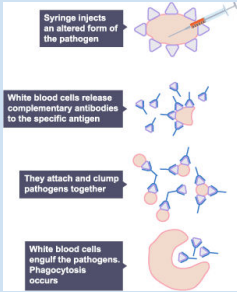
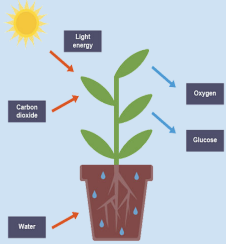
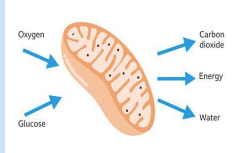
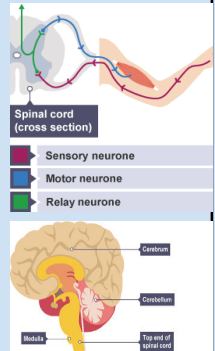
Pythagoras' Theorem and trigonometry - find missing sides and angles in right angled triangles using Pythagoras' theorem and trigonometry.

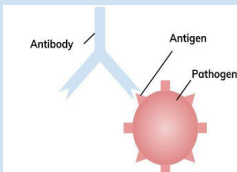
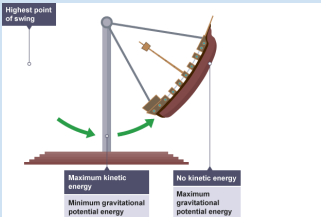
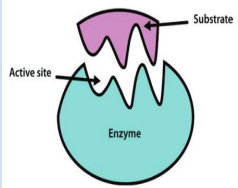
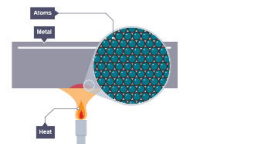
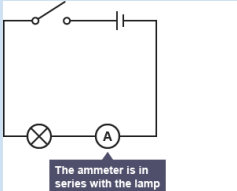
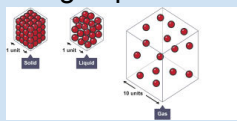
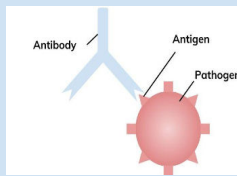
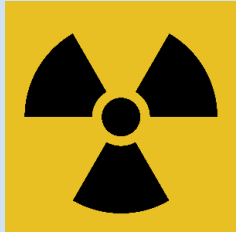
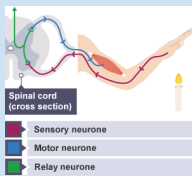
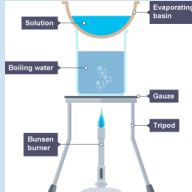


Simultaneous equations (extension topic) - solve equations with multiple solutions.

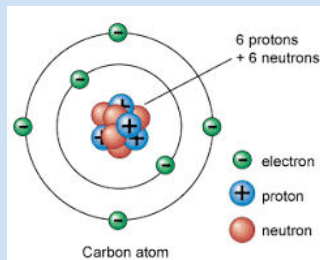
$$\begin{aligned} (1) \quad 3x + 4y &= 24 & (1) \times \\ (2) \quad 4x + 3y &= 22 & (2) \times \\ \hline & & y = 12 \end{aligned}$$

Useful resources available at:
<https://whiteroseeducation.com>

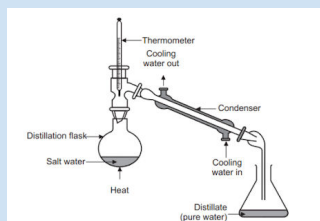
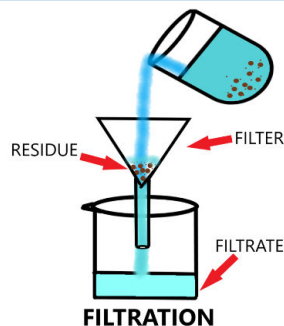
						om/parent-pupil-resources/math/home-learning?year=year-10
Biology GCSE	Organisation & the digestive System How the body is organised; how enzymes and the digestive system work and food chemistry. 	Organising animals and plants How the circulatory and respiratory systems work in humans; the structure of plants and how substances are transported in plants.  Communicable Diseases How diseases are	Preventing & treating disease Understanding vaccination, antibiotics and how drugs are discovered and developed.  Non-communicable disease How lifestyle, and inheritance are linked to diseases such as cancer. The use of monoclonal antibodies.	Photosynthesis What is photosynthesis and what affects it. How plants use glucose and how to increase photosynthesis. 	Respiration Aerobic respiration and exercise compared with anaerobic respiration. Metabolism and the liver. 	The human nervous system Homeostasis and the nervous system. Structure of the brain and eye and eye problems. 

		caused by pathogens and examples of disease in humans and plants.				
Combined Science GCSE	Physics: Conservation and dissipation of energy - gravitational potential, kinetic and elastic energy stores. Energy efficiency, electrical appliances and power.  Biology: Organisation & the digestive System How the body is organised; how enzymes and the digestive system work and food chemistry.  Chemistry:	Physics: Energy transfer by heating - conduction, specific heat capacity and insulating buildings. Energy resources - Energy from wind, water, the sun and Earth. Energy and the environment.  Biology: How the circulatory and respiratory systems work in humans; the structure of plants and how substances are transported in plants. Chemistry: The periodic table	Physics: Electric circuits - potential difference, resistance, series and parallel circuits. Electricity in the home - a.c and d.c, cables & plugs, appliances and efficiency  Biology: Communicable Diseases How diseases are caused by pathogens and examples of disease in humans and plants. Preventing & treating disease	Physics: Molecules and matter - density, states of matter, specific latent heat and gas pressure.  Biology: Non-communicable disease How lifestyle, and inheritance are linked to diseases such as cancer. The use of monoclonal antibodies.  Chemistry: Quantitative chemistry	Physics: Radioactivity - atoms and radiation, the nucleus, alpha, beta and gamma radiation.  Biology: What is photosynthesis and what affects it. How plants use glucose and how to increase photosynthesis. Respiration Aerobic respiration and exercise compared with anaerobic respiration. Metabolism and	Physics: Revision of Paper 1 Physics in preparation for the mock exam. Biology: Homeostasis and the nervous system. Neurones and the reflex arc.  Chemistry: Making salts 

Atomic structure



Separation techniques



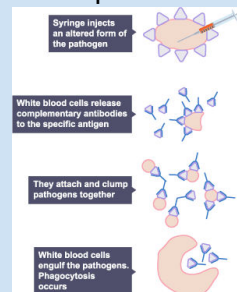
Periodic Table of the Elements

1	2																	10	11	12	13	14	15	16	17	18
Li	Be																	B	C	N	O	F	Ne			
Na	Mg																	Al	Si	P	S	Cl	Ar			
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr									
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe									
Cs	Ba	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn									
Fr	Ra	Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr										

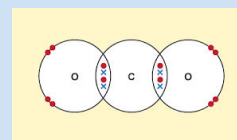
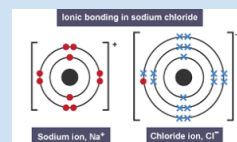
Reactions of elements in group 1, group 7 and group 0



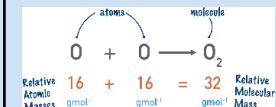
Understanding vaccination, antibiotics and how drugs are discovered and developed.



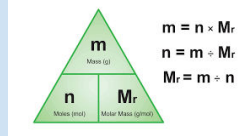
Chemistry:
Chemical bonding - ionic, covalent and metallic bonds. Includes bonding and their properties.



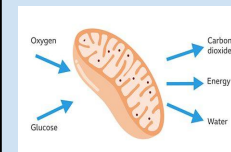
Relative formula mass



Moles



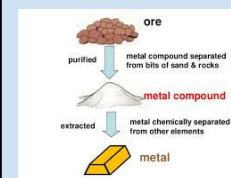
the liver.



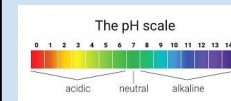
Chemistry:
Reactivity series

Potassium
Sodium
Lithium
Calcium
Magnesium
Aluminium
Carbon
Zinc
Iron
Hydrogen
Copper
Silver
Gold

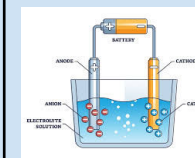
Extraction of metals

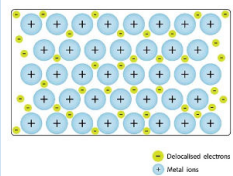
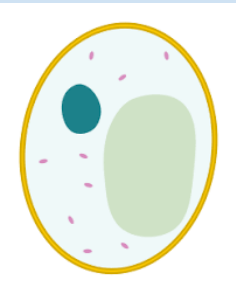
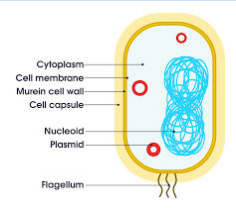
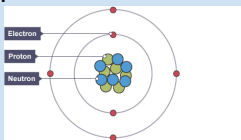


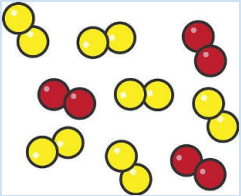
Reactions of acids



Electrolysis



						
Entry Level Science	What is the body made of? Cells, organisation, the circulatory and digestive system.  How the body works. Respiration, diet, lifestyle and disease. How the body fights disease. Vaccination, drugs and antibiotics. 	How the body is coordinated. Nervous system, hormones and fertility. Component 1 Biology Assessment Atoms, elements & compounds. Atoms and the periodic table.  Model of the atom. Atoms, electrons, metals and non-metals. Mixtures and compounds States of matter, mixtures, carbon and polymers.	Metals and Alloys. Metals, alloys, extracting and recycling metals. Component 3 Chemistry Assessment Energy. Energy stores, conservation, heating & resources. Forces & Work. Forces and work done.	Speed & Stopping Distances. How to calculate speed and stopping distances in the driving test. Atoms & Nuclear radiation. Alpha, beta and gamma radiation. Uses of radiation. Component 5 Physics Assessment	Feeding relationships. Photosynthesis, adaptations, food chains/webs and decay processes. Organisms and the environment. Competition, factors affecting ecosystems & pollution How life developed on Earth. Genetics, reproduction, variation, evolution and artificial selection	Revision and Component 2 Biology Assessment Practical Assessment 1. Testing reactions

						
GCSE Food Preparation and Nutrition	 The pupils begin their work by exploring and investigating the production, preparation and cooking of fruit and vegetables. They will look at the nutritional makeup of the fruit and vegetables.  At the end of the term, the learners will have to research, practice, cook and serve a dish of their choice making the vegetables the star of the show.	The pupils will explore and investigate the production, preparation and cooking of dairy products. Starting with the process of making milk they will learn how cheese, yoghurt and butter are made and have a go at making these products for themselves.  They will look at the nutritional makeup of the dairy and of dairy substitutes.  The pupils will make a range of dishes	 In the New year, the pupils will move on to explore and investigate the production of meat and poultry. They will look at farm assured schemes and ways to tell meat is good quality. The pupils will learn how to bone and portion chickens and other meats.  The pupils will explore cooking methods suitable	Seafood is a much underused and undervalued commodity and many people are unsure about cooking fish. Over the term, the pupils will carry out hands-on learning on varieties of fish and seafood, how to tell if seafood is fresh and store it  The pupils will gut, fillet and skin a range types of fish and go on to cook with them. 	 Pastry is a wonderful vehicle to hold all sorts of fillings, from a cornish pasty to a cream eclair. The pupils will learn the science behind making pastry and understand the need for accurate weighing, measuring and preparation. 	Bread is one of the world's staple foods and carries high marks, if done well, in the final practical exam.  The pupils will learn about the grains used to make flour and the role gluten and yeast plays in bread making.



made with a variety of dairy dishes before having to make their own choice dairy dish for assessment.



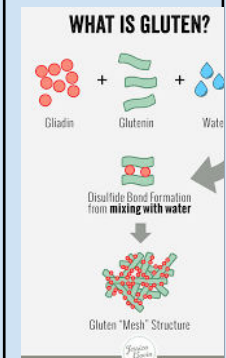
for different cuts of meat and go on to cook a given range of meat dishes before preparing and producing their own meat dish for assessment.



They will research, practice and cook their own chosen seafood dish at the end of term.



The pupils will make a range of sweet and savoury pastry products and finish them to a high standard. The pupils will then choose and make their own high quality pastry product that will impress.



They will make a range of doughs. Including enriched doughs such as brioche and then turn the dough into various shaped bread products.



BTEC L1 Hospitality



We welcome our new BTEC hospitality and tourism pupils. On the practical side, the pupils will each week, prepare, cook and serve a dish to a restaurant standard. The complexity of the dish made will increase as we progress through the term. The pupils will work on a wide range of pasta dishes and evaluate their dish and performance.



Alongside the cooking, the pupils will

After half term, the pupils will carry out research into pasta and choose a pasta dish that they have never cooked before. They will then look to improve the nutritional qualities of the dish and prepare an ingredient list, equipment list and a time plan. They will practice this dish before being formally assessed and given a mark that will count towards their final grade.



The pupils will also put their finishing touches to their visitor attraction

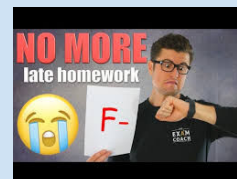


The pupils will undertake a generic unit that covers the "Managing One's Own Time" They will spend time decluttering their emails, google drives and calendars. This will involve deleting data that is no longer required and putting current information into a system of folders for easy access and retrieval.



The pupils will continue with cooking but this

The pupils build on their work undertaken after Christmas to evaluate the effectiveness of the changes they made to their email, google drive and calendar. The pupils will write a report of what they learnt and what changes they could further implement. They will submit this work for formal assessment.

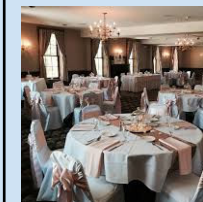


The pastry cooking continues with the pupils making ever more complex pastry dishes such as mille feuille and



As we head into the summer, we will build on the knowledge and skills learnt so far and put some of the theory into practice. They will learn to work as a team to research, plan and organise a function. Previous events have included a high tea, street food stalls and the classroom being transformed into the interior of a pub and the guests being served a range of pub classics. The pupils will

The pupils will continue to learn about and practice their customer service and food service skills.



They will add the final touches to the event including the marketing, guest list, producing a menu card and costing the event.

The pupils, with additional workers, will run the event

	investigate tourist attractions in the local area. The tourist attractions will need to meet the needs of a given family. 	work and will then present their findings to the group in the style of a tourist information officer. The work and presentation will be formally assessed. 	term the topic will be pastry. They will learn to make a variety of pastry types and use them in sweet and savoury dishes. 	tarte tartin. They will spend time on the finishing of the pastry dishes.  	divide up and allocate the different job roles.  The pupils will practice making some of their function dish ideas to enable them to fine tune them for the event. 	ensuring the food, drink and service is excellent.  The final task will be to carry out a thorough debrief and write a report on what went well and describe how the event could be improved further.
All Creative Arts: <i>Photography</i> <i>Art and Design</i> <i>3D Design</i>	How Creative and Applied Arts work in Year 10: Students study three artist/designer/photographers across the year, one each term. Each term follows the same creative process, allowing pupils to build skills and confidence while becoming more independent. Each term, students: • Research an artist/designer/photographer • Experiment with material and multi-media techniques					

**Graphic
Communicat
ions Textile
Design**

- Refine their strongest work
- Develop and improve a personal idea
- Present and evaluate their outcomes

This approach shows that strong creative ideas and outcomes develop through practice, refinement, and reflection. By repeating the same creative process with three different artist/designer/photographers, students:

- Build strong technical and creative skills
- Learn how to develop ideas over time
- Gain confidence in making and explaining creative decisions
- Become increasingly independent learners

This approach ensures that by the end of Year 10, pupils are fully prepared for Year 11, where they will study a fourth photographer and complete their major final project.

Research 1 > Building skills and confidence
(Teacher-led learning)

The autumn term focuses on building foundational skills. Lessons are carefully structured and led by the teacher to ensure all students feel confident using materials, equipment, and processes, and understanding artistic and technical techniques.

Refining skills and developing first ideas (Teacher-led with support)

Students begin refining their strongest experiments and using them to develop a simple creative idea of their own.

During this half-term, students will:

Review and refine their most successful practical outcomes

Research 2 > Developing ideas and decision-making
(Guided independence)

In the spring term, students are encouraged to take greater responsibility for their work. Teachers continue to guide learning, but pupils begin to make more creative decisions independently.

During this half-term, students will:

Refining ideas and outcomes
(Guided independence)

Students focus on strengthening their ideas and refining outcomes for clarity, quality, and impact.

During this half-term, students will:

Refine techniques based on feedback and comparison

Develop and select a stronger personal creative

Research 3 > Working with confidence and independence
(Student-led with support)

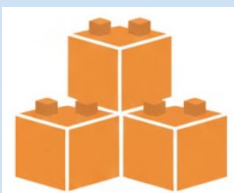
In the summer term, students work much more independently, applying everything they have learned so far. Teachers act as guides and mentors rather than directing each stage.

During this half-term, students will:

Refining and presenting outcomes
(Student-led)

Students complete a confident and personal outcome, working in a way that closely reflects GCSE expectations.





During this half-term, students will:

Be introduced to their specialist subject as a creative discipline

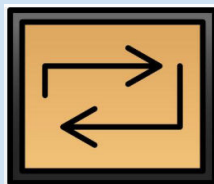
Study their first artist / designer / photographer, learning how creative work communicates meaning and mood

Produce copy studies inspired by the artist's / designer's / photographer's style

Learn how to use subject-specific materials, tools, or equipment confidently and appropriately

Experiment with a range of techniques through guided practical tasks

Improve technical control through repetition and small adjustments



Begin developing a simple personal idea inspired by their artist / designer / photographer

Explore how changes to materials, composition, scale, or technique improve outcomes

Present a short resolved outcome or mini-series

Complete a short written evaluation reflecting on their learning

By the end of the autumn term,

Research a second artist / designer / photographer in greater depth



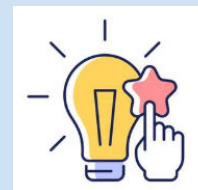
Explore ideas such as intention, visual language, and meaning

Carry out experiments that link more clearly to a chosen theme or concept

Begin selecting materials, techniques, and approaches with greater independence

Record and explain creative choices using subject-specific

idea



Improve the quality, consistency, and control of their work

Present a more resolved creative outcome or mini-project

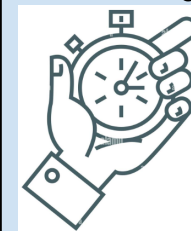
Write a more detailed evaluation using subject-specific language

By the end of the spring term, students show greater confidence, control, and understanding in their creative work.

Research a third artist / designer / photographer independently

Plan and manage their own practical work and creative sessions

Experiment with materials, techniques, and processes of their choosing



Take responsibility for equipment, organisation, and time management

During this half-term, students will:

Refine their work to a high standard

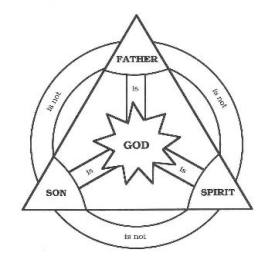
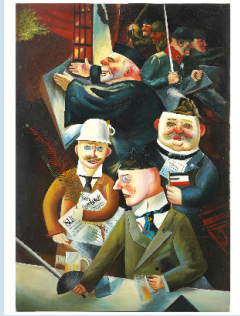
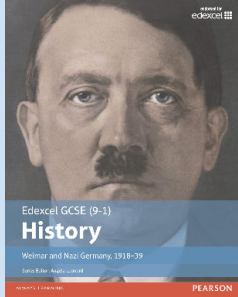
Develop a confident personal creative outcome

Present their work professionally

Complete a reflective evaluation linking research, experimentation, and final outcomes

By the end of the summer term, students are working with a level of independence and confidence that prepares them fully for

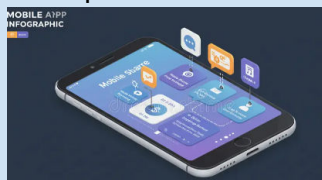
		students understand the full creative process and have completed their first mini-project.	vocabulary			Year 11.
	Creative Arts Preparation over the Summer Holidays: Artist / Designer / Photographer 4 – Research & Exploration Over the summer break, students begin their final artist study independently. This prepares them for the demands of Year 11 and allows them to start the year confidently. During this period, students will: • Research their fourth artist / designer / photographer • Produce copy studies inspired by this practitioner • Experiment with materials, techniques, or processes • Refine their strongest experiments This work completes the research and exploration stages of the creative process before students return to school.					
GCSE RE	Comp 2: Christian Beliefs Students are introduced to the foundational beliefs of Christianity. Beliefs about the nature of God, creation, the life of Jesus, afterlife and	Comp 2: Christian Practices Students apply their knowledge of religious belief to how Christians are influenced by their belief. – Forms of worship – Pilgrimage	Comp 3: Islam Beliefs The study of Islam is the comparative religion students learn for their GCSE. Students learn about the two main groups within Islam;	Comp 3: Islam Practices Students apply their knowledge of religious belief to how Muslims are influenced by their belief. – Five Pillars of Islam – Islam teachings of suffering	Comp 1: Issues of Life and Death (theme 1) Students learn about; the world, value of life, beliefs about death and the afterlife, the Sanctity of Life & Quality of Life	Consolidation, Exam Skills and Writing Practice

	heaven and hell. 	– The role of the church in the community – Christian Persecution 	Sunni and Shia Belief. – Nature of Allah – Six Articles of Faith – Five Roots of Usul-ad-Din – Prophethood & the Prophet Muhammad – Belief in Angels – Afterlife & Predestination	– Religious ceremonies and festivals 	arguments, medical ethics.  	
History GCSE	Medicine in Britain c1250–Present:  Medieval and Renaissance Medicine including; barber surgeons, the Four Humours and the Black Death	Medicine in Britain c1250–Present:  Medicine in the 19th century and modern medicine including; William	Medicine on the Western Front in World War One.  This unit covers how medicine	Weimar and Nazi Germany 1918–1939. 1  This unit covers; the Treaty of Versailles, the challenges,	Weimar and Nazi Germany 1918–1939. 2  This unit covers; life in Nazi Germany including;	Weimar and Nazi Germany 1918–1939. 2  This exciting unit covers; life in Nazi

		Harvey, Edward Jenner, Florence Nightingale.	changed to meet the challenges presented by World War One. It includes; the illnesses caused by the trench environment, causes and treatment of injuries and the role of the Royal Army Medical Corps	Weimar democracy, the Great Depression and the Rise of the Nazis.	propaganda and terror, women, minorities and living standards.	Germany including; the persecution of minorities.
Animal Care	Animal Feeding Nutrition needed for a healthy diet in a range of animals. Nutrition needed at various life stages of an animal. Practical feeding of a range of animals including companion animals, rodents, reptiles and amphibians.	Animal Feeding Problems that can occur due to incorrect feeding of animals. Common diseases and illnesses relating to feeding. Body Condition Scoring, weighing, monitoring health through observations.	Introduction to Livestock Problems that can occur due to incorrect feeding of livestock. Common diseases and illnesses relating to livestock feeding and nutrition. Body Condition Scoring, weighing, monitoring health through observations.	Animal Accommodation Types of animal accommodation including vivarium, terrarium, aquarium Safety and Security, cleaning procedures Types of Bedding advantages/disadvantages	Livestock Accommodation Describe the accommodation requirements of common farm livestock Prepare accommodation for the reception of farm livestock Maintain accommodation for farm livestock Assessment: Word processed coursework on	Animal Health Signs of good health in a range of animals Signs of ill health in a range of animals Practical health checking of a range of animals

	 Assessment: Word processed coursework including recording of feeding within practical diary, diet sheet relating to an animal in a given lifestage. Practical animal feeding assessment.	 Assessment: Word processed coursework including recording of feeding within a practical diary, problems that can occur due to incorrect feeding.	 Assessment: Word processed coursework including recording of feeding within a practical diary, leaflet on livestock feeding and nutrition	 Assessment: Word processed coursework on types of animal accommodation, recording of accommodation cleaning/set up in practical diaries. Practical assessment preparing animal accommodation, maintaining and repairing animal accommodation	types of livestock accommodation, recording of accommodation cleaning/set up in practical diaries. Practical assessment preparing and cleaning livestock accommodation	 Assessment: Practical health checks of a range of animals, evidencing through health check forms
Agriculture						
IT	Component 1: Interface Design & Accessibility Students explore how hardware and software	Component 1: Project Planning & Production Students learn to manage a digital	Data Modeling Foundations This intensive unit prepares students for Component 2	Component 2: Data Dashboards Students begin their Pearson-set assignment (PSA)	Component 2: Assessment Students finalize their data modeling	Component 3: Effective Digital Working

are designed for specific users. They master accessibility features—such as screen readers and high-contrast modes—and complete a **mock coursework** project to practice designing an interface for a specific audience.



project using tools like Gantt charts and flowcharts. They then apply their skills to produce a functional interface prototype, ensuring it meets a client brief while following professional design principles.



by mastering spreadsheet formulas and functions. Students learn to manipulate large datasets using absolute referencing, VLOOKUPs, IF statements, and data validation to ensure accuracy.



by transforming raw data into meaningful information. They design and create an interactive Dashboard that uses charts and summary tables to identify trends and inform decision-making.



coursework, focusing on the drawing of conclusions from their findings. They evaluate their dashboard's effectiveness and ensure all data processing meets the client's original requirements.



Students begin exploring the synoptic external unit. This term focuses on Modern Technologies, investigating how cloud computing, communication tools, and infrastructure impact the way organizations and individuals work together.

