Pendle Vale
Think Pendle Vale, Think Achievement

THE CURRICULUM OFFER AT PENDLE VALE COLLEGE

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THE CURRICULUM OFFER AT PENDLE VALE COLLEGE

In March of Year 9 the formal options process takes place with students choosing which subjects to specialise in during Key stage 4 (Years 10 and 11).

During KS4, students follow a core curriculum of English language and Literature, Mathematics, Science, PE, ICT and Personal Development. In addition to this, all students have a range of courses, which they can opt to study including both GCSE and Technical Award equivalent qualifications.

Students will receive guidance throughout this process from Senior Leaders, Class Teachers and our Year 9 Pastoral team. This guidance will ensure that our students choose options which will give them a well-balanced, successful and exciting final two years at Pendle Vale.

To ensure our students are competitive and attractive to future employers and Universities around half of our students each year will study French. These students will be selected based on academic potential with all students able to opt to follow the course too.

Some subjects are "guided choices"- which means that we will advise you as to whether you are likely to be successful in them before making your choices, these include Separate Science and Further Mathematics. Behaviour and Attitude to Learning stats will be taken into account in all subjects before subject groups are finalised.

In addition to the formal curriculum, Pendle Vale continues to offer a variety of experiences through Pastoral days, opportunities through local Sixth Form Colleges and school visits. This makes sure that our students leave us with not only the best qualifications they can achieve but that you have also had the chances to develop their personal traits and character to ensure future success.

AMBITION DETERMINATION RESPECT

ENGLISH

Students will study both English Language and English Literature in both KS3 and KS4 in line with the National Curriculum:

Through both English Language and English Literature students will develop their knowledge and skills in reading, writing and critical thinking. Our students have a chance to develop culturally and acquire knowledge of the best that has been thought and written. Studying both English Language and English Literature will encourage students to read widely for pleasure as preparation for studying literature at a higher level. We support students to read both fluently and write effectively. Students will be able to demonstrate a confident control of standard English and write grammatically correct sentences, deploy figurative language and analysing texts.

ASSESSMENT

KS4 – Student sit two exams at the end of Y11 in both English Literature and English Language. There is in addition a spoken language component which is carried in school during lesson and assessed by the English Department. There is no coursework.

- English Language Paper 1 – 1 hour 45 minutes
- English Language Paper 2 – 1 hour 45 minutes
- English Literature Paper 1 – 1 hour 45 minutes
- English Literature Paper 2 – 2 hours 15 minutes

POSSIBLE CAREERS

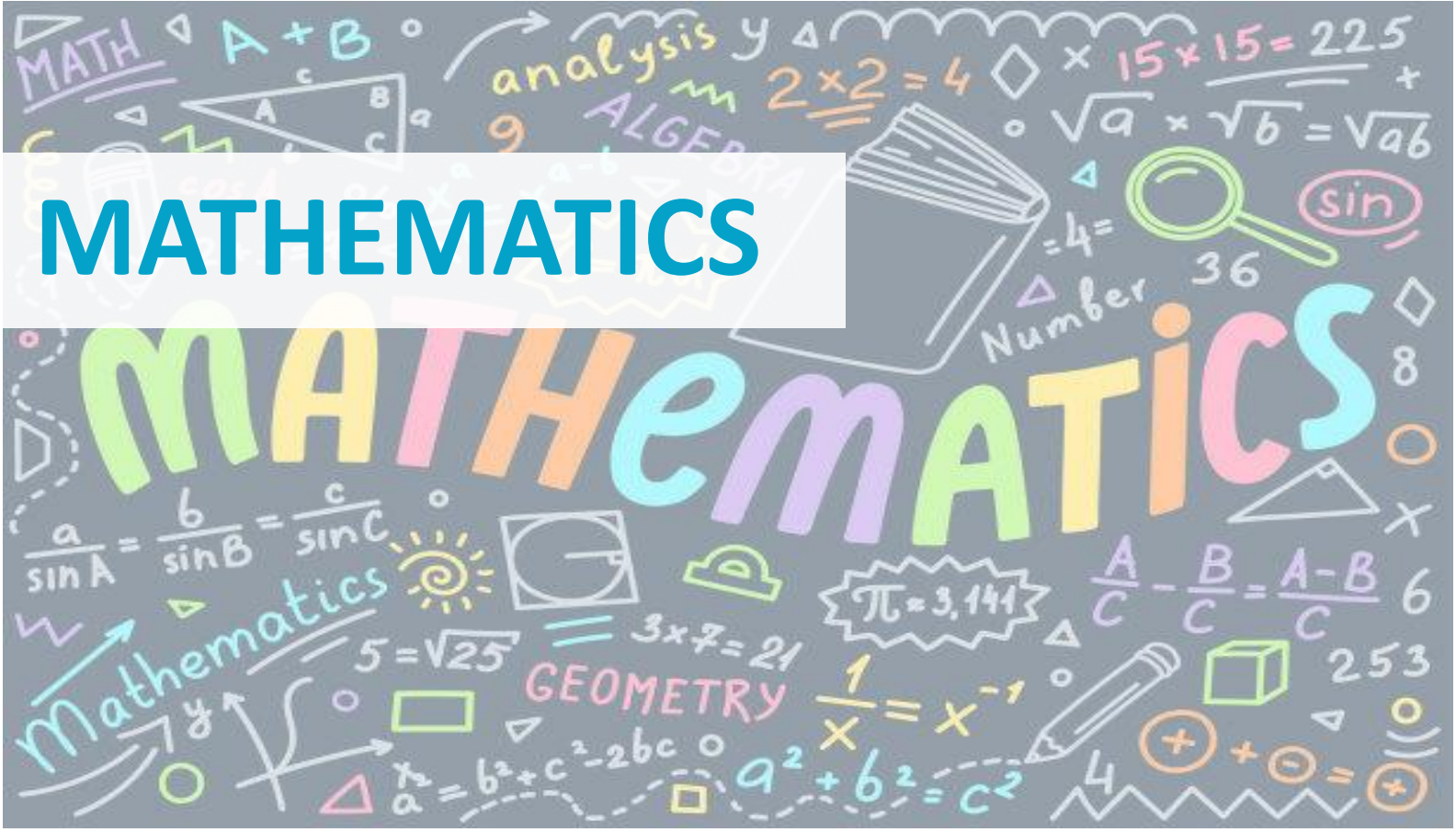
Teaching, either in primary or secondary education. Journalism or Writing and Marketing and Public Relations

ENGLISH

KS4

Year 10		
AUTUMN	**SPRING**	**SUMMER**
Anthology Poetry: Power & Conflict **LIT.** Context through a range of non-fiction texts **LANG PAPER 2: READING & WRITING SKILLS** **Substantive**: AQA Power and Conflict poetry anthology, Non-fiction texts. Understanding how the different poems in the clusters relate to each other in terms of themes and inferred messages. **Disciplinary:** (LIT) Analyse the language, form and structure used by poets to communicate messages with readers. Compare how poets present their ideas. (LANG) Identify a writer's perspective and explain how it is communicated. Apply rhetorical techniques to create persuasive writer.	An Inspector Calls **LIT** **Revisit and embed:** **1)power & conflict themes in anthology poetry. (HW)** **LANG PAPER 1:** **Substantive:** AIC: Understanding the context of the play. Understanding stage directions. Understanding and analysing how characters are presented. Analysing the structure of how the acts are presented and evaluate the plot moving forward. Understand themes and issues presented. **Disciplinary**: AIC- Develop vocabulary linked to play and context. Develop ability to independently locate quotations and analyse them. Continue to reinforce literary devices and word classes.	**Shakespeare: Macbeth** **Lang:** SPOKEN LANGUAGE ELEMENT: **Revisit and embed:** **Characters and themes in An Inspector Calls (HW)** **Substantive:** Understand the plot, structure and characters of the play. Understanding the five-act structure of Shakespearean tragedy. Understanding significant contextual influences on the play: Jacobean attitudes towards witches and ghosts; Jacobean Christian beliefs; Jacobean attitudes towards gender expectations. **Disciplinary**: Essay writing skills: writing an effective introduction e.g placing an extract within the play, targeted response to the question, clearly creating an argument and exploring ideas thoroughly, grouping together of ideas to form arguments, maintaining a critical style and developing a personal response. Effective use of quotations to support arguments: use of a range of short, precise quotations embedded in sentences. Use of sophisticated vocabulary to express ideas – students building a glossary of terms within lessons. Analysis of the writer's methods and how meanings are conveyed: exploration of the meanings and connotations of key words, phrases and techniques, exploration of the authorial intention and impact on the audience, exploration of the communication of the writer's messages.

Year 11		
AUTUMN	**SPRING**	**SUMMER**
A Christmas Carol **LIT** **Substantive:** Understanding of 19th Century culture and politics, Dickensian novel structure, Writer's use of fiction as social commentary. **Disciplinary:** Translate Dickensian language into modern English, analyse use of literary devices and their effect on audience, Write descriptively and narratively in the style of Dickens.	**Revision and consolidation in both Language and Literature** **Substantive:** Interpret the symbolic meaning of texts Consider the effects of an author's use of literary devices Connect the text to human experience **Disciplinary:** Considering the perspectives of the different authors and sources Evaluating evidence Corroborating sources.	**Revision and consolidation in both Language and Literature** **Substantive:** Interpret the symbolic meaning of texts Consider the effects of an author's use of literary devices Connect the text to human experience **Disciplinary:** Considering the perspectives of the different authors and sources Evaluating evidence Corroborating sources.



MATHEMATICS

Mathematics is an interconnected subject in which students need to be able to move fluently between representations of mathematical ideas.

The programme of study for key stage 3 & 4 is organised into apparently distinct domains, but students should build on previous key stages and make connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems

ASSESSMENT

KS4 – Students will sit three exams. These are sat at the end of Year 11.

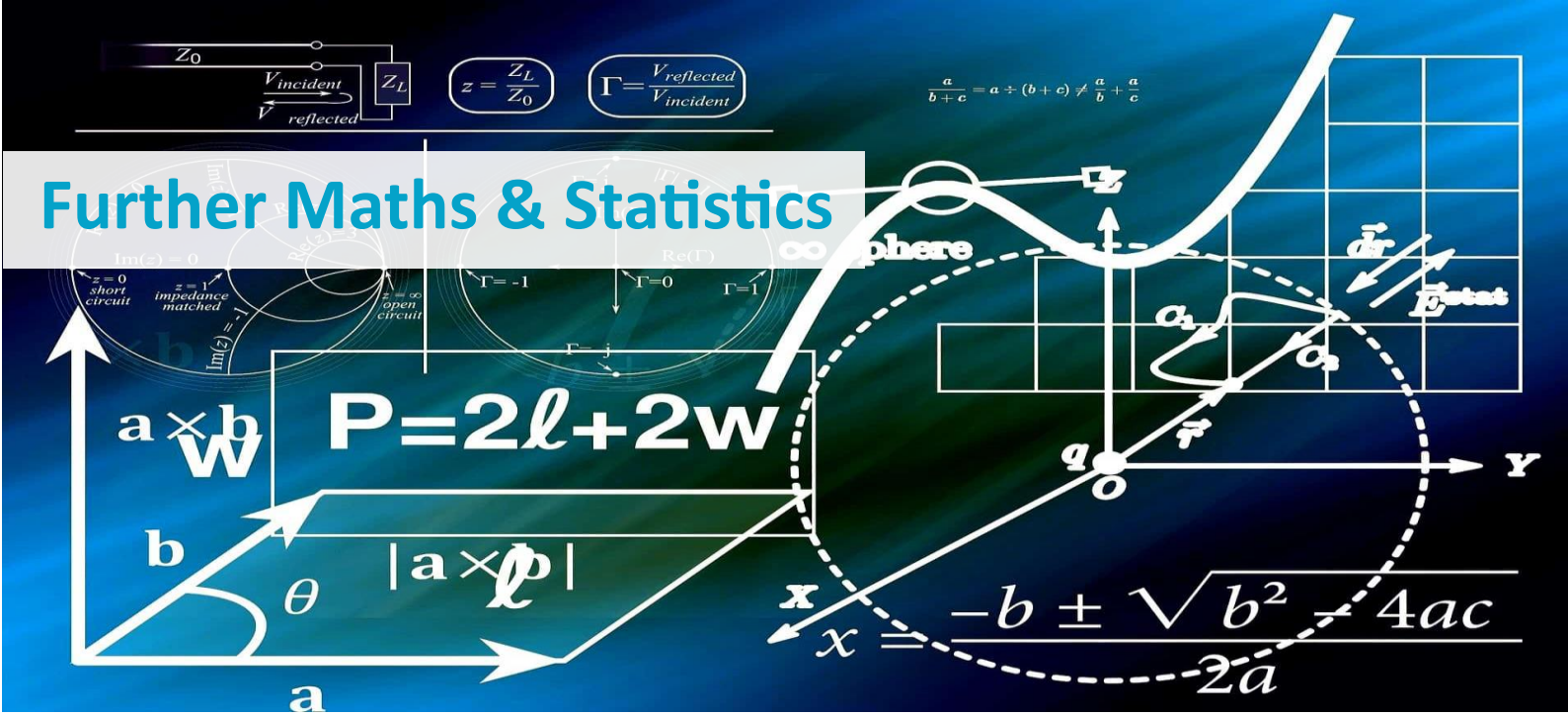
- Paper 1 – 1 hour 30 minutes (Non-calculator)
- Paper 2 – 1 hour 30 minutes (Calculator)
- Paper 3 – 1 hour 30 minutes (Calculator)

POSSIBLE CAREERS

Finance and Investment, Analyst and Adviser, Chartered or Certified Accountant, Programmer, Software Developer, Actuary

Year 10		
AUTUMN	**SPRING**	**SUMMER**
Foundation Tier		
Number concepts Calculations Limits of Accuracy Products of Primes Indices Standard Form Ratio and Proportion Fractions/ Decimals/ Percentage Negative Numbers	Algebra concepts Equations, Linear and Quadratic Formula Inequalities Sequences Straight Line graphs Real life graphs Averages and Range Frequency Tables	Probability Venn Diagrams Data Handling Stem and leaf diagrams Pythagoras' Theorem Trigonometry Perimeter and Area.
Higher Tier students in addition will study:		
Decimal Calculations BIDMAS Approximation Bounds and error intervals Fractions (Algebraic) Recurring Decimals Percentage (Multipliers) Negative Numbers Substitution Products of Primes HCF LCM from Venn Diagrams Algebraic manipulation Sequences	Standard Form Ratio Linear equations and Inequalities Simultaneous equations Linear Graphs Equations of Graphs Parallel and Perpendicular Lines Indices Quadratic Equations Quadratic curves Transformation of Graphs Rearranging Formula Quadratic Formula	Averages and Range All basic charts for displaying data. Data comparisons Cumulative Frequency Box plots Histograms Probability Functions Iterative processes Rates of change Gradient of a tangent Area under a curve
Key knowledge introduced		
Declarative: Enhanced knowledge of number Equivalent recurring decimals and corresponding fractions. Venn diagram and set notation. Sequences: triangular, square, cube, quadratic, Fibonacci type, and geometric. **Procedural:** Apply limits of accuracy to calculate bounds. Change recurring decimals to fractions. Use multipliers to solve percentage problems. Construct Venn diagrams and use to find HCF and LCM. Simplify, manipulate and factorise algebraic expressions. Find the nth term of a quadratic and geometric sequence. **Conditional:** Select and use appropriate calculation strategies to solve increasingly complex problems. Move freely between different numerical, algebraic, graphical and diagrammatic representations.	**Declarative:** Equations of parallel and perpendicular lines. Values of negative and Fractional powers. Roots, intercepts and turning points for quadratic curves Quadratic Formula **Procedural:** Use and apply operations to standard form and powers. Solve all forms of ratio problem. Solve linear and quadratic equations and inequalities Solve two linear equations in two unknowns. Construct graphs for non-standard functions, translate and reflect graphs of functions. Find the equation of a line including parallel and perpendicular. Use the quadratic formula to solve a quadratic equation. **Conditional:** Select concepts, methods, and techniques to apply to unfamiliar and non-routine problems.	**Declarative:** Statistics: Modal class, quartiles and interquartile range, cumulative frequency and box plots. Probability: dependent and combined events, tree diagrams. Function properties: inverse and composite functions Iteration formula Trapezium rule. **Procedural:** Construct graphs for time series, box plots, histograms, cumulative frequency graphs. Calculate quartiles and interquartile range. Compare data using statistics. Calculate probability of combined events. Approximate solutions to equations using iterations. Find equation of a tangent to a curve and circle. Find area under a curve using trapezium rule. **Conditional:** Reflect on how solutions have been affected by modelling assumptions.

Year 11		
AUTUMN	**SPRING**	**SUMMER**
Foundation Tier		
Linear and Simultaneous equations Transformations Congruence and Similarity Angles and Bearings Measures and conversions Compound Measures Constructions and Loci Pythagoras and Trigonometry	Types of graphs Real life Graphs Graphical solutions Area and Circumference 3D Shapes Volume and Surface Area Density and Rates of Change Trigonometry Similar Triangles	Transformations Vector Geometry Exam Practice Tailored revision topics.
Higher Tier students in addition will study:		
Pythagoras' Theorem Trigonometry Surds Area and Perimeter Arc length and Sector area Volume and Surface Area Similarity Transformations Angles and Bearings Sine and Cosine rule Sine rule for Area Circle Theorems	Direct and Indirect Proportion Quadratic Equations and curves Non-Linear Simultaneous equations Compound Measures Populations (capture/ recapture) Product rule for combinations Similarity (Area and Volume) Inequalities and regions Gradient and Equation of a Tangent Circle equations Area under a curve Vector Geometry Algebraic and Geometric proof Graphs of Trig functions Trig exact values (non calc methods) Congruence conditions Constructions and Loci	Exam Practice Tailored revision topics.
Key knowledge introduced		
Declarative: Enhanced knowledge of number including surds. Shape formula: surface areas and volumes of spheres, pyramids and cones. Arc length and sector area formula. Invariant points. Trigonometric facts: sine rule, cosine rule, A=1/2abSinC. Geometric facts: Angles, bearings & circle theorems. **Procedural:** Use/Apply operations to surds. Simplify, manipulate and factorise algebraic expressions involving surds. Calculate arc lengths, angles, and areas of sectors. Calculate volumes and surface areas of spheres, pyramids and cones. Construct enlargements of shapes with negative and fractional scale factors. Locate invariant points. Use and apply circle theorems when solving geometry problems **Conditional:** Select concepts, methods and techniques to apply to unfamiliar and non-routine problems.	**Declarative:** Product rule for counting. Area and volume scale factors. Function properties of circles. Algebraic terms Identity, proof. Trigonometric facts: exact values of sin, cos, tan Properties of Trig functions. Geometric facts: vector notation. Conditions of congruence & similarity. The locus of a point. **Procedural:** Construct and use equations to solve direct and indirect proportion problems. Solve linear and quadratic equations together using a substitution method. Convert compound units of density, pressure, and speed. Identify and use properties of congruent and similar shapes. Add and subtract vectors, multiply a vector by a scalar. Construct the locus of a point. **Conditional:** Identify variables & express relationships between variables algebraically & graphically. Use algebra to support and construct arguments and proof. Assess validity of an argument.	



Further Maths & Statistics

Our more able mathematics students have an opportunity to study a Further Maths course and a Statistics course giving them two extra GCSE qualifications. This will provide them with stretch, challenge, and enrichment and prepare them for further study at level 3.

Statistics is about making decisions when there is uncertainty. Perhaps one of the most versatile areas of maths, giving students the skills to collect, analyse, interpret and present data.
It complements subjects such as GCSE Biology, Psychology, Geography, Business and Economics, and opens the door to a variety of careers – from weather forecasting to the biological sciences.

Further Maths places an emphasis on higher order technical proficiency, rigorous argument and problem-solving skills.
It also introduces calculus and matrices and develops further skills in trigonometry, functions and graphs.

This option is suitable for learners who:

- are expected to achieve, grades 7, 8 and 9 in GCSE mathematics.
- are likely to progress to A-Level study in Mathematics and possibly Further Mathematics.

Student who select this will study both qualifications

Assessment

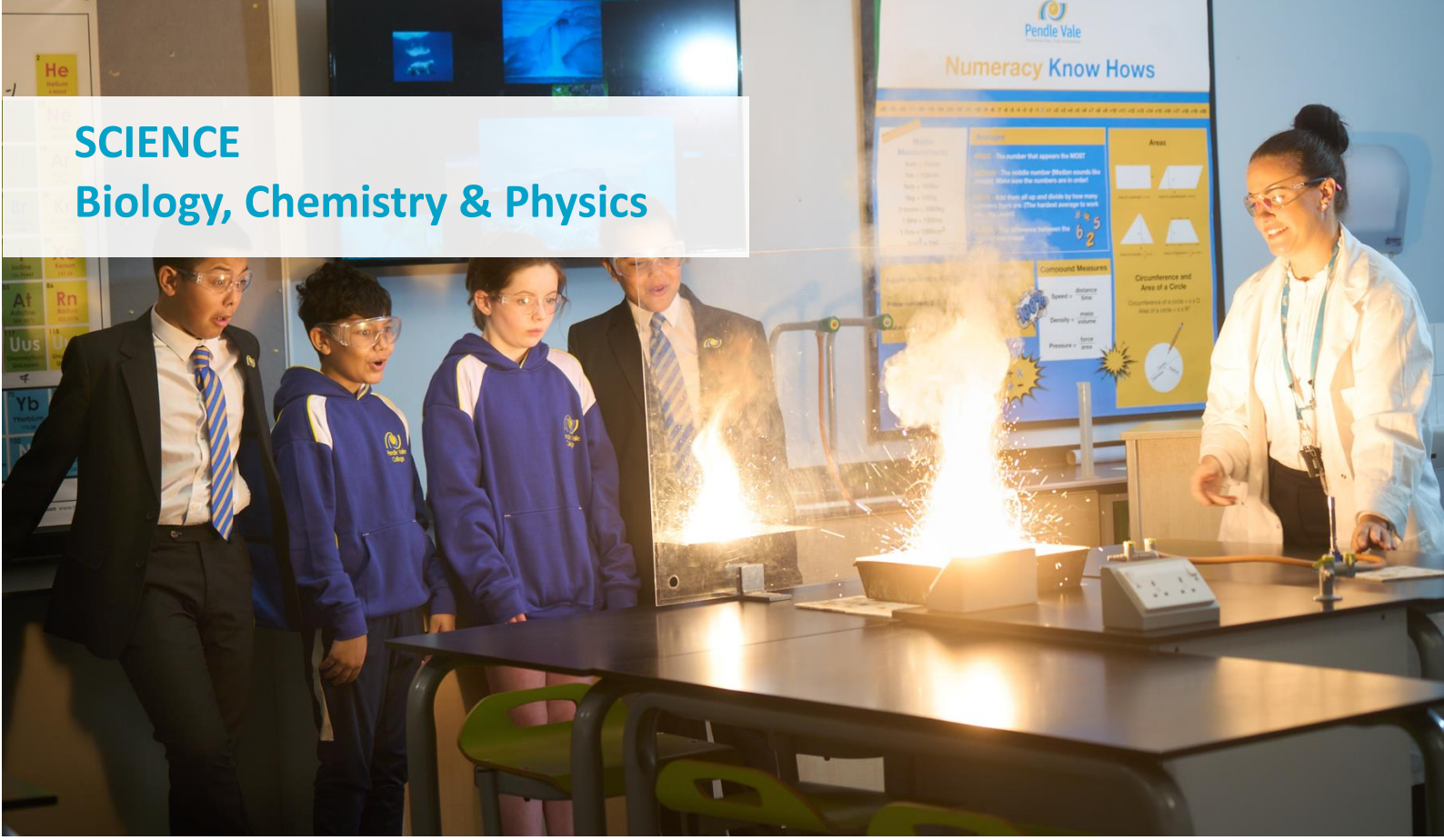
Two exam papers for each course are undertaken the end of Year 11

Statistics

- Paper 1 – 1 hour 45 minutes (calculator allowed)
- Paper 2 – 1 hour 45 minutes (calculator allowed)

Further Maths

- Paper 1 – 1 hour 45 minutes (non-calculator)
- Paper 2 – 1hour 45 minutes (calculator allowed)



SCIENCE
Biology, Chemistry & Physics

The principal focus of science teaching in Key Stage 3 and 4 is to develop a deeper understanding of a range of scientific concepts in the subject disciplines of Biology, Chemistry and Physics.

Students should begin to see the connections between these subject areas and become aware of the 10 big ideas underpinning scientific knowledge and understanding. Teaching in the sciences in Key Stage 4 continues building upon and deepening scientific knowledge and the understanding of ideas developed in earlier key stages in the subject disciplines of biology, chemistry and physics.

ASSESSMENT

KS4 – There are six exams undertaken at the end of Year 11.

- Biology Paper 1 – (Trilogy) 1 hour 15 minutes (Separates) 1 hour 45 minutes
- Biology Paper 2 – (Trilogy) 1 hour 15 minutes (Separates) 1 hour 45 minutes
- Chemistry Paper 1 – (Trilogy) 1 hour 15 minutes (Separates) 1 hour 45 minutes
- Chemistry Paper 2 – (Trilogy) 1 hour 15 minutes (Separates) 1 hour 45 minutes
- Physics Paper 1 – (Trilogy) 1 hour 15 minutes (Separates) 1 hour 45 minutes
- Physics Paper 2 – (Trilogy) 1 hour 15 minutes (Separates) 1 hour 45 minutes

POSSIBLE CAREERS

With a scientific qualification the opportunities are endless and include Doctors, Pharmacologist, Research Scientist, Vet, Secondary School Teacher, Marine Biologist, Dentist, Geophysicist/Field Seismologist, Healthcare Scientist, Medical Physics, Scientific Laboratory Technician, Structural Engineer, Analytical Chemist, Chemical Engineer, Clinical Biochemist and Toxicologist.

SCIENCE Inc Biology, Chemistry & Physics
Year 10

Biology		
AUTUMN	**SPRING**	**SUMMER**
Trilogy		
B2 Organisation -Organisation of animals and plants -Transpiration and translocation -The digestive system -Enzymes -Food groups and testing - Health and non-communicable diseases -Cancer -The cardiovascular system		**B5 Homeostasis and response** -Homeostasis: blood glucose, ions, water and temperature - Why is homeostasis so important? -The central nervous system -Why are reflex reactions so important? -The endocrine system -How do hormones control responses? -Female hormones in reproduction and contraception -**Required Practical 5: Reaction time**
Separate Science		
B2 Organisation -Organisation of animals and plants -Transpiration and translocation -The digestive system -Enzymes -Food groups and testing -Health and non-communicable diseases -Cancer -The cardiovascular system	**B5 Homeostasis and response** -Homeostasis: blood glucose, ions, water and temperature - Why is homeostasis so important? -The central nervous system -Why are reflex reactions so important? -The endocrine system -The eye and brain -The kidneys: structure, function and diseases -Dialysis and kidney transplant -How do hormones control responses? -Female hormones in reproduction and contraception -Plant hormones - **Required Practical 5: Reaction time** **- Required Practical 6: Plant hormone response**	**B7 Ecology** -Ecosystems and biodiversity -What is adaptation and why is it so important? -Why is the cycling of materials in nature so vital to life on Earth? -Decomposition -The carbon cycle -Food chains and food web -Pyramids of biomass -What is global warming and why does it matter? -How can we make food production more efficient? Efficiency of energy transfer in food chains **- Required Practical 8: Decay** **- Required Practical 7: Sampling**

Chemistry		
AUTUMN	**SPRING**	**SUMMER**
Trilogy		
C2 Bonding, structure and the properties of matter -Chemical bonds: ionic, covalent and metallic -Ionic compounds and properties -The three states of matter and state symbols -Polymers -Giant covalent structures -Properties of small molecules, metals and alloys -Allotropes of carbon -Bulk and surface properties of matter including nanoparticles (seps only) **C5 Energy changes** -Endothermic and endothermic reactions -Reaction profiles -Energy changes of reaction calculations	**C4 Chemical changes** -Reactivity of metals -Oxidation and reduction (HT only) -Reactions of acids/-Strong and weak acids (HT) -Electrolysis **- Required Practical: Electrolysis**	**C3 Quantitative chemistry** -Chemical measurements -Conservation of mass -Relative formula mass -Moles (HT only) -Amounts of substances in equations (HT only) -Using concentrations
Separate Science		
C2 Bonding, structure and the properties of matter -Chemical bonds: ionic, covalent and metallic -Ionic compounds and properties -The three states of matter and state symbols -Polymers -Giant covalent structures -Properties of small molecules, metals and alloys -Allotropes of carbon -Bulk and surface properties of matter including nanoparticles (seps only) **C4 Chemical changes** -Reactivity of metals -Oxidation and reduction (HT only) -Reactions of acids -Acids and Alkalis -Strong and weak acids (HT only) -Electrolysis **Required Practical: Making salts** **Required Practical: Electrolysis**	**C4 Chemical changes continued** **C3 Quantitative chemistry** -Chemical measurements -Conservation of mass -Relative formula mass -Moles (HT only) -Amounts of substances in equations (HT only) -Using concentrations and solutions -Titrations -Limiting reactants -Yield -Atom economy -Gas volumes **Required Practical: Neutralisation**	**C5 Energy changes** -Endothermic and endothermic reactions -Reaction profiles -Energy changes of reaction calculations

Physics

AUTUMN	SPRING	SUMMER
Trilogy		
P1 Energy -Energy stores, transfers and pathways -Conservation of energy -Ep/Ek/Ee -Dissipation and efficiency -Power -Thermal Conductivity -Specific heat capacity -Energy resources	**P2 Electricity** -Current -Electrical charge -Potential Difference -Resistance -Circuit diagrams – series and parallel-Resistors -Direct and alternating potential difference -Mains electricity -Power-Appliances **Required Practical 3: Investigate factors affecting resistance of a wire.** **Required Practical 4: Investigate IV characteristics of electoral components.**	**P5 Forces** - Forces are measured in Newtons. -Contact and non-contact forces -Weight -What is meant by a resultant force? -Work done-Elasticity -Distance and displacement -Speed is measured in m/s. When and forces interact, each one exerts a force on the other. -Velocity and acceleration -Newton's Laws -Momentum **Required Practical 6: Investigate the relationship between force and extension for a spring.** **Required Practical 7: Investigate the relationship between force, mass and acceleration.**
Separate Science		
P1 Energy -Energy stores, transfers and pathways -Conservation of energy -Ep/Ek/Ee -Dissipation and efficiency -Power -Thermal Conductivity -Specific heat capacity -Energy resources **P2 Electricity** -Current -Electrical charge -Potential Difference -Resistance-Circuit diagrams – series and parallel-Resistors -Direct and alternating potential difference-Mains electricity -Power-Appliances -The National Grid-Static electricity -Electric fields **Required Practical 3: Investigate factors affecting resistance of a wire.** **Required Practical 4: Investigate IV characteristics of electoral components.**	**P5 Forces** - Forces are measured in Newtons. -Contact and non-contact forces -Weight -What is meant by a resultant force? -Work done -Elasticity -Distance and displacement -Speed is measured in m/s. When and forces interact, each one exerts a force on the other. -Velocity and acceleration -Newton's Laws -Momentum **Required Practical 6: Investigate the relationship between force and extension for a spring.** **Required Practical 7: Investigate the relationship between force, mass and acceleration.**	**P5 Forces continued** **P8 Space** -Our solar system -Astronomers use non-optical telescopes to obtain images. -What is the life cycle of a star? -What is the evidence for the Big Bang theory? -Orbital motion and satellites -Red-shift

Year 11

Biology		
AUTUMN	**SPRING**	**SUMMER**
Trilogy		
B7 Ecology -Ecosystems and biodiversity -Distribution of organisms and sampling techniques -What is adaptation and why is it so important? -Why is the cycling of materials in nature so vital to life on Earth? -Decomposition -The carbon cycle -Food chains and food web -What is global warming and why does it matter? -Efficiency of energy transfer in food chains **- Required Practical 7: Sampling**	**B6 Inheritance, variation, and evolution.** -Variation within a species -Sexual and asexual reproduction -What is DNA? What is a genome, and why is it so important to be able to analyse the genome of an organism? -Gender inheritance -History of Mendel -Inheritance of characteristics -Inheritance of genetic disorders -Theories of evolution/fossils -Fossils and extinction -Selective breeding and genetic engineering - What is genetic engineering and what are the benefits and drawbacks of this technology? -GM crops. -Classification	**Preparation for terminal assessments** -Exam technique -Command words -Exam terminology -Working scientifically -Calculations
Separate Science		
B7-Ecology -Ecosystems and biodiversity -Distribution of organisms and sampling techniques -Adaptations -Why is the cycling of materials in nature so vital to life on Earth? /Decomposition -The carbon cycle/Food chains and food web/Pyramids of biomass -What is global warming and why does it matter? -Peat bogs-Deforestation -Can we have more efficient food production? -Data analysis on population changes, environmental factors and climate change **- Required Practical 7: Sampling** **- Required Practical 10: Decay**	**B6-Inheritance, variation, and evolution** -Variation within a species - Sexual and asexual reproduction. - What is DNA? What is a genome, and why is it so important to be able to analyse the genome of an organism? - Gender inheritance - Inheritance of characteristics - Inheritance of genetic disorders - Theories of evolution - Fossils and extinction - Selective breeding and genetic engineering -History of Mendel -Theories of evolution - Fossils what are the benefits and drawbacks of this technology? – - GM crops - Cloning - Classification	**Preparation for terminal assessments** -Exam technique -Command words -Exam terminology -Working scientifically -Calculations

Chemistry		
AUTUMN	**SPRING**	**SUMMER**
Trilogy		
C7 Organic chemistry -Crude oil, hydrocarbons, alkanes and alkenes -Fractional distillation -Cracking **C8 Chemical analysis** -Pure substances -Formulations -Chromatography -Identification of common gases	**C6 The rate and extent of chemical change** -Rates of reactions -Collision theory and activation energy -Catalysts -Reversible reactions and dynamic equilibrium_ **- Required Practical: Rates of reaction** **C10 Chemistry of the atmosphere** -Common atmospheric pollutants and sources -Using the earth's resources and potable water -Waste Water treatment -Alternative methods of extracting water (HT) -Life cycle assessment -Ways of reducing the use of resources **C9 Earth's resources** -The composition and evolution of the Earth's atmosphere -Greenhouse gases and global climate change -How is human activity affecting the Earth's atmosphere?	**Preparation for terminal assessments** -Exam technique -Command words -Exam terminology -Working scientifically -Calculations
Separate Science		
C7 Organic chemistry -Crude oil, hydrocarbons, alkanes and alkenes -Fractional distillation -Cracking/ -Alkenes -How do functional groups affect the reactions of organic compounds? -How does the structure of a polymer affect its properties? -How can we use chemical tests to identify unknown substances? -What are the advantages and disadvantages of using instrumental methods of analysis? **C8 Chemical analysis** -Pure substances -Formulations -Chromatography -Identification of common gases -Identification of ions by chemical and spectroscopic means **- Required Practical: identifying ions**	**C9 Chemistry of the atmosphere** -The composition and evolution of the Earth's atmosphere -Greenhouse gases and global climate change -How is human activity affecting the Earth's atmosphere? **C10 Using resources** -Common atmospheric pollutants and their sources -Using the earth's resources and potable water -Waste Water treatment -Alternative methods of extracting water (HT only) -Life cycle assessment -Ways of reducing the use of resources -Using materials -The Haber process and NPK fertilisers	**Preparation for terminal assessments** -Exam technique -Command words -Exam terminology -Working scientifically -Calculations

Physics		
AUTUMN	**SPRING**	**SUMMER**
Trilogy		
P6 Waves -Transverse and longitudinal waves -Properties of waves -Electromagnetic waves RP8: Measure the frequency, wavelength, and speed of waves in a ripple tank and waves in a solid. RP10: Investigate the absorption and emission of Infrared radiation from different surfaces.	**P7 Magnetism and Electromagnetism** -Permanent and induced magnetism, magnetic forces and fields -The motor effect	**Preparation for terminal assessments** -Exam technique -Command words -Exam terminology -Working scientifically -Calculations
Separate Science		
P6 Waves -Transverse and longitudinal waves -Properties of waves -How do we measure waves and how fast do they travel? -What are electromagnetic waves and how do they differ from sound waves? -Reflection of waves -Waves for detection and exploration -Lenses -Visible Light -Black body radiation **-Required Practical 8: Measure the frequency, wavelength, and speed of waves in a ripple tank and waves in a solid.** **-Required Practical 9: Investigate the law of reflection.** **-Required Practical 10: Investigate the absorption and emission of Infrared radiation from different surfaces.**	**P7 Magnetism and Electromagnetism** -Permanent and induced magnetism, magnetic forces and fields -The motor effect -Induced potential, transformers and the National Grid	**Preparation for terminal assessments** -Exam technique -Command words -Exam terminology -Working scientifically -Calculations

FRENCH

Learning a foreign language is a liberation from insularity and provides an opening to other cultures

Our high-quality languages education fosters students' curiosity and deepens their understanding of the world.

Our curriculum for languages ensures that all students:

- Understand and respond to spoken and written language from a variety of authentic sources
- Speak with increasing confidence, fluency and spontaneity, finding ways of communication what they want to say, including through discussion and asking questions, and continually improving accuracy of their pronunciation and intonation
- Can write at varying length, for different purposes and audiences, using the variety of grammatical structures that they have learnt
- Discover and develop an appreciation of a range of writing in the language studied.

ASSESSMENT

KS4 – There are four exams taken at the end of Year 11 at either Foundation or Higher Tier.
There is no coursework

Paper 1 – Speaking -	15 minutes plus preparation time
Paper 2 – Listening -	65 minutes
Paper 3 – Reading -	60 minutes
Paper 4 – Writing -	80 minutes

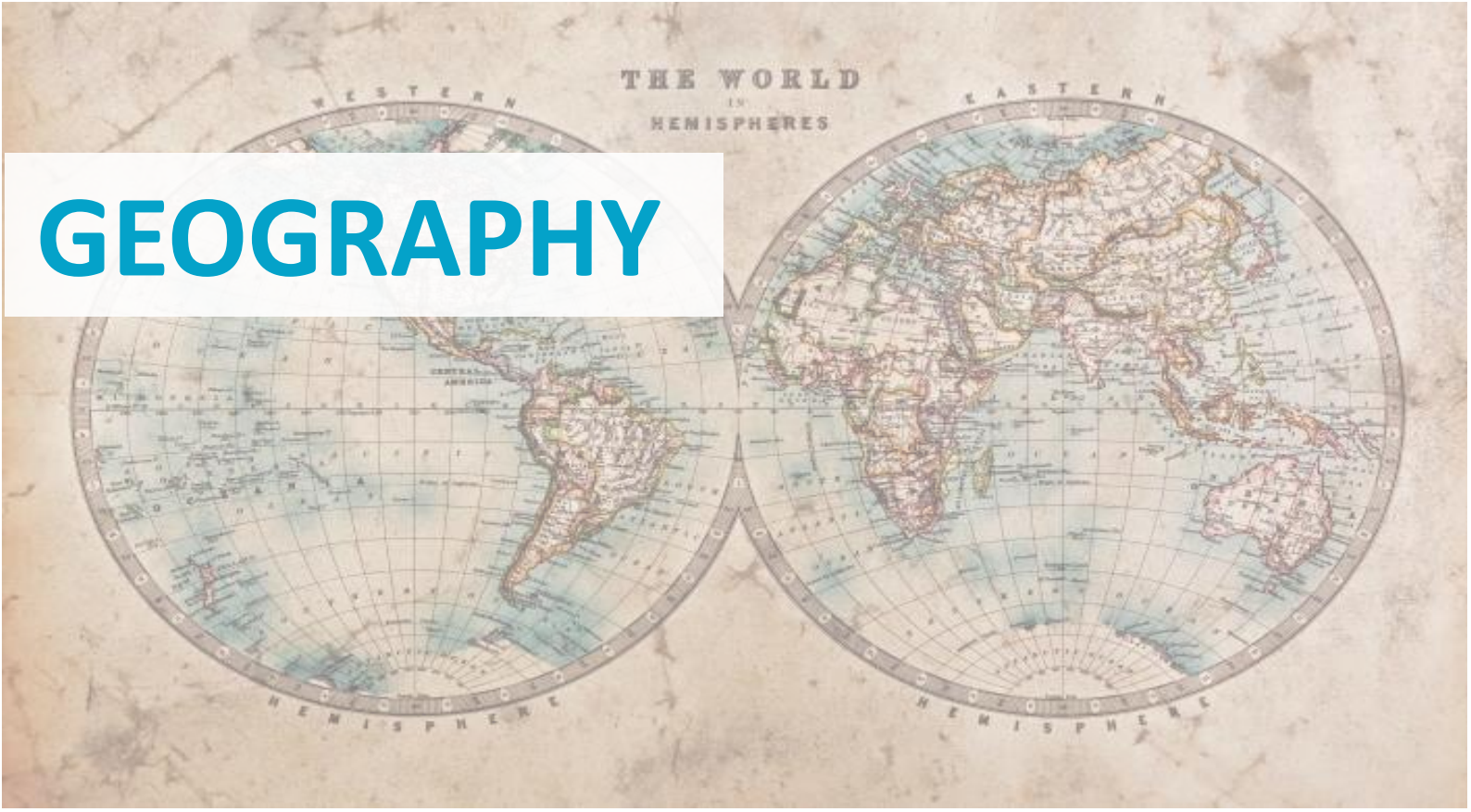
POSSIBLE CAREERS

Academic Researcher, Interpreter, Political Risk Analyst, Teacher, Translator, Broadcast Journalist, Internation Aid/Development Worker, Logistics and Distribution Manager, Marketing Executive, Sales Executive, Tour Manager, Flight Attendant.

FRENCH

Year 10		
AUTUMN	**SPRING**	**SUMMER**
HT1 - Famille et amis **HT2 - Médias et technologie** **Vocab** – Family relationships; friendships; role models; online activity **Phonics** – è / eill / i / **Grammar** – Adjective agreements; reflexive verbs; present & perfect verb forms – regular -er verbs, high frequency irregular verbs; venir de + infinitive	**HT3 - Une vie saine** **HT4 - Ma région** **Vocab** – food & drink; leisure; body parts & ailments; transactional language; geographical features; places to visit & why; directions & shopping – transactional language. **Phonics** – a / ï **Grammar** – present tense; avoir mal; imperatives	**HT5 - Les vacances** **HT6 - Les vacances** **Vocab** – Holiday destinations; weather; holiday accommodation; travel; holiday activities; past holiday; dream holiday **Phonics** – eu / **Grammar** – pronoun y; modal verbs; weather verbs; perfect tense; conditional tense

Year 11		
AUTUMN	**SPRING**	**SUMMER**
HT 1 - Mock exam preparation **HT2 - Module 6 Global issues** **Vocab** - Revision of Module 5 Holidays; High frequency language for writing exam; Environmental issues; Voluntary work. **Phonics** - ai / ant **Grammar** - Tenses - Simple future and conditional. Passive voice; impersonal verbs; present participles; comparatives and superlatives.	**HT 3 - Module 3 School life** **HT 4 - Module 8 Future plans** **Vocab** - School subjects; uniform; school rules. Further/higher education plans; jobs; personal plans. **Phonics** - é / ai / ais **Grammar** - Tenses - Perfect; imperfect; near & simple future; infinitives as nouns; comparatives; avant de & après avoir +pp; impersonal verbs.	**HT 5 - Exam preparation** **Revision of KS4 content -** focus on speaking exam role plays and picture tasks.



GEOGRAPHY

Our high-quality geography education inspires students' curiosity and fascination about the world and its people that will remain with them for the rest of their lives.

Our curriculum for Geography ensures that all students:

- Develop contextual knowledge of the location of globally significant places- both terrestrial and marine – including their defining physical and human characteristics and how these provide a geographical context for understanding the actions of processes
- Understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time
- Are competent in the geographical skills

ASSESSMENT

KS4 – There are three exams taken at the end of Year 11

- Paper 1 –Living with the physical environment - 1 hour 30 minutes
- Paper 2 – Challenges in the Human environment - 1 hour 30 minutes
- Paper 3 – Geographical application - 1 hour 15 minutes

POSSIBLE CAREERS

Journalism and Media, The Law, Engineering, Business Management, ICT, Environment Management, Teaching, Economic Planning, Marketing, Leisure, Recreation and Tourism.

GEOGRAPHY

Year 10

AUTUMN	SPRING	SUMMER
Ecosystems /Tropical Rainforests/ Cold Environment **Substantive:** **Ecosystems (**food webs and food chains, biomes) **Tropical rainforests (**Animal and plant adaptations in TRF, causes and impacts of deforestation and sustainable management methods) **Cold environments (**Location and climate of cold environments, opportunities and challenges of cold environments and why they are valuable) **Disciplinary**: **Map skills (**Using longitude and latitude data to describe the location of places). **Climate graphs (**Creating and comparing climate graphs) **Numeracy skills (**Analysis deforestation rates and using this data to make comparisons.)	**Urban** **Substantive:** **Urban issues and challenges (**Urbanisation, push and pull factors, natural increase, Rio opportunities and challenges and management strategies, Manchester opportunities and challenges and management strategies, Blackpool regeneration) **Disciplinary:** **Map skills (**Using longitude and latitude data to describe the location of places). **Climate graphs (**Creating and comparing climate graphs in Manchester and Rio) **Numeracy skills (**statical analysis.)	**Coasts** **Substantive:** **Coasts** (types of waves, landforms created by erosion, landforms created by deposition, hard and soft engineering, example of coastal management – Holderness.' **Fieldwork (**Off site paper 3 GCSE fieldwork and write up) **Disciplinary**: **Introduction to fieldwork (**off site fieldwork experiencing using weather equipment to collect data) **Application of numeracy skills** (Creating a radar graph and proportional flow symbols using data collected in fieldwork and using statistic skills such as mean, median, mode and range to analyse results. **Application of GIS (**Using google earth to compare findings with secondary data).

Year 11

AUTUMN	SPRING	SUMMER
Changing economic world **Substantive**: **Changing economic world – development (**Development indicators, causes and consequences of uneven development, strategies to reduce the development gap.) **Changing economic world – Brazil (**location and importance, industry in Brazil, TNCs, aid and relationships with the wider world.) **Changing economic world – UK (**industry, science parks, changing rural landscapes) **Disciplinary**: **Interpretation of maps:** comparing development using choropleth maps **Numeracy skills (**statical analysis.) **Locational skills** describing the location of Brazil) **GIS: (**Analysis of live population pyramids)	**Resource management/Water/ Fieldwork** **Substantive:** **Challenge of resource management UK (**overview of energy, water and food and the challenges and opportunities of each) **Challenge of resource management water (** Global overview of water opportunities, challenges and management strategies). **Disciplinary:** **Map skills (**Using longitude and latitude data to describe the location of places e.g Lesotho). **Climate graphs (**Creating and comparing climate graphs in Wakel and Lesotho) **Application of graphs** (creating, analysis and evaluating choropleth maps and pie charts)	**Revision and preparation for GCSE – Pre-release to support Paper 3** **Revising and revision to support pre-release and paper 3 knowledge** **Pre-release topics are not known in advance of the pre-release date**

HISTORY

Our high-quality history education helps students gain a coherent knowledge and understanding of Britain's past and that of the wider world. It inspires students' curiosity to know more about the past.

Our curriculum for History ensures that all students:

- Know and understand the history of these islands as coherent, chronological narrative, from the earliest times to present day.
- Know and understand significant aspects of the history of the wider world.
- Gain and deploy a historically grounded understand of abstract terms
- Understand historical concepts
- Understand the method of historical enquiry
- Gain historical perspective

ASSESSMENT

KS4 – There are three exams taken at the end of Year 11

• Paper 1	Medicine & The British Sector of the Western front	1 hour 45 minutes
• Paper 2	Anglo-Saxon England and the Norman Conquest	1 hour 45 minutes
• Paper 3	Germany 1918-39	1 hour 20 minutes

POSSIBLE CAREERS

Potential career pathways that GCSE History can be linked to include Law, Journalism, Public Services, Teaching, Politics, Human Resources, University research. Any career in which you are required to communicate your opinions and conclusion effectively.

HISTORY

Year 10		
AUTUMN	**SPRING**	**SUMMER**
Industrial/Early Modern: 1700-1900. Modern medicine: 1900-present day. Substantive: Improvements in the understanding of the cause of disease, improvements in the treatment and prevention of disease, improvements in surgery, improvements in public health. Genetics, magic bullets, penicillin, NHS, role of the government, case study: fight against lung cancer. The trench system, major battles, illness in the trenches, wounds in the trenches, RAMC, FANY, system of evacuation, treating injuries, impact on medicine. Disciplinary: Chronology, Cause and Consequence, Change and Continuity, Similarity and Difference, Historical Significance, Sources and Evidence.	**The British sector of the Western Front.** **Anglo-Saxon England and the Norman conquest.** Substantive: The trench system, major battles, illness in the trenches, wounds in the trenches, RAMC, FANY, system of evacuation, treating injuries, impact on medicine Anglo-Saxon Society, Edward the Confessor, Succession crisis, Norman Invasion. Disciplinary: Chronology, Cause and Consequence, Change and Continuity, Similarity and Difference, Historical Significance, Sources and Evidence, Historical Interpretations.	**William in Power: Securing the Kingdom.** **Norman England 1066-1088.** Substantive: How William established control, Anglo-Saxon resistance, Consequences of resistance, Revolt of the Earls. The Feudal system, The Church, Norman Government, Norman Aristocracy, William, and his sons. Disciplinary: Chronology, Cause and Consequence, Change and Continuity, Similarity and Difference, Historical Significance, Sources and Evidence, Historical Interpretations.

Year 11		
AUTUMN	**SPRING**	**SUMMER**
The Weimar Republic: 1918-1933. Hitler and the Nazi Party 1919-1933. The Nazi Dictatorship: 1934-1939. Substantive: Impact of WW1 on Germany, Origins of the Weimar Republic, Challenges to the Weimar Republic, Recovery of the Weimar Republic, Changes in German society. Hitler's early life up to 1924 including his early political career, The Munich Putsch, Lean years of the Nazi Party, Growth in Nazi Support, How did Hitler become Chancellor. Steps to dictatorship, The Police State, Controlling and influencing German Minds, Opposition, and resistance to the Nazis. Disciplinary: Chronology, Cause and Consequence, Change and Continuity, Similarity and Difference, Historical Significance, Sources and Evidence, Historical Interpretations.	**Life in Nazi Germany: 1934-1939. The Origins of the Cold War: 1941-1958.** Substantive: Nazi policies towards women, Nazi youth policies, employment and living standards, persecution of minorities. Early tensions between East and West, The development of the Cold War, The deepening of the Cold War. Disciplinary: Chronology, Cause and Consequence, Change and Continuity, Similarity and Difference, Historical Significance, Sources and Evidence, Historical Interpretations.	**Cold War Crises: 1958-1970.** **The end of the Cold War: 1970-1991** Substantive: Cold War Crises: Berlin, Cuba, Czechoslovakia, Attempts to reduce tension – SALT 1+2, Reagan and Gorbachev, INF Treaty. Flashpoints – Afghanistan, Carter doctrine, Olympic boycotts, 'Second Cold War'. Collapse of Soviet Control of Eastern Europe – Gorbachev, Berlin Wall, Collapse of Soviet Union, Warsaw Pact. Disciplinary: Chronology, Cause and Consequence, Change and Continuity, Similarity and Difference, Historical Significance, Sources and Evidence, Historical Interpretations.

RELIGIOUS STUDIES

Religious Studies covers two of the major world religions: Christianity and Sikhism, and four contemporary ethical themes, ensuring that students have a diverse collection of intriguing and exciting subjects to explore.

Students will be challenged with questions about belief, value, meaning, purpose and truth, enabling them to develop their own attitudes towards religious issues. Students will also gain an appreciation of how religion, philosophy and ethics form the basis of our culture. They will develop analytical and critical thinking skills, the ability to work with abstract ideas, leadership and research skills.

ASSESSMENT

KS4 – Students will sit 2 exams at the end of Year 11

Paper 1:	The study of religions: beliefs, teaching and practices	1 hour 45 minutes
Paper 2:	Thematic studies	1 hour 45 minutes

POSSIBLE CAREERS

Medicine, Aid Worker, Construction Project Manager, Nursery Worker, Police Officer, Youth and Community Worker, Teacher, Journalist, Lawyer, Social Worker.

RELIGIOUS STUDIES

Year 10		
AUTUMN	**SPRING**	**SUMMER**
AQA A Christian Beliefs & Christian Practices **B&V, RL - Substantive knowledge:** Develop understanding of the life of Jesus and belief about creation and life after death. Explore Christian Practices such as prayer and worship. Understanding the differing ways in which different denomination practice religion. Know the sacraments, and understand significance of baptism, eucharist and pilgrimage. The work of the church and the support of the community including support Christians dealing with persecution. **Disciplinary (methods) knowledge:** Apply religious teaching from the Bible to each of these concepts. Link evidence through religious text and prayers. Key parables to be analysed and applied to key teachings.	**AQA A Religion, Relationships and Family** **B&V, RL - Substantive knowledge:** Develop knowledge of relationships and diverse types of families. Different religious views towards sexuality. Gender equality in the UK and religious perspectives. Issues with roles in the family and views around marriage divorce and remarriage. **Disciplinary (methods) knowledge:** Apply religious teaching from the Bible and the Quran to each of these concepts. Link evidence through religious figures such as the hadith. Key quotes to be analysed and applied to key teachings.	**AQA A Religion and Life** **B&V, RL - Substantive knowledge:** Exploring how the world was created and different interpretations to the origins of human life. Understanding awe and wonder as well as human responsibility to the earth as stewards. Duty to look after animals and use of them. The law on euthanasia and abortion as well ethical issues around this linking to life after death. **Disciplinary (methods) knowledge:** Apply religious teaching from the Bible and the Quran to each of these concepts. Link evidence through religious figures such as the hadith. Key quotes to be analysed and applied to key teachings.

Year 11		
AUTUMN	**SPRING**	**SUMMER**
AQA A Sikhism Beliefs **B&V, RL - Substantive knowledge:** Develop understanding of Sikhs beliefs about Waheguru. Creation within Sikhism as well as the purpose of life. The nature of human life linked to karma and reincarnation with teaching of the virtues. 5 stages of liberation are to be explores as well as the importance of the sangat and Sewa. Equality through the gurus. **Disciplinary (methods) knowledge:** Apply religious teaching from the Guru Granth Sahib to each of these concepts. Link evidence through religious figures. Key scripture such as the mool mantra to be analysed and applied to key teachings.	**AQA A Sikhism Practices** **B&V, RL - Substantive knowledge:** Sikh practices such as how the community support one another. The gurdwara and worship in the home is developed. Understanding Sewa, festivals, pilgrimage, and naming ceremonies also explored **Disciplinary (methods) knowledge:** Apply religious teaching from the Guru Granth Sahib to each of these concepts. Link evidence through religious figures.	

ART

Art, craft and design embody some of the highest forms of human creativity. Our curriculum for art and design aims to ensure that all students:

- Produce creative work, exploring their ideas and recording their experiences
- Become proficient in drawing, painting, sculpture and other art, craft and design techniques
- Evaluate and analyse creative works using the language of art, craft and design
- Know about great artists, craft makers and designers, and understand the historical and Cultural development of their art forms.

ASSESSMENT

KS4 – Students complete one portfolio of coursework (60%) across Year 10 and 11 and one externally set task (40%) in Year 11 (Jan-May including 10hr examination period).

POSSIBLE CAREERS

Artist, Gallery Technician, Architect, Art Therapist, Artist and Repertoire Administrator, Art Director, Artist Manager, Museum Conservator, Magazine Art Editor, Graffiti Artist, Tattooist, Illustrator, Court room artist, Graphic Designer, Fashion Designer

ART

Year 10

AUTUMN	SPRING	SUMMER
Introduction to GCSE AQA ART 60 % Coursework 40% ESA Assessment Objectives **Texture & Line** **Graffiti** **Natural Forms** – (Starting Point) Recording & Investigation Analysis Research & Annotation Artists & Movements Experimentation/Materials /Responding Personally/Creating & Making		**Personal Response** Further exploration of 'favourite' theme. A sustained amount of time to develop work from previous 'Starting Points'. A04 Final Response -Including a mini mock
Understanding what a portfolio of work is, and how the GCSE Fine Art is Graded. **Substantive** What do different materials look and feel like? What types of pencils are there? What is mono-printing? **Disciplinary Knowledge** How to Record & Investigate including photography/How to Analyse Research/ Annotation/How to use different materials including printing process – mono print/How to Present independent work Experimentation and execution of media/ techniques / processes /Independent thought Personal responses/Time management	Research Artists and critical analysis of Natural Forms theme. **Substantive** Who is Kate Malone? What is design sketching? **Disciplinary Knowledge** How to use different materials including clay	Sustained and in-depth exploration of a theme Exploration of Final piece ideas / Preparatory work and Final Piece **Substantive** What will you create for your final mock exam **Disciplinary Knowledge** How to respond in the mock exam for a 5-hour sustained piece

Year 11

AUTUMN	SPRING	SUMMER
Identity Recording & Investigation/Analysis Research & Annotation/Artists Experimentation/Materials /Responding Personally/Creating & Making/Any Media (Personal Choice)	**Externally Set Assignment** **January.** 40% Exam Portfolio Question paper form released by AQA. 7 choices of Starting point.	**Presentation of coursework work portfolio and ESA final GCSE exhibition including EXAM.** Deadline May. Assessment and Moderation.
Critical analysis of the work of Artists who focus on the starting point 'Identity' **Substantive** What is a mind map /artist research page? What is an exceptional drawing? What is an observational drawing page? What is development? Who is x Identity artist? **Disciplinary Knowledge** How to Record & Investigate, Analyse Research, Annotation/How to Present independent work/Experimentation and execution of media/ techniques / processes /Independent thought /Personal responses/Time management	Personal response Time management Sustaining a project from conception to realisation **Substantive** What is your chosen title? What does that title link to? **Disciplinary Knowledge** How to respond to the exam preparation How to use prior knowledge and exam timetable	Presentation / display techniques Exhibition techniques **Substantive** What will you create for your final 10 hour exam? **Disciplinary Knowledge** How to respond in the 10 hour exam. How has planning taken place?

Media

Studying Media students will learn how Media products are constructed. During the course they will construct and deconstruct a variety of different Media products including films, television dramas, websites, social media, magazines and advertising. It will help students to understand the world around them and will complement their English studies.

ASSESSMENT

KS4-
There are two externally assessed exams worth 70%
Coursework which is worth 30% and will be completed in year 10.

POSSIBLE CAREERS

Editor, lighting and sound technicians, location managers, website design researchers, writers, animators, director and camera operator.

Media Studies

Year 10		
AUTUMN	**SPRING**	**SUMMER**
Introduction to Media Theory and Practical elements Substantive: Introduction to theoretical framework; introduction to practical work; Component One Section A: Advertising and Marketing. Comparative analysis with other products; practical application-plan/draft an advert; film marketing: analysis of Bond posters: Component One Section B: Film Industry; film audience and film marketing: Practical task-poster design; Component One Section A: Front Cover Magazines Analysis: Media language and representations of gender and ethnicity. Disciplinary: Analysis, comparative analysis, practical application, understanding of media theory and how to apply.	**Crime drama and representation** Substantive: Component Two Section A: TV genre -viewing/key codes; analysis of key sequences-specific elements of media language; analysis of representations-gender, ethnicity etc; exploration of relevant contexts in relation to full-length product; exam focus-media language/representations. Practical task e.g. storyboarding a TV sequence; industry issues in relation to full-length product; audience issues in relation to full-length product; introduction to second product. Disciplinary: Analysis, comparative analysis; media theory, representation	**Creating a Media product to a brief Coursework** Substantive: Component Three: Introduction to briefs, initial ideas/research. Research-analyse similar products. Planning-storyboarding, scripting, layout designs etc. Planning-submit statement of aims Production of media product. Disciplinary: Research skills; understanding of media products; analysis of similar products.

Year 11		
AUTUMN	**SPRING**	**SUMMER**
Music video and Gaming **Substantive**: **Introduction-revision of year one, introduction to year two work.** **Component One section B:** Video Games-introduction. **Component Two Section B:** Music video and online media: overview of topic and music industry; analysis of contemporary videos. ML and representation (ethnicity); analysis of older music video. **Exam focus-**media language and representation; analysis of online, social and participatory media; industry and audience issues; analysis of online, social and participatory media. **Disciplinary:** Analysis and comparative analysis and application of media theory.	Radio and Printed News **Substantive**: **Exam focus-** music industry and audience**;** **Component One Section B:** Radio industry **Exam focus** on radio; **Component One Section A:** Newspapers Introduction and overview; analysis: Component One Section B: Industry and ownership, context, political leaning etc; Audience and target audience, readership, responses. **Exam focus-**newspapers (set product and comparison with unseen). **Disciplinary:** Application of media theory; representation, media language	Exam Preparation **Substantive and Disciplinary**: **Revision/exam practice.**

Digital IT

Our high-quality computing education equips students to use computational thinking and creativity to understand and change the world. Our curriculum for computing ensures that all students:

- Can understand and apply fundamental principles and concepts of computer science. Including abstraction, logic, algorithms and data representation
- Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- Are responsible, competent, confident and creative users of information and communication technology

At KS4, there will be the option to specialise in Computer Science, Design Information Technology or Core ICT.

ASSESSMENT

At the end of Year 11

Digital IT
There is one exam taken.
The exam is worth 40% of the final marks.

There are two coursework units:
Component 1 – Worth 30%
Component 2 – Worth 30%

POSSIBLE CAREERS

Software Programmer, Games Designer, Web Developer, Software Engineer, App Designer, Systems Engineer, Network Management

Digital ICT

Year 10		
AUTUMN	**SPRING**	**SUMMER**
Component 1 **Learning Outcome A:** A1 User interfaces. A2 Audience needs. A3 Design principles. A4 Designing an efficient user interface. **Learning Outcome B:** B1 Project planning techniques. B2 Creating a project proposal and plan. B3 Creating an initial design. B4 Developing a user interface. **Learning Outcome C:** C1 Review a user interface.	**Component 1 PSA** **Controlled Assessment 1:** Board set assignment; scenario differs for each exam series. **Learning Outcome A:** A1 Characteristics of data and information. A2 Representing information. A3 Ensuring data is suitable for processing.	**Component 2** **Learning Outcome A:** A4 Data collection. A5 Quality of information. A6 Sectors that use data modelling. A7 Threats to individuals. **Learning Outcome B:** B1 Data processing methods. B2 Producing a dashboard.
Year 11		
AUTUMN	**SPRING**	**SUMMER**
Component 2 PSA **Learning Outcome B (continued):** B1 Data processing methods. B2 Producing a dashboard. **Learning Outcome C:** C1 Drawing conclusions based on findings in the data. C2 How presentation affects understanding. **Controlled Assessment 2:** Board set assignment; scenario differs for each exam series.	**Component 3** **Assessment objective 1:** **A Modern Technologies** A1 Modern technologies. A2 Impact of modern technologies. **Assessment objective 2:** **B Cyber Security** B1 Threats to data. B2 Prevention and management of threats to data. B3 Policy. **Assessment objective 3:** **C The wider implications of digital systems** C1 Legal and ethical.	**Component 3** **Assessment objective 3:** **C The wider implications of digital systems** C1 Legal and ethical (continued). **Assessment objective 4:** **D Planning and communication in digital systems** D1 Forms of notation.

Computer Science

Computer Science students will study three broad aspects within the course.

- Computer Systems introduces students to the central processing unit (CPU), computer memory and storage, data representation, wired and wireless networks, network topologies, system security and system software. It also looks at ethical, legal, cultural and environmental concerns associated with Computer Science.
- Computational thinking, algorithms and programming requires students to apply their knowledge and develops skills and understanding in computational thinking: algorithms, programming techniques, producing robust programs, computational logic and translators.
- Students are to be given the opportunity to undertake a programming task(s) during their course of study which allows them to develop their skills to design, write, test and refine programs using a high-level programming language.

  Students will be assessed on these skills during the written examinations.

Key Skills

Students will learn how to:

- Understand and apply abstraction, decomposition, logic, algorithms, and data representation
- Analyse problems in computational terms through practical experience of solving such problems, including designing, writing and debugging programs
- Think creatively, innovatively, analytically, logically and critically
- Understand the components that make up digital systems, and how they communicate with one another and with other systems
- Understand the impacts of digital technology to the individual and to wider society
- Apply mathematical skills relevant to Computer Science.

ASSESSMENT

Computer Science

There are two exams. These are sat at the end of Year 11.

- Paper 1: Computer Systems – 1 Hour 30 minutes
- Paper 2: Computational thinking, algorithms and programming – 1 hour 30 minutes

There is one Non-Examined Assessment that student will complete.

POSSIBLE CAREERS

Software Programmer, Games Designer, Web Developer, Software Engineer, App Designer, Systems Engineer, Network Management

BTEC Enterprise -Business Studies

Business Studies explores how businesses are set up, run and managed. Students will get the opportunity to write their own business plan and study in detail two local businesses.
We explore marketing, accounting, business aims, human resources and how to make a business successful. The exam component is based around business marketing, finance and accounting. This course gives a good grounding for those students who want to pursue Business Studies at college.

ASSESSMENT

KS4 –

Two coursework units:

Unit 1: Exploring Enterprises (Year 11 - September to December)

Unit 2: Micro Enterprise (Year 10 - January - April)

One Exam – Marketing and Finance for Enterprise (40%) 2 Hours

The Exam will be undertaken in Year 11

POSSIBLE CAREERS

Accountant, Banking, Human Resources, Marketing and Management, Driving instructor, Estate Agent

Business Studies - Enterprise

Year 10

AUTUMN	SPRING	SUMMER
Component 2 **Assessment Objective: Choose an Idea and Produce a Plan for a Micro Enterprise Idea.** **Learning Outcome A:** A1 Choosing Ideas for a Micro Enterprise. Innovative Ideas which are Realistic and Within Budget A2 Plan for a Micro Enterprise. **Learning Outcome B:** B1 Production of Presentation. B2 Delivery of Presentation **Learning Outcome C:** C1 Review of Presentation.	**Component 2 PSA** **Controlled Assessment 1:** Pearson Set Assignment (PSA); the three business categories differ for each exam series. **ASSESSEMENT OF FOLLOWING:-** **Learning Outcome A:** Choosing Ideas for a Micro Enterprise. Innovative Ideas which are Realistic and Within Budget A2 Plan for a Micro Enterprise. **Learning Outcome B:** B1 Production of Presentation. B2 Delivery of Presentation **Learning Outcome C:** C1 Review of Presentation.	**Component 1** **Assessment Objective: Exploring Enterprise** **Learning Outcome A:** A1 Size and Features of SMEs. A2 Markets, Sectors, Models and Industries in which Enterprises Operate. A3 Aims and Objectives of Enterprises. A4 Skills and Characteristics of Entrepreneurs. **Learning Outcome B:** B1 Market Research Methods B2 Understanding Customer Needs. B3 Understanding Competitor Behaviour. B4 Suitability of Market Research Methods.

Year 11

AUTUMN	SPRING	SUMMER
Component 1 PSA **Learning Outcome C:** C1 PEST Situational Analysis. C2 SWOT Situational Analysis. **Controlled Assessment 2:** Pearson Set Assignment (PSA); two businesses to be chosen from a selection of suitable Enterprises as identified by the exam board.	**Component 3 (Exam)** **Assessment objective 1:** **A Marketing Activities** A1 Targeting and Segmenting the Market. A2 4Ps of the Marketing Mix. A3 Factors Influencing the Choice of Marketing Methods. A4 Trust, Reputation and Loyalty. **Assessment objective 2:** **B Financial Documents and Statements** B1 Financial Documents. B2 Payment Methods B3 Revenue and Costs B4 Financial Statements B5 Profitability and Liquidity **Assessment objective 3:** **C Financial Planning and Forecasting** C1 Budgeting C2 Cashflow	**Component 3 (Exam)** **Assessment objective 3:** **C Financial Planning and Forecasting (continued)** C3 Suggesting Improvements to Cashflow Problems. C4 Breakeven Point and Breakeven Analysis. C5 Sources of Finance. **Exam to be taken summer of Year 11.**

CHILD CARE (Child Development)

Students will learn about three key topics:

- **Supporting Children's Growth and Development:** Understand and explore the characteristics of children's growth and development.
- **Learning through play:** Develop an understanding of how children learn through play
- **Supporting Child to Play, Learn and Develop:** Understand how a child learns, develops and adapts through play.

Key Skills
Students will:

- Understand the difference between growth and development
- Explore factors that affect growth and development
- Illustrate how children grow and develop across the ages of birth to five years old
- Explore how children play
- Understand how play can be organised to promote learning
- Demonstrate how children's learning can be supported through play
- Understand how individual circumstances can impact on a child's learning and development
- Explore safe environments to support play, learning and development
- Investigate how a child learns, develops and how to adapt activities to support the inclusion of all children in play for learning and development
- Students should have the ability to work hard, work independently and use class time efficiently and be able to be a positive role model to young
  children. Students should be interested in learning more about children and how they grow and develop. They must like children. They must like working with them, communicating with them and want to understand how to help them make progress as they grow up. Students should be willing to work independently and also as part of a team

ASSESSMENT

There is one exam. The exam is worth 40%
There are two course work units.
Exam: Supporting children to learn, play and develop – 2 Hours
Coursework 1: Children's Growth & Development
Coursework 2: Learning through play

POSSIBLE CAREERS

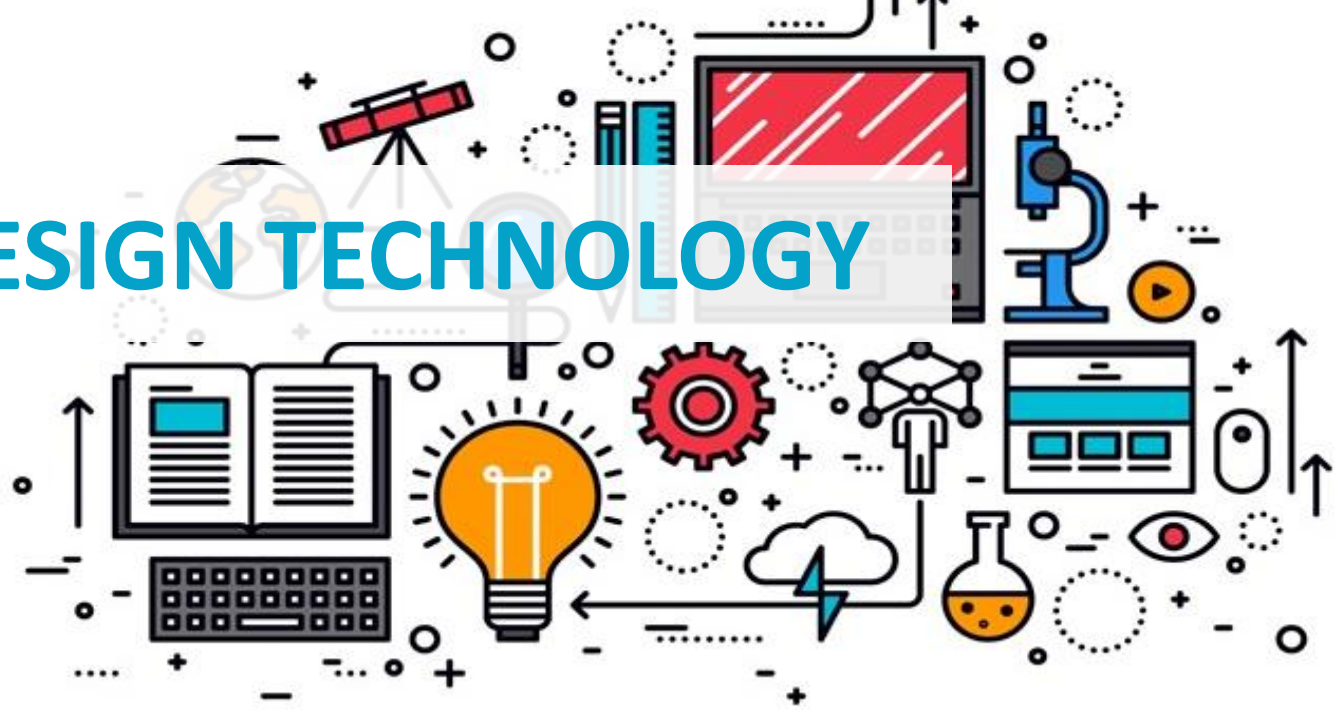
Early Years Teacher, Education Consultant, Family Support Worker, Health Play Specialist, Learning Mentor, Play Therapist, Primary School Teacher, Special Educational Needs Coordinator (SENCO)

Child Care (Child Development)

Year 10		
AUTUMN	**SPRING**	**SUMMER**
Coursework Unit Children's Growth & Development	**Coursework Unit** Children's Growth & Development	**Coursework Unit** Learning through play

Year 11		
AUTUMN	**SPRING**	**SUMMER**
Coursework Unit Learning through play	**Exam Unit** Supporting Children to play, learn & develop	**Exam Unit** Supporting Children to play, learn & develop

DESIGN TECHNOLOGY



Design technology is an inspiring, rigorous and practical subject.

Using creativity and imagination, students design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values.

Our Curriculum ensures that all students:

- Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- Build and apply a repertoire of knowledge, understanding and skills to design and make high-quality prototypes and products for a wide range of users
- Critique, evaluate and test their ideas and products and the work of others
- Understand and apply the principles of nutrition and learn how to cook

At KS4 students are able to specialise in the following Design Technology Areas:

- Engineering Design
- Hospitality and Catering

ASSESSMENT

KS4 – Assessment Formal Examination & Coursework specific to the chosen option

POSSIBLE CAREERS

Engineering: Renewable Energy, Space, Low Carbon, Aerospace, Automotive, Consumer Product Designer, Marketing, Product Design Consultancy, Design Research, Project Planning, Technical Sales, CAD/CAM, Buying Interior/Exhibition Design, Advertising, Display Design, Web Design, Engineer.

Hospitality & Catering: Food Specialist, Nutritionist, Dietitian, Chef, Baker, Farmer, Catering Manager, Teacher, Food Development, Food engineer, Confectionary Leader.

Year 10

ENGINEERING DESIGN

AUTUMN	SPRING	SUMMER
Unit R038: Principles of engineering design. **Topic area 1: Designing processes.** **-1.1 The stages involved in design strategies.** Types of design: linear, iterative, inclusive, user-centred, sustainable, ergonomic. **- 1.2 Stages of the iterative design process.** Identify (design brief, research, ergonomics, anthropometrics, ACCESS FM, process planning), design (specification, generating ideas, selection and justification, engineering drawings, manufacturing plans), optimise (virtual and physical modelling, error proofing), validate (Justification of decisions, testing, evaluating) **Topic area 2: Design requirements.** **-2.1 Types of criteria included in an engineering specification.** Needs and wants, situation and context, ACESS FM, tolerance, ergonomics, anthropometrics, materials, including smart, modern, recycled and composite; manufacturing, DFMA, standard components, pre-manufactured components, robotics). -**2.2 How manufacturing considerations affect design.** Scales of production. **-3.1 Communicating design outcomes.** Freehand sketching, thick and thin lines, oblique drawing, isometric drawing, 1-point perspective, 2-point perspective, rendering, exploded drawing, scale drawing. **Unit R039: Communicating Designs** **-1.1 sketches for a design idea** **Controlled Assessment:** 6 pages of initial ideas which are rendered with detailed annotations, justification of design based on specification and user needs.	**Unit R038: Principles of engineering design.** **Topic area 2: Design requirements.** **-2.2 How manufacturing considerations affect design.** Automation, material availability and form, types of manufacturing processes: wasting, casting, machining, forming, joining, finishing and assembly; production costs. **-2.3 Influences on engineering product design.** Technology push, market pull, cultural fashion and trends, British international standards, UKCA, CE, legislation, planned obsolescence, sustainability 6R's. **Unit R039: Communicating Designs**. **-1.1 Manual production of freehand sketches.** ***Controlled Assessment:*** Design iterations, final design. **-1.2 Manual production of engineering drawings.** ***Controlled Assessment:*** Exploded drawing, third-angle projection. **-1.3 Use of computer-aided design.** Introduction to OnShape (computer design programme), develop skills in the use of OnShape. ***Controlled Assessment:*** Drawing own design using OnShape.	**Unit R038: Principles of engineering design.** **Topic area 2: Design requirements.** **-2.3 Influences on engineering product design.** Reusing products and components, upcycling, disposal of non-recyclable materials, sustainable engineering initiatives, 6R's. **-3.1 Types of drawing used in engineering.** Assembly drawing, block diagrams, circuit diagrams, flowcharts, wiring diagrams. **-3.2 Working drawings.** 3rd angle, standard drawing conventions, tolerances, common abbreviations, representation of mechanical features on drawings. **-3.3 Using CAD software.** Advantages and limitations of using CAD drawing software. **-4.1 Methods of evaluating design ideas.** Subjective evaluation, production of models, qualitative comparison with the brief and specification, QFD. **-4.1 Modelling methods.** Virtual CAD, card, block, breadboarding, 3D printing. **-4.3 Methods of evaluating a design outcome.** Measurement methods, functionality, quantitative comparison with the design brief and specification, user testing, modifications and improvements. **Unit R039: Communicating Ideas** **1.3 Use of computer aided design.** ***Controlled Assessment:*** Drawing own design using OnShape, converting drawing into an exploded drawing and working drawing, evaluation. Controlled assessment marked and submitted June window. **Unit R040 Design, evaluation and modelling.** **Modelling design ideas.** Timbers, plastic and metals based practical projects.

Hospitality & Catering

Hospitality & Catering	Hospitality & Catering	Hospitality & Catering
Unit 1 – H & C Industry **LO1 Understand the environment in which H&C providers operate:** **LO1** -Describe: -the structure of the H&C industry. -Analyse job requirements. -Describe working conditions of different job roles. -Explain factors affecting the success of H & C providers. Know how food can cause ill health -Describe: - food related causes of ill health. -EHO role and responsibilities -food safety legislation. -common types of food poisoning. -symptoms of food induced ill health.	**LO3 Understand how H & C provision meets health and safety requirements** -Describe personal safety responsibilities in the workplace. -Identify risks to personal safety in H&C. -Recommend personal safety control measures. **LO2 – Understand how H & C provisions operate.** -Describe the operation of the kitchen. -Describe the operation of front of house. -Explain how hospitality and catering provision meet customer requirements.	**LO5 – Be able to propose an H & C provision to meet specific requirements** - Review options for hospitality and catering provision. -Recommend options for hospitality provision. **Revision of LO1** - Understand the environment in which H&C providers operate.
Unit 2 – H&C in action: Understand menu planning and being able to cook dishes -Plan production of dishes for a menu. -Time Planning. **Be able to cook dishes** -Use techniques in preparation, cooking and presentation of ingredients. -Assure quality of ingredients to be used in food preparation. -Use food safety practices.	**Unit 2 H & C in Action Understand the importance of nutrition when planning menus.** -Describe functions on nutrients in the human body. -Compare nutritional needs of specific groups. -Explain characteristics of unsatisfactory nutritional intake. -Explain how cooking methods impact nutritional value. **Be able to cook dishes** -Use techniques in preparation, cooking and presentation of ingredients. -Assure quality of ingredients to be used in food preparation. -Use food safety practices.	**Unit 2 – H & C in action** **LO3 – Be able to cook dishes** -Use techniques in preparation of ingredients. -Assure quality of ingredients to be used in food preparation. -Use techniques in cooking. -Complete dishes using presentation techniques. -Use food safety practices.

Year 11

ENGINEERING DESIGN

AUTUMN	SPRING	SUMMER
Unit R038: Principles of engineering design. **Principles of engineering design.** ACCESS FM, materials, manufacturing, scales of production, material availability and form, manufacturing processes, production methods, technology push, market pull, standards and legislation, planned obsolescence, 6 R's, upcycling, circular economy and types of drawing. **Unit R040 Design, evaluation and modelling.** Preparation for R040: What is product analysis, ranking matrices, QFD, Product disassembly, component analysis, health and safety of tools and equipment, risk assessments, practical skill development, reading working drawings, production planning, making journals, OnShape revisit. Start **NEA R040** Carry out the product analysis.	**Unit R038: Principles of engineering design.** Working drawings, advantages and limitations of CAD and CAM, subjective and objective evaluations, ranking matrices, why models are made, methods of measuring dimensions, designing processes, design requirements. **Unit R040 Design, evaluation and modelling.** Disassembly write up, component analysis, CAD modelling, plan of manufacture, risk assessments, product manufacture, evaluation and modifications.	**Unit R038: Principles of engineering design.** Revision mats to be produced on: Topic area 3 – communicating design outcomes. Topic area 4 – Evaluating design ideas. Final revision: planned based on the needs of the groups. **Unit R040 Design, evaluation and modelling.** **R040 internally moderated and sent for external moderation. Deadline 5th May.** **R038 external exam between 10th – 20th May**

Hospitality & Catering

AUTUMN	SPRING	SUMMER
Unit 2 – H & C in action - Controlled Assessment Task **LO1 - Understand the importance of nutrition when planning menus** -Describe functions of nutrients in the human body. -Compare nutritional needs of specific groups. -Explain characteristics of unsatisfactory nutritional intake. -Explain how cooking methods impact nutritional value. **LO2 – Understand Menu Planning** -Explain how dishes on a menu address environmental issues, meet customer needs -Plan production of dishes for a menu. **LO3 - Be able to cook dishes.** -Use techniques in preparation of ingredients. -Assure quality of ingredients to be used in food preparation. -Use techniques in cooking. -Complete dishes using presentation techniques. -Use food safety practices. **Controlled Assessment.**	**Unit 2 – H & C in action - Controlled Assessment Task** **LO1 - Understand the importance of nutrition when planning menus** -Describe functions of nutrients in the human body. -Compare nutritional needs of specific groups. -Explain characteristics of unsatisfactory nutritional intake. -Explain how cooking methods impact nutritional value. **LO2 – Understand Menu Planning** - proposing dishes for menus. -Explain how dishes on a menu address environmental issues, meet customer needs. -Plan production of dishes for a menu. **LO3 - Be able to cook dishes.** -Use techniques in preparation of ingredients. -Assure quality of ingredients to be used in food preparation. -Use techniques in cooking. -Complete dishes using presentation techniques. -Use food safety practices. **Controlled Assessment – Practical Exam**	**Unit 1 Revision** – Focussing on areas of weakness across the group and for individual students **Unit 1** – External exam (June)

PERFORMING ARTS INCLUDING DRAMA & MUSIC

Performing Arts incorporates both Drama and Music.

Drama & Music allows students to discover performance roles, skills, techniques and processes and take part in workshops, classes and rehearsals. It allows students to develop a love of music and performances, and so increases their self-confidence, creativity and sense of achievement.

ASSESSMENT

KS4 – There is one externally assessed unit work 40% _ Performing Arts in Practise and Two coursework assignments

Unit 1 – **Performing** – Controlled assessment, internal
One piece or a portfolio of pieces. Performed individually or as a group lasting between 3 & 6 minutes

Unit 2 – **Creating –** controlled assessment, internal. A portfolio of work and recordings. Presentation of ideas to an audience.

Each worth 30%. Assignment briefs provided by WJEC

POSSIBLE CAREERS

Session Musician, TV and Film Composer, Film Music Director, Arts Management, Sound Engineer, Producer, Teacher, Musical Director, Music Therapist, Musicologist, Promoter, Radio Researcher, Actor, Director, Producer, Stage Manager, Writer, Blogger, Vlogger, Journalist, Lawyer, Arts Manager

Year 10		
AUTUMN	**SPRING**	**SUMMER**
Drama		
Research and rehearsal Performance DRAMA - A holistic knowledge and understanding of the skills and techniques needed to reproduce an existing piece of professional / published work. Practice and exploration activities Research – author, mood, style and genre, themes and ideas, performance space, purpose, relationship between audience and performer. Rehearsal – schedule, journal, action planning, rehearsal prep, responding to direction, annotating scripts, refining, Reflective journal	**As terms 1 and 3**	**1.3 review and reflect** Responding to feedback Reviewing the intention of the performance Reflecting. Identifying strengths and areas for future development, creating action plans and targets, referring to professional working practices.
Music		
Explore and develop Exploration – purpose, effect, audience, themes and ideas, experiences, styles and demands. Composition Melody, harmony, tonality, form and structure, dynamics, sonority, texture tempo, rhythm, metre articulation, scores / lead sheets Researching two named practitioners Develop and demonstrate knowledge and understanding of the skills and techniques needed to create and refine original work - composing	**As terms 1 and 3** **Applying knowledge and skills to create an original work** Knowledge and use of processes of composition Consideration of the elements of music Consideration of style Knowledge and use of instrumental / vocal resources	**Review, Reflect, Refine** Responding to feedback Reviewing the intention of the performance Reflecting. Identifying strengths and areas for future development, creating action plans and targets, referring to professional working practices. Evaluating the success of the original piece/s Review of skills

Year 11		
AUTUMN	**SPRING**	**SUMMER**
Drama & Music		
Unit 3 How to respond to and practically explore a brief. How to respond to and practically explore a brief. Mock 1 & 2 Research Selecting and exploring stimuli Creative Intentions Target audiences. Selecting skills. Practitioner influence Style/Genre Performance space and structure Marketing Budgeting Ideas Log prep Rehearsal schedule Starting points – issues. Selecting skills with reference to target audience. Starting points - group and individual skills. Presentation to an audience / panel Evaluation Budgeting, marketing, copyright rules and royalties, organisations, rehearsal and performance space and schedules	**Unit 3 Explore a brief.** How to respond to and practically explore a brief. Exam Research Selecting and exploring stimuli Selecting and exploring stimuli Creative Intentions Target audiences. Selecting skills. Practitioner influence Style/Genre Performance space and structure Marketing Budgeting Ideas Log prep Rehearsal schedule Starting points – issues. Selecting skills with reference to target audience. Starting points - group and individual skills. Presentation to an audience / panel Evaluation Completion of Unit 3	

BTEC LEVEL 2 SPORTS

A high-quality physical education curriculum inspires all student to succeed and excel in competitive sport and other physically demanding activities.

It should provide opportunities for students to become physically confident in a way which supports their health and fitness.

Opportunities to compete in sport and other activities build character and help to embed values such as fairness and respect

Our curriculum for physical education aims to ensure that all students:

- Develop competence to excel in a broad range of physical activities
- Are physically active for sustained periods of time
- Engage in competitive sports and activities
- Lead healthy active lives

ASSESSMENT

KS4 –

Throughout the Year 10 & 11 you will complete two coursework units:

- Practical Sport (worth 30%)
- Principles of Anatomy and Physiology (worth 30%)

Year 11 June: Externally assessed Set assignment & Principles of Fitness Testing (worth 40%)

POSSIBLE CAREERS

Doctor, PE Teacher, Sports Psychologist, Sports Coach/Conditioning, Sports Scientist, Nutritionist, Physiotherapist, Professional Sports Player, Personal Trainer.

SPORTS STUDIES

Year 10		
AUTUMN	**SPRING**	**SUMMER**
Performance and leadership in sports activities **Substantive**: 1.Performance and Leadership in Sports Activities. Practical. Performance of skills and technique. (Boxing , Handball , Sport of their choosing from the relevant list of accepted Sports. 2.Practical. Performance of skills and technique 3. Practical. Tactics & strategies **Disciplinary:** Dictated by OCR Schema , Course work with briefs, self-assessment , peer assessment and teacher observation	**Performance and leadership in sports activities** **Substantive:** 4.Performance and Leadership in Sports Activities. Practical. Compositional ideas. 5. Practical. Use of creativity in performance 6. Self-assessment and report **Disciplinary**: Dictated by OCR Schema , Course work with briefs, self-assessment , peer assessment and teacher observation	**Outdoor and Adventurous Activities** **Substantive** Topic Area 1: Provision for different types of outdoor and adventurous activities in the UK Topic Area 2: Equipment, clothing and safety aspects of participating in outdoor and adventurous activities Topic Area 3: Plan for and be able to participate in an outdoor and adventurous activity Topic Area 4: Evaluate participation in an outdoor and adventurous activity **Disciplinary:** End of unit/topic test – theory lesson. Meta cognition and retrieval practice. Quizzes or other retrieval strategies to be used at the start of lessons.

Year 11 – Examined Unit, Principles of Fitness		
Learning Aim	**Key Content areas**	**Assessment approach**
A: Understand the components of fitness	**A1** Components of physical related fitness **A2** Components of skill-related fitness **A3** Fitness tests to assess components of fitness **A4** Classification of sport for team or individual	This unit is assessed through a Pearson Set Assignment.
B: Support the administration of fitness tests for different components of fitness	**B1** Explore specific fitness tests for client **B2** Planning fitness tests **B3** Administering fitness tests	
C: Evaluate fitness testing data	**C1** Produce a fitness profile for a selected sports performer **C2** Provide feedback to selected sports performer	