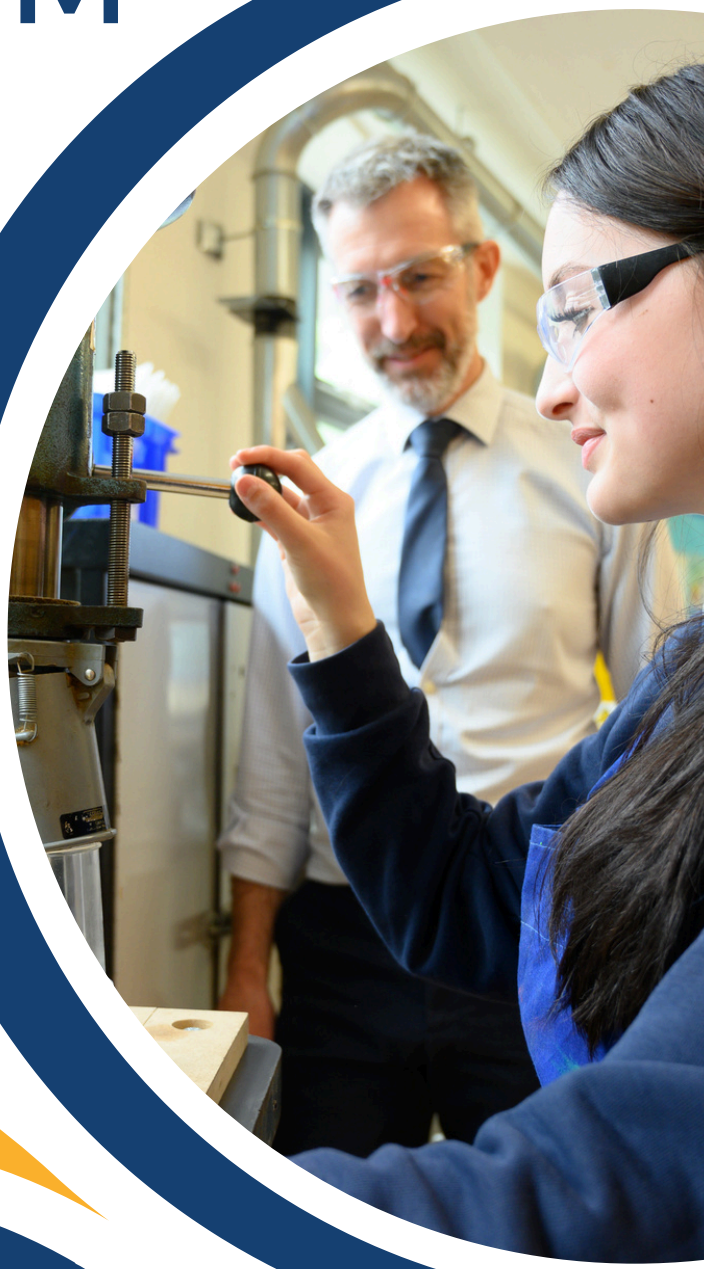
CURRICULUM MAPS



Rednock School

Where everyone matters

APPLIED SCIENCE

LEVEL 3 BTEC

YEAR 12

PRACTICAL SCIENTIFIC PROCEDURES AND TECHNIQUES (COURSEWORK)

1. IDENTIFYING UNKNOWN CONCENTRATIONS (2A)
- Calibration
- Standard solution
- Titrations
- Beer-Lambert's Law
- Colorimetry

2. HEATING AND COOLING (2B)
- Melting points
- Cooling curves
- Rate of cooling
- Measuring temperature changes

3. CHROMATOGRAPHY (2C)
- Plant pigments
- Amino acid chromatograms
- Paper chromatography
- Thin layer chromatography
- Identifying unknown substances

4. PERSONAL DEVELOPMENT (2D)
- Personal reflection
- Skills audit
- Application of scientific skills

PRINCIPLES AND APPLICATIONS OF SCIENCE (EXAMINED CONTENT)

1. BIOLOGY 1: CELLS
- Cell ultrastructure
- Microscopy
- Specialised cells
- Prokaryotic cells
- Bacterial staining

2. BIOLOGY 2: TISSUES
- Epithelial tissue
- Muscle tissue
- Nervous tissue

3. CHEMISTRY 1: STRUCTURE AND BONDING
- Electron configuration
- Ionic bonding
- Covalent bonding
- Metallic bonding
- Intermolecular forces

4. CHEMISTRY 2: PRODUCTION AND USES OF CHEMICAL SUBSTANCES
- Quantitative chemistry
- Physical properties
- Chemical properties

5. PHYSICS 1: WORKING WITH WAVES
- Transverse and longitudinal waves
- Diffraction gratings
- Stationary waves
- Resonance

6. PHYSICS 2: WAVES IN COMMUNICATION
- Principles of fibre optics
- Electromagnetic waves

YEAR 13

PHYSIOLOGY OF HUMAN BODY SYSTEMS (COURSEWORK)

1. THE MUSCULOSKELETAL SYSTEM (8A)
- Muscles
- Bones
- Musculoskeletal conditions and treatments
- Joints

2. THE LYMPHATIC SYSTEM (8B)
- Lymph and tissue fluid
- Lymphatic conditions and treatments

3. THE DIGESTIVE SYSTEM (8C)
- Food tests
- Malnutrition
- Micronutrients
- Digestive conditions and treatments

SCIENCE INVESTIGATION SKILLS (EXAMINED CONTENT)

1. BIOLOGY
- Enzymes as biological catalysts
- Diffusion of molecules
- Factors that affect the growth and distribution of plants

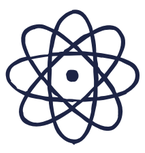
2. CHEMISTRY
- Diffusion of molecules
- Arrangement and movement of molecules
- Energy content of fuels

3. PHYSICS
- Use of electrical components
- Parallel and series circuits
- Energy usage

4. PLANNING A SCIENTIFIC INVESTIGATION
- Developing a hypothesis
- Using standard procedures
- Health and safety in the laboratory
- Identifying key variables
- Collecting data

5. DATA COLLECTION, PROCESSING, ANALYSING AND INTERPRETATION
- Data tabulation
- Statistical analysis
- Graphical representations of data
- Critical evaluation

6. DRAWING CONCLUSIONS
- Interpreting data
- Primary and secondary data
- Qualitative and quantitative sources of error
- Making recommendations for improvements.



ART & DESIGN

YEAR 7

1. LINE AND TONE
- Mark-making
- Print-making
- Tonal drawing
- Skills

2. 3D FORM
- Clay relief and carving

3. COLOUR THEORY
- Primary
- Secondary
- Tertiary
- Tints and shades

4. PATTERN & SHAPE
- Print-making
- Composition
- Painting

5. PHOTOGRAPHY
- Composition
- Digital manipulation
- Thematic task

YEAR 8

6. LINE AND TONE
- Tonal drawing
- Portraiture
- Character design
- Storyboarding

7. 3D FORM
- Clay modelling
- Sculpture
- Set design props

8. ANIMATION
- Stop motion
- Scenic backdrop

9. COLOUR AND SHAPE
- Painting
- Blending
- Impasto
- Still life photography

YEAR 9

10. LINE AND TONE
- Tonal drawing
- Print-making
- Typography

11. COLOUR THEORY
- Primary
- Secondary
- Tertiary
- Tints and shades
- Colour mixing

12. 3D FORM
- Texture
- Artist study
- Clay
- Ideas sketches

13. PAINTING
- Artist study
- Ideas sketches

14. CONTEXTUAL STUDIES
- Artist research

15. PHOTOGRAPHY
- Composition
- Camera techniques
- Photoshoot

16. DEVELOPING IDEAS AND FINAL PIECE
- Mind mapping
- Composition

GCSE

AND/OR

GCSE FINE ART
- Skill-building
- Presentation
- Contextual studies
- Developing and refining ideas
- Annotation
- Recording through photography and drawing
- Experimenting with media
- Producing a personal response

GCSE PHOTOGRAPHY
- Camera skills and techniques
- Presentation
- Contextual studies
- Developing and refining ideas
- Annotation
- Experimentation
- Digital manipulation
- Producing a personal response

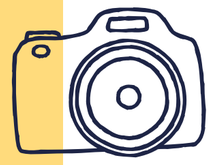
Component 1 NEA 60%, Component 2 NEA 40%

A LEVEL

AND/OR

A-LEVEL FINE ART
- Exploring themes
- Contextual studies
- Critical analysis
- Advanced skills and refinement

A-LEVEL PHOTOGRAPHY
- Exploring themes
- Contextual studies
- Refined post production
- Advanced compositions
- Critical analysis



Component 1 NEA 60%, Component 2 NEA 40%

BIOLOGY

YEAR 7

1. CELL BIOLOGY
- Plant and animal cells
- Unicellular and multicellular organisms
- Movement in and out of cells
- Levels of organisation
- Specialised cells

2. INTERDEPENDENCE
- Food chains and food webs
- Bioaccumulation
- Predators and prey

3. BODY AND ECOSYSTEMS
- Muscles, bones and joints
- Ligaments and tendons
- Environmental science
- Population sampling

YEAR 8

4. PLANTS AND REPRODUCTION
- Plant structure
- Plant reproduction
- Variation
- Adaptations
- Human reproduction
- Foetal development
- Adolescence and puberty

GCSE

1.ECOLOGY AND CELLS
- Eukaryotes and prokaryotes
- Cell structure and function
- Microscopy and magnification
- Biotic and abiotic factors
- Communities
- Levels of organisation

2. CELL DIVISION, TRANSPORT AND ORGANISATION
- Chromosomes and the cell cycle
- Mitosis
- Stem cells
- Diffusion
- Osmosis
- Active transport
- Digestive system
- Heart structure and function
- Blood

3. DISEASE
- Communicable and non-communicable disease
- Plant disease
- Cancer
- Pathogens
- Heart disease and treatment

4. ECOLOGY
- Cycling materials
- Biodiversity
- Waste management
- Deforestation
- Global warming
- Fishing and farming

5. GENETICS
- Sexual and asexual reproduction
- Meiosis
- DNA structure and genomes
- Genetic inheritance
- Genetic disorders
- Sex determination
- Selective breeding
- Genetic engineering
- Classification
- Evolution

6. HOMEOSTASIS AND CONTROL
- Endocrine system
- Negative feedback
- Menstrual cycle
- Control of fertility
- Contraception
- Nervous system

YEAR 9

8. BIOENERGETICS
- Photosynthesis
- Limiting factors
- Aerobic respiration
- Anaerobic respiration
- Effects of exercise on the body

7. BREAKING DOWN MOLECULES
- Digestion
- Healthy diets
- Food testing
- Digestive system
- Enzymes

6. GENETICS
- Inheritance
- Evolution
- Mutations
- Extinction
- Natural selection

5. GAS EXCHANGE AND MICROBIOLOGY
- Breathing
- Lung structure and function
- Gas exchange
- Microbes
- Communicable and non-communicable disease

A LEVEL

1. CELLS AND BIOLOGICAL MOLECULES
- Cell ultra-structure
- Water
- Carbohydrates
- Lipids
- Proteins
- Nucleic acids

2. EXCHANGE AND TRANSPORT
- Gas exchange
- Animal transport
- Plant transport

3. COMMUNICABLE DISEASE
- Plant and animal diseases
- Transmission
- Defense mechanisms

4. CELLS
- Plasma membrane
- Cell division
- Stem cells

5. BIODIVERSITY AND EVOLUTION
- Sampling techniques
- Calculating biodiversity
- Conservation
- Classification
- Variation and evolution

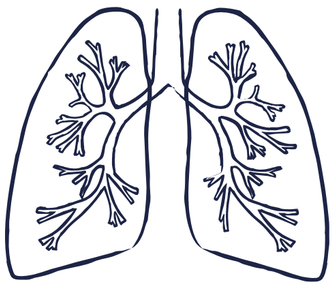
6 COMMUNICATION AND INHERITANCE
- Nervous system
- Endocrine system
- Cellular control
- Genetic inheritance

7 HOMEOSTASIS AND MANIPULATING GENOMES
- Thermoregulation
- Liver function
- Kidney function
- DNA profiling
- Genetic engineering

8. RESPIRATION AND BIOTECHNOLOGY
- Respiration in detail
- Plant and animal cloning
- Culturing microorganisms

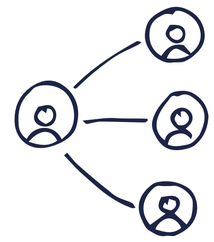
9. PHOTOSYNTHESIS AND ECOSYSTEMS
- Photosynthesis in detail
- Energy transfers
- Recycling
- Succession

10. PLANT RESPONSES AND SUSTAINABILITY
- Plant hormones
- Tropisms
- Competition
- Conservation
- Ecosystem management



KS3 KS4 KS5

BUSINESS



GCSE

1. BUSINESS IN THE REAL WORLD
- Purpose and nature
- Business ownership
- Setting aims and objectives
- Stakeholders
- Location
- Planning
- Expanding a business

2. INFLUENCES ON BUSINESS
- Technology
- Ethical and environmental considerations
- Economic climate
- Globalisation
- Legislation
- Competitive environment

3. BUSINESS OPERATIONS
- Production processes
- Role of procurement
- Quality
- Good customer services

4. HUMAN RESOURCES
- Organisational structures
- Recruitment and selection
- Motivating employees
- Training

A LEVEL

1. WHAT IS BUSINESS?
- Nature and purpose
- Different forms
- Understanding businesses in an external environment

2. MANAGERS, LEADERSHIP AND DECISION-MAKING
- Management
- Leadership
- Decision-making
- Role of stakeholders

3. MARKETING MANAGEMENT
- Setting marketing objectives
- Understand markets and customers
- Segmentation, targeting, positioning
- The marketing mix

4. OPERATIONAL MANAGEMENT
- Setting operational objectives
- Analysing performance
- Increasing efficiency and productivity
- Improving quality
- Managing inventory and supply chains

5. FINANCIAL MANAGEMENT
- Setting financial objectives
- Analysing performance
- Sources of finance
- Improving cash flow and profits

6. HUMAN RESOURCE MANAGEMENT
- Setting HR objectives
- Analysing performance
- Organisational design
- Managing the HR flow
- Motivation and engagement
- Employer-employee relations

7. ANALYSING THE STRATEGIC POSITION OF A BUSINESS
- Mission, objectives and strategy
- Financial ratio analysis
- Overall performance
- Political and legal change
- Economic change
- Social and technological
- The competitive environment
- Investment appraisal

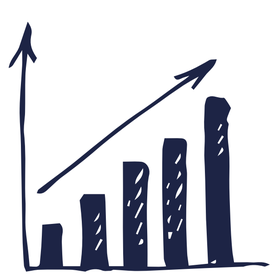
8. CHOOSING STRATEGIC DIRECTION
- Choosing markets to compete in
- Choosing how to compete

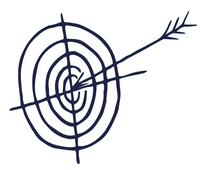
9. STRATEGIC METHODS
Assessing:
- A change in scale
- Innovation
- Globalisation and internationalisation
- Greater use of digital technology

10. MANAGING STRATEGIC CHANGE
- Managing change
- Managing organisational culture
- Managing strategic implementation
- Problems with strategy

6. FINANCE
- Sources of finance
- Cash flow
- Terms and calculations
- Analysing financial performance

5. MARKETING
- Understanding customers
- Segmentation
- Market research methods
- Price, product, promotion and place (4Ps)





CHEMISTRY

YEAR 7

1. HOW SCIENCE WORKS
- Safety in the laboratory
- Investigations
- Variables

2. MATTER
- Particle model
- Changing states
- Separation techniques

3. REACTIONS
- Periodic table
- Metals and non-metals
- Chemical reactions
- Physical changes

YEAR 8

4. THE EARTH
- The atmosphere
- Testing gases
- Earth structure
- Rocks

5. PROPERTIES OF MATERIALS
- Metals
- Plastics
- Alloys
- Ionic and covalent structures

GCSE

1. STATES OF MATTER
- Elements, compounds and mixtures
- Relative atomic mass
- Moles
- Chemical yields

2. PERIODIC TABLE AND BONDING
- Metal structure
- Metal reactions
- Ionic compounds
- Covalent compounds
- Development of the periodic table

3. NEUTRALISATION
- Making salts
- Titrations
- Quantitative chemistry

4. ENERGY CHANGES
- Bond energy
- Reaction profiles
- Fuel cells

5. ELECTROLYSIS
- Products of electrolysis
- Extraction of aluminium

6. HYDROCARBONS
- Fractional distillation
- Cracking
- Complete and incomplete combustion
- Polymers

YEAR 9

6. CHEMICAL ENERGY
- Combustion
- Chemical changes
- Exothermic and endothermic reactions
- Chemical equations

7. ACIDS AND BASES
- Chemical indicators
- Neutralisation
- Concentrations
- Metals and acids

8. ELEMENTS
- The periodic table
- Patterns in groups
- Oxidation
- Metal reactions

9. COLOUR CHEMISTRY
- Chromatography
- Calculating concentrations
- Balancing equations

7. EARTH'S RESOURCES
- Materials chemistry
- Water
- Reduce, reuse and recycle

8. CHEMICAL ANALYSIS
- Formulations
- Testing for gases

9. EARTH AND ATMOSPHERE
- History of earth's atmosphere
- Climate change
- Pollution

A LEVEL

1. FOUNDATIONS IN CHEMISTRY
- Atomic structure
- Quantitative chemistry
- Bonding and structure
- Reactions of acids
- Redox

2. PERIODIC TABLE AND ENERGY
- Periodicity
- Group 2
- Enthalpy changes
- Rates of reaction and enthalpy changes

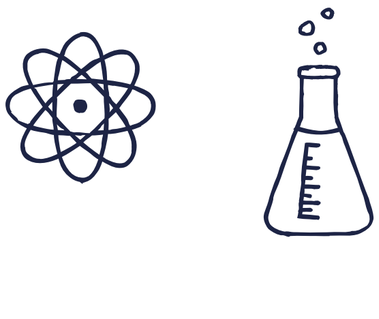
3. CORE ORGANIC CHEMISTRY
- Isomerism and organic functional groups
- Aliphatic hydrocarbons
- Alcohols and haloalkanes
- Analytical techniques
- Nomenclature

4. PHYSICAL CHEMISTRY AND TRANSITION ELEMENTS
- Rates
- Equilibrium
- Acid-base chemistry
- Enthalpy and entropy
- Redox chemistry
- Electrochemical cells
- Transition metals

5. ORGANIC CHEMISTRY AND ANALYSIS
- Aromatic compounds
- Carboxylic acids and esters
- Organic nitrogen compounds
- Polymer chemistry
- Synthetic chemistry
- Analytical techniques

10. RATES
- Collision theory
- Factors affecting rates of reaction

11. EQUILIBRIUM
- Reversible reactions
- Le Chatelier's principle



COMPUTING

YEAR 7

1. MESSAGING IN DIGITAL MEDIA
- Research
- Plan and develop a range of media
- Evaluate against criteria

2.PROGRAMMING IN CODE.ORG
- Sequencing
- Variables
- Selection
- Count-controlled iteration

3. MODELLING DATA USING SPREADSHEETS
- Use cell references and the autofill tool
- Format data including conditional formatting
- Create formulas for add, subtract, divide and multiply
- Create functions for SUM, COUNTA, AVERAGE, MIN, MAX and COUNTIF
- Sort and filter data
- Create graphs

4. NETWORKING
- Network technology
- The internet
- Protocols

5. CYBER EXPLORERS
- Online safety
- Cyber security
- Cyber careers

YEAR 8

6. MEDIA FOR A CAUSE
- Licensing issues involving online content
- Credibility, referencing and evaluating resources
- Plan, create and evaluate digital artefacts

7. VECTOR GRAPHICS
- Bitmap and vector images
- Plan and create a vector image
- Evaluate the use of vector images

8. PROGRAMMING EXTENSION WITH TURING LAB
- Sequence, selection and iteration
- Syntax and coding errors
- Algorithms and functions

9. DATA VISUALISATION
- Format data including conditional formatting
- Advanced Excel formulas and functions
- Presenting information

10. COMPUTER SYSTEMS
- Hardware and software
- How are instructions stored and executed?
- Boolean logic

11. EXPLORING DATA REPRESENTATION
- Binary including conversion
- How are text, sound and images stored?
- Data storage

12. INTRODUCTION TO WEB DEVELOPMENT
- Develop and create webpages using HTML
- Cascading Style Sheets (CSS)
- Web search technologies

YEAR 9

13. ARTIFICIAL INTELLIGENCE (AI)
- What is AI?
- How do machines learn?
- Opportunities in AI

14. ADVANCED PROGRAMMING IN PYTHON
- Data in sequences e.g. lists and strings
- Programming features to develop solutions
- How are instructions stored and executed?

15. EXPLORING DATA SCIENCE
- Select, use and combine data
- Present data in a variety of visual forms
- Analyse data and visualisations to draw conclusions

16. PHYSICAL COMPUTING WITH MICRO BITS
- Algorithms that reflect computational thinking
- Design, use and evaluate computational abstractions

17. UNDERSTANDING CYBER SECURITY
- Profiling
- Data Protection Act and the Computer Misuse Act
- Hacking and malware
- Protection methods e.g. firewalls, anti-malware and password authentication

18. INVICTUS
- Create, reuse, revise and repurpose digital artefacts
- Understand trustworthiness, design and usability

GCSE

1. FUNDAMENTALS OF ALGORITHMS
- Representing algorithms
- Efficiency of algorithms
- Searching algorithms
- Sorting algorithms

2. PROGRAMMING
- Data types and data structures
- Programming concepts
- Arithmetic, Boolean and Relational operations
- Input / output including string handling and random numbers
- Structured programming and subroutines

3. FUNDAMENTALS OF DATA REPRESENTATION
- Number bases and converting between them
- Units of information
- Binary arithmetic
- Representing text, images and sound
- Data compression

4. COMPUTER SYSTEMS
- Hardware and software
- Boolean logic
- Software classification
- Classification of programming languages and translators
- Systems architecture

5. FUNDAMENTALS OF COMPUTER NETWORKS
- Advantages and disadvantages
- Topologies
- Protocols
- Network security

6. CYBER SECURITY
- Fundamentals of cyber security
- Cyber security threats
- Social engineering
- Malicious code (malware)
- Methods to detect and prevent cyber security threats

7. RELATIONAL DATABASES AND STRUCTURED QUERY LANGUAGE (SQL)
- Relational databases
- Structured query language (SQL)

8. ETHICAL, LEGAL AND ENVIRONMENTAL IMPACTS OF DIGITAL TECHNOLOGY
- Cyber security
- Mobile technologies
- Wireless networking
- Cloud storage
- Hacking
- Wearable technologies
- Computer based implants
- Autonomous vehicles

A LEVEL

1. COMPONENTS OF A COMPUTER AND THEIR USES
- Structure and function of the processor
- Types of processor
- Input, output and storage

2. SOFTWARE AND SOFTWARE DEVELOPMENT
- Systems software
- Applications generation
- Software development
- Types of programming language

3. EXCHANGING DATA
- Compression, encryption and hashing
- Databases
- Networks
- Web technologies

4. DATA TYPES, DATA STRUCTURES AND ALGORITHMS
- Different algorithms that can be applied to these structures
- Data types
- Data structures
- Boolean algebra

5. LEGAL, MORAL, CULTURAL AND ETHICAL ISSUES
- Legislation surrounding the use of computers and ethical issues that can or may in the future arise from the use of computers
- Computer related legislation
- Moral and ethical issues

6. ELEMENTS OF COMPUTATIONAL THINKING
- Thinking abstractly
- Thinking ahead
- Thinking procedurally
- Thinking logically
- Thinking concurrently

7. PROBLEM SOLVING AND PROGRAMMING
- Programming techniques
- Computational methods

8. ALGORITHMS
- Using algorithms to describe problems and standard algorithms

9. PROGRAMMING PROJECT
- Analysis of the problem
- Problem identification
- Stakeholders
- Research the problem
- Specify the proposed solution
- Design the solution
- Decompose the problem
- Describe the solution
- Describe the approach to testing
- Developing the solution
- Iterative development process
- Testing to inform development
- Evaluation
- Testing to inform evaluation
- Success of the solution
- Describe the final product
- Maintenance and development

KS3 KS4 KS5

CRIMINOLOGY

LEVEL 3 Applied Diploma

1. UNIT 1: CHANGING AWARENESS OF CRIME

- Types of crimes
- Reasons and consequences of unreported crimes
- Impact of media's representation of crime on public perceptions
- Statistics about crime
- Campaigns for change
- Impact of media in changing crime
- Campaigning – planning, designing and justification

2. UNIT 2: CRIMINOLOGICAL THEORIES

- Criminal vs deviant behaviours
- Social construction of crime
- Biological explanations of criminal behaviour
- Psychological explanations of criminal behaviour
- Sociological explanations of criminal behaviour
- Different situations of criminality
- Effectiveness of criminal theories
- Criminological theories informing government policy
- Impact of social change and campaigns on government policy

CRIME

4. UNIT 4: CRIME AND PUNISHMENT

- Process of making laws
- Organisations involved in the criminal justice system
- Models of criminal justice
- Forms of social control
- Aims and effectiveness of punishment
- Roles of agencies in social control
- Limitations and effectiveness of agencies in achieving social control

3. UNIT 3: CRIME SCENE TO COURTROOM

- Personnel involved in criminal investigations
- Investigative techniques
- Processing evidence
- An individual's rights in a criminal investigation
- The Criminal Prosecution Service (CPS)
- Trial process
- Rules for using evidence in criminal cases
- Lay people in criminal cases
- Examining the validity of information
- Drawing conclusions from information

LAW

DESIGN & TECHNOLOGY

YEAR 7

DESIGN – MAKE – EVALUATE – TECHNICAL KNOWLEDGE

1. LICENCE TO SEW
- Health and safety
- Measuring and marking materials
- Joining techniques

2. MONSTER MADNESS
- Designing creative ideas
- Design specification
- Evaluating against a specification
- Paper patterns
- Impacts of product design

3. BOOK OF ILLUSION
- Health and safety in the workshop
- Materials classification & properties
- Cutting and shaping
- Simple electronic circuits
- CAD/CAM
- Planning manufacturing
- Biomimicry

YEAR 8

DESIGN – MAKE – EVALUATE – TECHNICAL KNOWLEDGE

4. DYSON
- Iterative design
- Disassembly
- Ergonomics and anthropometrics
- Power and electronic systems
- Solving design problems
- Using CAD/CAM to model
- Evaluating products

5. UNDER THE SEA
- Textile fibres
- Fabric construction
- Detailed design specifications
- Material surface modification

6. STEAMPUNK
- Technological developments
- Creative design

7. NATURAL WORLD
- Materials casting
- Production schedules
- Using planning tools
- Biomimicry

YEAR 9

DESIGN – MAKE – EVALUATE – TECHNICAL KNOWLEDGE

8. FESTIVAL
- Context Analysis
- Users
- Creating design briefs

9. ARCHITECTURAL SPACES
- Life cycle analysis
- 'Cradle to grave' product development
- Circular economy
- Skills development
- Selecting suitable materials

GCSE

USING REUSED MATERIALS

3. UPCYCLE
- Impacts of products on the environment
- Cutting materials to minimise waste
- Different energy generation and storage
- 6Rs and product life cycle
- Social and ecological issues in design
- Selection of materials and components

USING CAD/CAM

2. CAD/CAM - SCALE OF PRODUCTION
- New and emerging technologies
- Manufacturing systems
- Planned obsolescence and design for maintenance
- Scale of production
- Tolerance
- Nesting and tessellation
- Stockform

MATERIALS, TOOLS & EQUIPMENT

1. ITERATIVE DESIGN PROCESS
- Communication of ideas
- User centred design
- Design brief and specification
- Past and present designers
- Technology push vs market pull

USING CAD/CAM

4. PAPER AND BOARDS
- Categorising papers and boards
- Ergonomics and anthropometrics
- Stockform and components
- Treatments and finishes

VARIETY OF MATERIALS

5. CORE MATERIALS
- Impact on the planet
- Developments in technology
- Properties of materials
- Timber, metal, polymers, textiles, composite materials and smart materials

6. MECHANISMS, SYSTEMS AND MECHANICAL DEVICES
- The use of sensors
- Programming microcontrollers
- Mechanical devices and levers

USING LEARNT KNOWLEDGE

NON-EXAMINED ASSESSMENT (NEA) 50%
- Identifying and investigating design possibilities
- Producing a design brief and specification
- Generating design ideas
- Developing design ideas
- Realising design ideas
- Analysing and evaluating

A LEVEL

HIGH PRACTICAL ELEMENT

MATERIALS AND PROCESSES
- Performance and applications of materials
- Materials including, wood, metal, polymer, smart, modern, composites, paper and card and biodegradable polymers
- Accuracy in design and manufacture
- Design communication

NEA COURSEWORK 50%
- Identify and investigate design possibilities
- Producing a design brief and specification
- Development of design proposals
- Development of design prototype(s)
- Analysing and evaluating

COMMERCIAL DESIGN

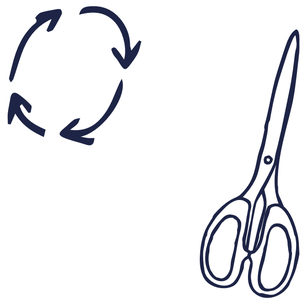
DESIGN THEORY
- Commercial design methods and processes
- Enterprise and marketing
- Critical analysis and evaluation
- Responsible design
- Design communication

CAD PACKAGES

CAD/CAM
- Modern, industrial and commercial practice
- Modern manufacturing systems
- Forming, redistribution and addition processes
- Digital design and manufacture
- Design communication

MATERIALS

TEXTILES



KS3 KS4 KS5

Rednock School
where everyone matters
Drama Department

DRAMA

PLAY

YEAR 7

1. INTRODUCTION TO DRAMA SKILLS
- Health and safety in the drama space
- Concentration
- Collaboration
- Communication
- Confidence and control

2. INSIDE OUT
- Embracing emotional diversity
- Wellbeing
- Mindfulness
- Communication and negotiation skills

3. TREASURE ISLAND
- Working from a script
- Teamwork
- Rehearsal techniques
- Performance skills (FEMPIG and VTAPE)

4. DARKWOOD MANOR
Developing characterisation through:
- Improvisation
- Still image
- Thought tracking
- Narration
- Hot seating and teacher-in-role
- Role-play

5. STORYTELLING THROUGH PHYSICAL THEATRE
Developing storytelling through:
- Focus and engagement in performances
- Narration
- Improvisation
- Physical theatre skills

6. MUSICAL THEATRE
- Coordination
- Characterisation using performance skills
- Sustaining character
- Evaluating theatre
- Stagecraft

YEAR 8

7. GREEK THEATRE
- Choral speaking
- Choral expression
- Choral gestures
- Levels
- Formations
- Teamwork

8. REAL CRIME DRAMA
- Research skills
- Marking the moment
- Mime
- Improvisation
- Proxemics of performance
- Focus and organisation in a group performance

9. WHODUNNIT? – MURDER MYSTERY
- Devising and creating
- Planning
- Teamwork
- Sustaining a character through performance skills

10. PHYSICAL THEATRE
- Exploring practitioners
- Devising work from a stimulus
- Coordination skills
- Teamwork

11. HIP HOP SHAKESPEARE
- Understanding of Shakespearean language
- Exploring Shakespearean England
- Diction and rhythm
- VTAPE skills

12. SCRIPTED SHAKESPEARE
- Interpretation of character
- Shakespearean language
- Use of performance skills
- Study of a script

YEAR 9

13. PRODUCTION DESIGN
- Health and safety requirements
- Technical design skills
- Production elements within theatre (set, lighting, costume, sound)

14. A STUDY OF A RANGE OF DRAMA SCRIPTS
- Sight reading
- Independent research
- Characterisation
- Performance skills (FEMPIG and VTAPE)

15. SCRIPTED PERFORMANCE
- Rehearsal techniques
- Time management
- Organisation and rehearsal roles
- Performance skills (FEMPIG and VTAPE)

16. EVALUATING THEATRE
- Peer evaluation
- Analysing theatre
- Literacy for Drama

17. DEVISING FROM A STIMULUS
Structuring a piece of theatre through:
- Collaboration
- Resilience
- Creativity
- A range of drama devices

18. DRAGONS' DEN
- Use of persuasive language

Presentational skills including:
- Teamwork
- Organisational skills
- Use of clear diction
- Projection
- Engaging an audience

BTEC LEVEL 3

BTEC LEVEL 3 NATIONAL EXTENDED CERTIFICATE IN PERFORMING ARTS

2. INVESTIGATING PRACTITIONERS' WORK
- Investigate the work of two practitioners
- Develop critical analysis and understanding
- Explore how practitioners communicate themes in their work

1. DEVELOPING SKILLS AND TECHNIQUES FOR LIVE PERFORMANCE
- Exploration and analysis of performance skills
- Study two performance styles
- Understanding the 'Role of an Actor'

3. ACTING STYLES
- Develop acting skills three styles of performance
- Participate in live workshops
- Analyse the rehearsal and performance process

4. GROUP PERFORMANCE WORKSHOP
- Work with a set stimulus
- Create an original performance
- Analyse the development and rehearsal process

GCSE

4. UNDERSTANDING DRAMA
- Knowledge drama and theatre factors
- Study of one set play
- Review of live theatre

3. TEXTS IN PRACTICE
- Play study
- Performance of two extracts

Or
- Design in a Technical role

2. DEVISING DRAMA
- Creating devised drama
- Performance of devised drama
- Analysis and evaluation of work

1. INTRODUCTION TO THE DRAMA GCSE
- Exploring skills
- Technical theatre
- Theatre makers

SCRIPT

KS3 KS4 KS5

ECONOMICS

A LEVEL

1. ECONOMIC METHODOLOGY AND THE ECONOMIC PROBLEM
- Economic methodology
- Nature and purpose of economic activity
- Economic resources
- Scarcity and choice
- Allocation of resources
- Production possibility diagrams

2. INDIVIDUAL ECONOMIC DECISION MAKING
- Consumer behaviour
- Imperfect information
- Aspects of behavioural economic theory
- Behavioural economics and economic policy

3. PRICE DETERMINATION IN A COMPETITIVE MARKET
- The determinants of the demand for goods and services
- Price, income and cross elasticities of demand
- Supply of goods and services
- Price elasticity of supply
- Determination of equilibrium market prices
- Interrelationship between markets

4. PRODUCTION, COSTS AND REVENUE
- Production
- Specialisation, division of labour and exchange
- The law of diminishing returns and returns to scale
- Marginal average and total revenue
- Profit
- Technological change

5. PERFECT COMPETITION, IMPERFECTLY COMPETITIVE MARKETS AND MONOPOLY
- Market structures
- Objectives of firms
- Perfect competition
- Monopoly and monopoly power
- Monopolistic competition
- Oligopoly
- Price discrimination
- Dynamics of competition and competitive market processes
- Contestable and non-contestable markets
- Static and dynamic efficiency
- Resource allocation
- Consumer and producer surplus

6. THE LABOUR MARKET
- The demand and supply of labour
- Competitive labour markets
- The influence of trade unions
- The national minimum wage
- Discrimination in the labour market

7. DISTRIBUTION OF INCOME AND WEALTH: POVERTY AND INEQUALITY
- The distribution of income and wealth
- The problem of poverty
- Government policies

8. MARKET MECHANISM, MARKET FAILURE AND GOVERNMENT INTERVENTION IN MARKETS
- How markets and prices allocate resources
- Meaning of market failure
- Private, public and quasi-public
- Externalities, merit and demerit goods, market imperfections
- Competition policy
- Government intervention
- Government failure

9. MEASUREMENT OF MACROECONOMIC PERFORMANCE
- Government economic policy
- Macroeconomic indicators
- Index numbers
- Uses of national income data

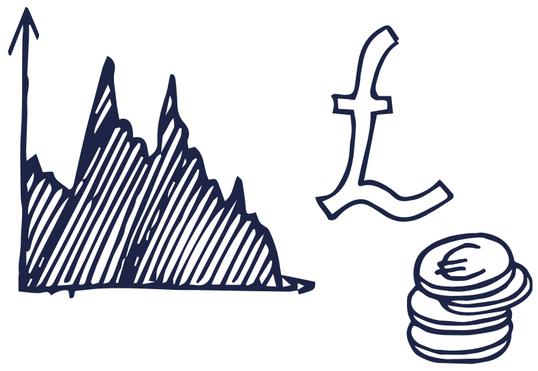
10. HOW THE MACROECONOMY WORKS
- The circular flow of income
- AD/AS analysis

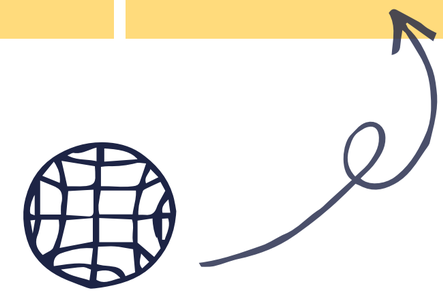
11. ECONOMIC PERFORMANCE
- Economic growth
- Economic cycle
- Employment and unemployment
- Inflation and deflation
- Conflicts between macroeconomic policy objectives

12. FINANCIAL MARKETS AND MONETARY POLICY
- Structure of financial markets
- Commercial and investment banks
- Central banks and monetary policy
- Regulation of the financial system

13. FISCAL POLICY AND SUPPLY-SIDE POLICIES
- Fiscal policy
- Supply-side policy

14. THE INTERNATIONAL ECONOMY
- Globalisation
- Trade
- Balance of payments
- Exchange rate systems
- Economic growth and development





ENGLISH

YEAR 7

HEROES AND VILLAINS

Greek myths and legends	Shakespearean heroes and villains	Fairytales

- Character archetypes
- Subversion of heroes and villains over time

DYSTOPIA

'The Hunger Games' by Suzanne Collins

- How writers use genre archetypes and conventions
- Descriptive writing skills

THE WORLD AROUND US

Nature poetry	Non-fiction environmental writing

- Different poetic forms and methods
- How writers craft perspective and viewpoint
- Shaping non-fiction texts

YEAR 8

INTRODUCTION TO SHAKESPEARE

Shakespeare play

- Themes, characters and setting within a Shakespeare play
- Influence of context on text

DETECTIVE FICTION

Sherlock Holmes stories by Sir Arthur Conan Doyle

- How writers use genre conventions
- How writers structure the text to impact the reader

CONTROVERSIAL ISSUES

Human rights poetry	'The Bone Sparrow' by Zana Fraillon

- Human rights in literature
- Crafting powerful opinions

TRAVEL WRITING

Travel extracts

- How writers persuade the reader
- Comparative skills

YEAR 9

GOTHIC LITERATURE

A range of literary extracts

- How writers use genre conventions
- How to evaluate

RHETORIC

A range of persuasive extracts

- How writers use persuasive techniques to convey a viewpoint
- How to apply persuasive techniques

NOVEL FROM A DIFFERENT CULTURE

'Of Mice and Men' by John Steinbeck

- Themes, characters, setting and context
- How the writer structures the text to impact the reader

NARRATIVE WRITING

Creative writing

- How to apply structural methods
- How to craft setting and characters

CONFLICT

War poetry	Shakespeare play

- Consideration of content
- Different poetic forms and methods
- Comparative skills

- Themes, characters and setting within a Shakespeare play
- Presentation of conflict

GCSE

ENGLISH LANGUAGE AND ENGLISH LITERATURE

LITERATURE PAPER 2
- Unseen poetry
- How to interpret and analyse in an exam
- Summary and comparison skills

LITERATURE PAPER 2
- Poetry anthology
- Different poetic forms and methods
- Social and historical context
- Comparative skills

LITERATURE PAPER 1
- 19th century novel
- Characters, themes, setting
- Social and historical context

LITERATURE PAPER 1
- Shakespeare play
- Characters, themes, setting
- Social and historical context

LANGUAGE PAPER 2
- Approaching non-fiction texts
- Non-fiction writing skills

LITERATURE PAPER 2
- Poetry anthology
- Different poetic forms and methods
- Social and historical context
- Comparative skills

LANGUAGE PAPER 1
- Approaching fiction texts
- Narrative writing skills

LITERATURE PAPER 2
- Modern text
- Characters, themes, setting
- Social and historical context

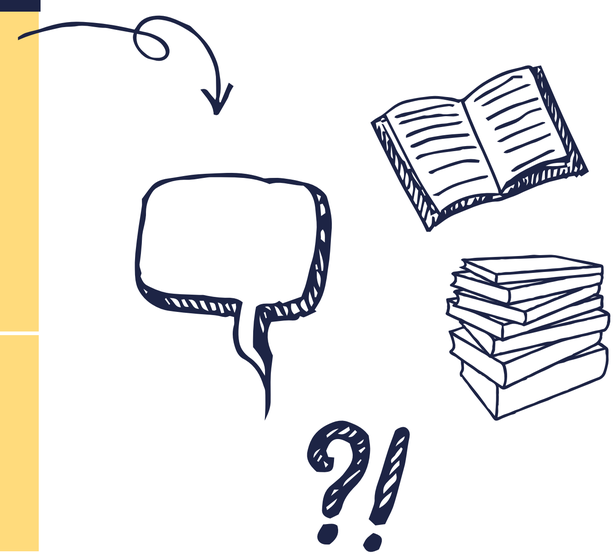
A LEVEL

ENGLISH LITERATURE

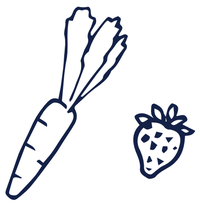
PAPER 1: LOVE THROUGH THE AGES
- Unseen prose: an introduction to the key concepts
- Comparison of 'A Streetcar Named Desire' and 'The Handmaid's Tale'
- 'Feminine Gospels'

PAPER 2 (OPTION B): TEXTS IN SHARED CONTEXTS: MODERN TIMES
- Unseen poetry: an introduction to the key concepts
- NEA: independent comparative study: 'Doctor Faustus' and a text chosen by the student
- Comparison of 'The Great Gatsby' and an anthology of pre-1900 poetry
- Shakespeare: 'Othello'

With each unit of study, students will learn to...
- Articulate responses to literary texts
- Analyse ways in which meanings are shaped
- Understand the significance and influence of the contexts
- Explore connections across literary texts
- Explore different interpretations



FOOD & NUTRITION



YEAR 7

KEY PRACTICAL SKILLS: Knife skills, weighing, measuring, use of cookers, bread making, different cooking methods e.g. stir frying, baking, boiling

1. COOK IT UP
- Introduction to food in schools
- Storing, preparing and cooking food safely
- Food waste and composting
- Using the oven, grill and hob
- Importance of healthy eating
- Eatwell guide
- Eight healthy eating tips

YEAR 8

KEY PRACTICAL SKILLS: Meat cookery, bread making – flavouring, presentation, shaping

2. WONDERFUL WORLD OF FOOD
- Selecting, preparing and cooking ingredients
- Food production, processing and selling
- Nutrition

YEAR 9

LEVEL 2 Hospitality & Catering

NUTRITION & PRACTICAL FOCUS: Carbohydrates

1. FOOD SAFETY IN HOSPITALITY & CATERING
- Food related causes of ill health
- Symptoms and signs of food related ill health
- Preventative control measures of food-induced ill health
- The Environmental Health Officer (EHO)

KEY PRACTICAL SKILLS: Laminating, rubbing in, reduction, sauce making, assembly

5. BUSINESS OF FOOD
- Food safety
- Costing and advertising
- Roles within the industry

KEY PRACTICAL SKILLS: Creaming, bread making – decorating, planning & preparation, presentation

4. COOKING FOR OTHERS
- Selecting, preparing and cooking a broader range of ingredients
- Factors affecting food choice
- Recipe adaptation

KEY PRACTICAL SKILLS: Modifying recipes, healthy alternatives, portion control

3. FOOD SMART
- Modifying recipes
- Energy balance

NUTRITION & PRACTICAL FOCUS: Protein – animal and plant based

2. HEALTH & SAFETY IN HOSPITALITY & CATERING
- HASAWA: Health and Safety at Work Act
- RIDDOR: Reporting of Injuries, Diseases and Dangerous Occurrences Regulations
- COSHH: Control of Substances Hazardous to Health
- MHOR: Manual Handling Operations Regulations
- PPER: Personal Protective Equipment at Work Regulations
- HACCP: Hazard Analysis & Critical Control Point
- Food Safety Act 1990
- Responsibilities of food handlers

NUTRITION & PRACTICAL FOCUS: Fats, Vitamins & Minerals

3. HOSPITALITY & CATERING PROVISION
- Hospitality and catering providers
- Working in the hospitality and catering industry
- Working conditions in the hospitality and catering industry
- Contributing factors to the success of hospitality and catering provision

NON-EXAM ASSESSMENT (NEA) 60%

4. CATERING IN ACTION (NEA)
- Understanding the importance of nutrition
- How cooking methods can impact on nutritional value
- Factors affecting menu planning
- How to plan production
- Practical assessment
- Reviewing of dishes
- Reviewing own performance

LEVEL 3 Food Science & Nutrition

25% INTERNAL PRACTICAL ASSESSMENT

3. EXPERIMENTING TO SOLVE FOOD PRODUCTION PROBLEMS (INTERNALLY ASSESSED)
- Scientific properties of food
- Scientifically investigate changes to food
- Solve food production problems

25% EXTERNAL ASSESSMENT

2. ENSURING FOOD IS SAFE TO EAT (EXTERNALLY ASSESSED)
- How microorganisms affect food safety
- How food can cause ill health
- How food safety is managed

25% INTERNAL PRACTICAL ASSESSMENT, 25% EXTERNAL EXAM

1. MEETING NUTRITIONAL NEEDS OF SPECIFIC GROUPS (EXTERNALLY ASSESSED)
- Food safety
- Properties of nutrients
- Relationship between nutrients and the human body
- Nutritional requirements
- Production and creation of complex dishes

5. HOW HOSPITALITY & CATERING PROVIDERS OPERATE
- The operation of the front and back of house
- Customer requirements in Hospitality and catering
- Hospitality and catering provision to meet specific requirements

FRENCH

YEAR 7

1. INTRODUCING TO FRENCH
INTRODUCING OURSELVES AND OTHER PEOPLE; GETTING TO KNOW FRANCE
Grammar content:
- Using verbs
- Masculine, feminine and plural nouns and adjectives
- Positive and negative opinion phrases
- Articles
- Introduction to present tense verb conjugation

YEAR 8

2. MY HOBBIES
EXPRESSING OPINIONS ABOUT SPORT
Grammar content:
- Working with irregular verbs
- Expressing a greater range of opinions
- Consolidation of present tense

3. WHERE I LIVE
DESCRIBING OUR LOCAL AREA
Grammar content:
- Using *il y a*
- Giving a greater range of opinions
- Present tense verb conjugation
- Using irregular verbs (e.g. modal verbs)
- Brief introduction to the future time frame

YEAR 9

7. MY RELATIONSHIPS
TALKING ABOUT WHAT WE LIKE TO DO WITH OUR FRIENDS
Grammar content:
- Consolidation of the past time frame
- Working with masculine, feminine and plural nouns and adjectives
- Working with two verbs together in the present tense
- Working with irregular verbs (e.g. modal verbs)
- Consolidation of future time frame
- Consolidation of negatives

6. I VISITED PARIS
BEING ABLE TO TALK ABOUT A PAST HOLIDAY
Grammar content:
- Introduction to the past time frame
- Using regular verbs in the perfect tense
- Irregular verbs in the perfect tense
- Using the perfect tense with *avoir* and *être* as auxiliaries
- Working with all three time frames

5. OFF TO FRANCE
ORDERING FOOD AND DRINK; TALKING ABOUT FUTURE HOLIDAY PLANS
Grammar content:
- Transactional language for shops, cafés and restaurants
- Consolidation of future time frame
- Comparing time frames

4. MY SCHOOL
DESCRIBING OUR SCHOOL AND EXPRESSING OPINIONS ABOUT DIFFERENT SUBJECTS
Grammar content:
- Comparatives
- Present tense verb conjugation
- Future time frame in greater depth
- Complex negatives

8. MY HEALTH
DISCUSSING WHAT WE DO TO LOOK AFTER OUR HEALTH
Grammar content:
- Using modal verbs to give advice
- Using *pour* to express 'in order to'
- Introduction to the imperfect tense
- Consolidation of negatives
- Consolidation of perfect tense
- Introduction to the simple future tense

9. MY WORK EXPERIENCE
DISCUSSING THE WORK EXPERIENCE WE HAVE DONE AND OUR CAREER PLANS FOR THE FUTURE
Grammar content:
- Consolidation of modal verbs in the present tense
- Consolidation of perfect tense combined with negatives
- Introduction to the conditional tense
- Consolidation of future time frame

10. GCSE-READY
Grammar content:
- Consolidation of present, past and future tenses
- Using direct object pronouns
- Working with reflexive verbs

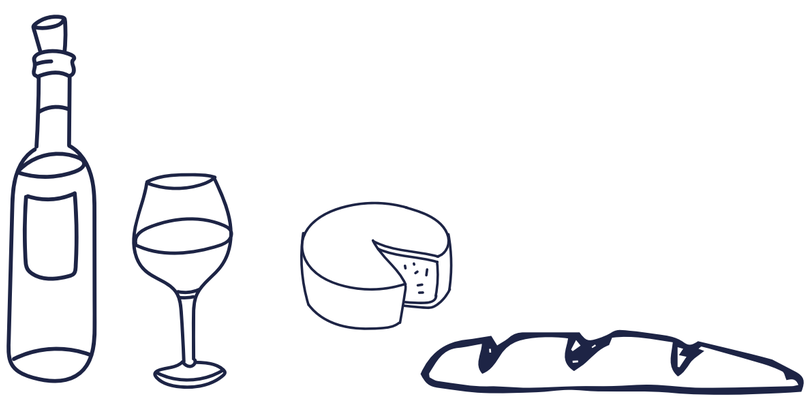
GCSE

Grammar content:
- Consolidation of verb conjugation in the present tense
- Consolidation of main past tenses
- Consolidation of main future tenses
- Advanced grammar

A LEVEL

Grammar content:
- Mastery of all tenses and moods
- Introduction to literary registers
- Advanced grammar

	6. TRAVEL AND TOURISM	5. STUDYING AND MY FUTURE	4. MEDIA AND TECHNOLOGY	3. MY NEIGHBOURHOOD	2. LIFESTYLE AND WELLBEING	1. MY PERSONAL WORLD
	Tourist attractions, accommodation, transport	School, future opportunities, jobs	Social media and gaming, TV and film, music	Places in town, shopping, transport, the natural world, environmental issues	Physical and mental wellbeing, food and drink, sports	Family, friends, relationships, equality
ANALYSIS OF A NOVEL						
ANALYSIS OF A FILM	**CURRENT TRENDS** • Family • Technology • Volunteering	**ARTISTIC CULTURE** • Cultural heritage • Francophone music • Cinema	**CURRENT TRENDS** • Diversity • Marginalised groups • Criminals and criminality	**POLITICAL LIFE** • Political engagement • Demonstrations and strikes • Immigration		
INDIVIDUAL RESEARCH PROJECT						



KS3 KS4 KS5

FURTHER MATHEMATICS

A LEVEL Year 12

TEACHER 1
CORE PURE (CP) AND DECISION (D) MATHS

1. D - ALGORITHMS
- Flow charts
- Bubble sort
- Quick sort
- Bin-packing

2. CP - COMPLEX NUMBERS
- Imaginary numbers
- Multiplying complex numbers
- Complex conjugation
- Complex roots

3. CP - ARGAND DIAGRAMS
- Modulus and argument
- Loci
- Regions

4. D - GRAPHS AND NETWORKS
- Modelling with graphs
- Graph theory
- Matrices
- The planarity algorithm

5. D - ALGORITHMS ON GRAPHS
- Kruskal's
- Prim's
- Dijkstra's
- Floyd's

6. D - ROUTE INSPECTION
- Eulerian graphs
- Route inspection algorithm
- Networks with more than 4 odd nodes

7. D - LINEAR PROGRAMMING
- Linear programming problems
- Graphical methods
- Locating optimal point
- Solutions with integer values

8. D - CRITICAL PATH ANALYSIS
- Modelling
- Dummy activities
- Early and late activities
- Critical activities
- Float
- Gantt charts

9. CP - VECTORS
- Equation of a line in 3 dimensions
- Equation of a plane in 3 dimensions
- Scalar product
- Angles between lines and planes
- Points of intersections
- Finding perpendiculars

TEACHER 2
CORE PURE (CP) AND FURTHER STATISTICS (FS)

1. CP - ROOTS OF POLYNOMIALS
- Quadratics
- Cubics
- Quartics
- Linear transformations of roots

2. CP - SERIES
- Sums of natural numbers
- Sums of squares and cubes

3. CP - PROOF BY INDUCTION
- Proving sums
- Proving divisibility
- Proving statements about matrices

4. CP - MATRICES
- Matrix multiplication
- Determinants
- Inverses
- Simultaneous equations

5. CP - LINEAR TRANSFORMATION
- Transformations in 2D
- Reflections and rotations
- Enlargements and shears
- Successive transformations
- Transformations in 3D

6. CP - VOLUMES OF REVOLUTION
- Around the x-axis
- Around the y-axis
- Adding and subtracting
- Modelling

7. FS - DISCRETE RANDOM VARIABLES
- Expected values
- Variance
- Functions of X

8. FS - POISSON DISTRIBUTION
- Modelling
- Adding
- Mean and variance
- Approximating binomial

9. FS - HYPOTHESIS TESTING
- Poisson
- Critical values

10. FS - CHI SQUARED
- Goodness of fit
- Degrees of freedom
- Contingency tables

11. FS - GEOMETRIC AND NEGATIVE BINOMIAL
- Geometric distribution
- Negative binomial
- Mean and variance
- Hypothesis testing

A LEVEL Year 13

TEACHER 1
CORE PURE (CP) AND DECISION (D) MATHS

1. D - TRAVELLING SALESMAN
- Classical problem
- Minimum spanning trees
- Nearest neighbour

2. CP - COMPLEX NUMBERS
- Exponential form
- Multiplying and dividing
- De Moivre's Theorem
- Trigonometric identities
- Sums of series
- Nth roots

3. D - CRITICAL PATH ANALYSIS
- Resource histograms
- Scheduling diagrams

4. D - SIMPLEX
- Linear programming
- Simplex method
- Two stage
- Big M method

5. CP - POLAR COORDINATES
- Equations
- Sketching curves
- Area
- Tangents

6. CP - METHODS IN CALCULUS
- Improper integrals
- Mean values
- Inverse trigonometric functions
- Partial fractions

7. CP - HYPERBOLIC FUNCTIONS
- Inverse
- Identities and equations
- Differentiating
- Integrating

TEACHER 2
CORE PURE (CP) AND FURTHER STATISTICS (FS)

1. CP - SERIES
- Method of differences
- Maclaurin series
- Series expansions

2. FS - PROBABILITY GENERATING FUNCTIONS
- Standard distributions
- Mean and variance
- Sums of independent variables

3. CP - VOLUMES OF REVOLUTION
- x and y axis
- Parametric
- Modelling

4. CP - METHODS IN DIFFERENTIAL EQUATIONS
- First order
- Second order
- Non-homogeneous
- Boundary conditions

5. CP - MODELLING WITH DIFFERENTIAL EQUATIONS
- Harmonic motion
- Damped and forced harmonic motion
- Coupled first-order simultaneous differential equations

6. FS - CENTRAL LIMIT THEOREM
- Normal distribution
- Other distributions

7. FS - QUALITY OF TESTS
- Type I and Type II errors
- Normal distribution
- Size and power

GEOGRAPHY

YEAR 7

1. WHAT MAKES PLACES FANTASTIC?
- Exploring fantastic places
- Describing physical geography
- Describing human geography
- Continents and oceans

2. HOW IS CRIME AFFECTED BY GEOGRAPHY?
- Map Skills – using GIS/OS maps
- Where does crime take place?
- Local fieldwork - investigating crime
- International crime

3. WHY ARE RIVERS AND COASTS IMPORTANT?
- World rivers and cities
- Key features of rivers
- The UK coastline
- Tourism and the coast

4. HOW SUSTAINABLE IS MY LOCAL AREA?
- Building a new football stadium
- Solar farms
- Food miles
- New communities

5. TOO LITTLE OR TOO MUCH WATER?
- Water cycle – processes and stores
- Types of rainfall
- Extreme weather - flooding and drought
- Local fieldwork - infiltration rates

6. WHAT IS FASCINATING ABOUT ASIA?
- Presentation skills
- Group investigation
- Place studies presentation

YEAR 8

1. WHAT IS DEVELOPMENT?
- Measuring development
- The causes of poverty
- Living on Dollar Street
- Increasing and supporting development

2. HOW ARE PEOPLE AFFECTED DIFFERENTLY BY NATURAL HAZARDS?
- Causes and impacts of earthquakes
- Volcanic eruptions in rich and poor countries
- Tropical storms and their impacts
- Wildfires

3. HOW ARE OUR POPULATIONS CHANGING?
- Population structure and population pyramids
- Population policies – can they work?
- Why do people migrate?
- What is it like to be a refugee?

4. WHY ARE ROCKS AND SOILS IMPORTANT?
- Our planet and its spheres
- Rocks and minerals as a resource
- Types of rock and the rock cycle
- Cheddar Gorge – an investigation

5. WHAT IS IT LIKE IN AN EXTREME ENVIRONMENT?
- Deserts
- Tropical rainforests
- Interpreting climate graphs
- Cold environments

6. HOW DOES PHYSICAL GEOGRAPHY AFFECT CONFLICT?
- What is meant by 'conflict' in geography?
- Impacts of physical geography on conflict
- Impacts of conflict on the landscape
- Water wars

YEAR 9

1. DO WE LIVE IN AN INTERCONNECTED WORLD?
- Globalisation
- Interdependence
- The spread of transnational corporations
- The rise of China

2. HOW SEVERE ARE TODAY'S GLOBAL ENVIRONMENTAL ISSUES?
- Causes and impacts of climate change
- Veganism and deforestation
- Environmental problems with fashion
- Mitigation and adaptation strategies

3. IS AFRICA CHANGING FOR THE BETTER?
- Challenges and opportunities for countries in Africa
- 'Africa is not a country' - dealing with misconceptions
- Is Africa still influenced by colonial exploitation?
- Is the western view of poverty in Africa a single-story one?
- Is China helping to develop African countries?

4. ARE WORLD CITIES REALLY MEGA?
- Where are all the megacities?
- Characteristics of a megacity
- Living in a slum
- Sustainable urban development

5. HOW DOES ICE CHANGE OUR WORLD?
- How do glaciers change the landscape?
- Glacial landforms
- Tourism in a glacial landscape
- Ice - here today, gone tomorrow?

6. WHAT ARE THE GEOPOLITICAL ISSUES FOR THE 21ST CENTURY?
- Arctic trade
- Taiwan and microchips
- Sportswashing in the Middle East
- The Space Race

GCSE

1. THE DEVELOPMENT GAP
- Measuring development
- Causes and impacts of uneven development
- Reducing the gap

2. NIGERIA - A NEWLY EMERGING ECONOMY
- Exploring Nigeria
- Changing industrial structures
- The impacts of TNCs and International Aid
- Managing environmental issues

3. TECTONIC HAZARDS
- Earthquakes and volcanoes
- Physical processes at plate margins
- Effects of and responses to earthquakes
- Risks from tectonic hazards

4. WEATHER HAZARDS AND CLIMATE CHANGE
- Formation of tropical storms
- Impacts of tropical storms
- Reducing the effects of tropical storms
- Weather hazards in the UK

5. ECOSYSTEMS
- Small scale ecosystems
- How does change affect ecosystems?
- Global ecosystems

6. TROPICAL RAINFORESTS
- Environmental characteristics of rainforests
- Causes and impacts of deforestation
- Managing tropical rainforests
- Sustainable management of tropical rainforests

7. COASTAL LANDSCAPES AND FIELDWORK
- Wave types and their characteristics
- Weathering and mass movement
- Erosion processes and landforms
- Transportation and depositional landforms
- Management strategies

8. COLD ENVIRONMENTS
- Characteristics
- Opportunities and challenges of development
- Cold environments under threat
- Managing cold environments

9. RESOURCE MANAGEMENT
- Global distribution of resources
- Provision of food, water and energy in the UK

10. FOOD MANAGEMENT
- Global food supply
- Impact of food insecurity
- Increasing food supply
- Sustainable food production

11. RIVER LANDSCAPES
- River profiles and processes
- River erosional and depositional landforms
- Factors increasing flood risk
- Managing floods – hard and soft engineering

12. URBAN ISSUES IN LICS/NEES – RIO
- An increasingly urban world
- The emergence of megacities
- Rio de Janeiro – opportunities and challenges
- Managing the growth of squatter settlements
- Planning for Rio's urban poor

13. URBAN CHANGE IN THE UK – BRISTOL AND FIELDWORK
- Where do people live in the UK?
- Economic challenges and opportunities
- Urban change and the environment
- Social inequality and new housing in Bristol
- Urban regeneration in Bristol

14. SUSTAINABLE URBAN DEVELOPMENT
- Planning for urban sustainability
- Sustainable living
- Sustainable traffic management

A LEVEL

1. ENVIRONMENTS
- Urbanisation and urban change
- Urban form
- Social and economic urban Issues
- Urban climate and air quality
- Urban drainage
- Urban environmental issues
- Sustainable urban development
- Contrasting urban areas at a global scale

2. CHANGING PLACES
- The nature and importance of places
- Place relationships and connections
- Place meaning and representation
- Places seen through qualitative and quantitative sources
- Place studies

3. GLOBAL SYSTEMS AND GLOBAL GOVERNANCE
- Globalisation – causes and flows
- Global systems
- International trade and access to markets
- Global governance
- Global commons
- Antarctica case study – threats and protection

1. WATER AND CARBON CYCLES
- Natural systems
- The water cycle
- The carbon cycle
- Water, carbon, climate and life on earth
- Case study: rainforest
- Case study: drainage basin

2. HOT DESERT SYSTEMS AND LANDSCAPES
- Hot desert environments and their margins
- Systems and processes in hot deserts
- Arid landscape development in contrasting areas
- Desertification
- Quantitative and qualitative skills in hot deserts

3. HAZARDS
- Hazards as a geographical concept
- Theory of plate tectonics
- Volcanic hazards
- Seismic hazards
- Tropical cyclone hazards
- Fires in nature
- Multi-hazard locations and management

15. THE CHANGING UK ECONOMY
- Science and business parks
- Changing rural landscapes
- Changing transport infrastructure
- North-South divide
- UK in the wider world

16. ISSUES EVALUATION
- Pre-release investigation
- Question spotting and feedback

KS3 KS4 KS5

GERMAN

YEAR 7

1. INTRODUCING MYSELF
LEARNING ABOUT GERMANY, AUSTRIA AND SWITZERLAND; BEING ABLE TO DESCRIBE OURSELVES
Grammar content:
- Using regular and irregular verbs
- Masculine, feminine and neuter nouns
- Articles
- Working in the present tense

2. MY SCHOOL
LEARNING TO GIVE OPINIONS ABOUT OUR SCHOOL AND THE SUBJECTS WE STUDY
- Giving positive and negative opinions
- Giving reasons for opinions

YEAR 8

3. FAMILY, FRIENDS AND FREE-TIME
BEING ABLE TO DESCRIBE OURSELVES AND OTHER PEOPLE; TALKING ABOUT HOBBIES
Grammar content:
- Using the nominative and accusative cases
- Plural nouns
- Present tense verb conjugation
- Using the adverbs *gern* and *lieber* to express opinions
- Working with subordinate clauses

4. WHERE I LIVE
DESCRIBING OUR LOCAL AREA; EXPRESSING WISHES FOR THE FUTURE
Grammar content:
- Using the nominative, accusative and dative cases
- Present tense verb conjugation
- Introduction to the future time frame
- Working with negatives
- Using modal verbs in 'two verb sentences'

5. EATING OUT
ORDERING FOOD AND DRINK; TALKING ABOUT THE PAST AND FUTURE
Grammar content:
- Working with transactional language
- Introduction to the past time frame
- Consolidation of future time frame
- Giving a range of opinions

YEAR 9

6. HOLIDAYS
TALKING ABOUT PAST HOLIDAYS AND FUTURE PLANS
Grammar content:
- Giving a greater range of opinions
- Using the perfect tense with *haben* and *sein* as auxiliaries
- Using regular and irregular verbs in all three time frames

7. TV, FILM AND SHOPPING
DISCUSSING HOW WE ORGANISE OUR FREE-TIME
Grammar content:
- Consolidation of all three time frames
- Working with separable verbs
- Working with regular and irregular verbs
- More work with key modal verbs
- Consolidation of nominative, accusative and dative cases

8. MY HEALTH
DISCUSSING WHAT WE DO TO LOOK AFTER OUR HEALTH
Grammar content:
- Working with *um…zu* to express 'in order to'
- Introduction to reflexive verbs
- Further work with modal verbs in 'two verb sentences'
- How to use subordinating conjunctions
- Consolidation of all three time frames

9. THE WORLD OF WORK
DISCUSSING THE WORK EXPERIENCE WE HAVE DONE AND CAREER PLANS FOR THE FUTURE.
Grammar content:
- Consolidation of different future tenses to discuss career pathways
- Consolidation of past tenses to discuss work experience
- Further work with nominative, accusative and dative cases

10. GCSE-READY
Grammar content:
- Further work with subordinating conjunctions
- Consolidation of all three time frames
- Further focus on transactional language

GCSE

1. MY PERSONAL WORLD
Family, friends, relationships, equality

2. LIFESTYLE AND WELLBEING
Physical and mental wellbeing, food and drink, sports

3. MY NEIGHBOURHOOD
Places in town, shopping, transport, the natural world, environmental issues

4. MEDIA AND TECHNOLOGY
Social media and gaming, TV and film, music

5. STUDYING AND MY FUTURE
School, future opportunities, jobs

6. TRAVEL AND TOURISM
Tourist attractions, accommodation, transport

Grammar content:
- Consolidation of verb conjugation in the present tense
- Consolidation of main past tenses
- Consolidation of main future tenses
- Advanced grammar

A LEVEL

Grammar content:
Mastery of all tenses
Introduction to literary registers
Advanced grammar

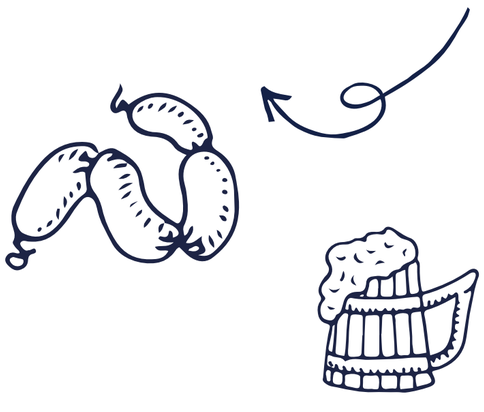
ANALYSIS OF A NOVEL

ANALYSIS OF A FILM

INDIVIDUAL RESEARCH PROJECT

ASPECTS OF GERMAN-SPEAKING SOCIETY
- The changing state of the family
- The digital world
- Youth culture

MULTICULTURALISM IN GERMAN-SPEAKING SOCIETY
- Immigration
- Integration
- Racism



POLITICAL LIFE
- Germany and the European Union
- Politics and youth
- German reunification and its consequences

ARTISTIC CULTURE
- Festivals and traditions
- Art and architecture
- Cultural life in Berlin

KS3 KS4 KS5

HEALTH & SOCIAL CARE

BTEC Level 2

COMPONENT 1: HUMAN LIFESPAN DEVELOPMENT

- Life stages: infancy, childhood, adolescence, early adulthood, middle adulthood, later adulthood
- Key physical, intellectual, emotional, and social development across life stages (PIES)
- Factors affecting growth and development:
  - Physical (e.g. genetic conditions, diet)
  - Social and cultural (e.g. relationships, culture)
  - Economic (e.g. income, education)

- Life events: expected and unexpected (e.g. starting school, bereavement)
- Impact of life events on individuals
- Sources and types of support (formal, informal, voluntary)
- Non-examined Assessment (NEA) - PSA 1

COMPONENT 2: HEALTH AND SOCIAL CARE SERVICES AND VALUES

- Non-examined Assessment (NEA) - PSA 2
- Reflecting on own practice and improvements
- Demonstrating and applying care values in role play scenarios
- Care values:
  - Empowering individuals
  - Maintaining confidentiality
  - Promoting equality and diversity
  - Respecting individual rights
  - Promoting effective communication
  - Safeguarding and duty of care
- Barriers to accessing services:
  - Physical
  - Sensory
  - Financial
  - Geographical
  - Language
- Social care services (e.g. residential care, domiciliary care)
- Health care services (e.g. GP, hospitals, mental health services)

COMPONENT 3: HEALTH AND WELLBEING (EXTERNAL ASSESSMENT – EXAM)

- Factors affecting health and wellbeing:
  - Physical
  - Lifestyle
  - Social
  - Emotional
  - Environmental
  - Genetic
- Interpreting physiological data:
  - BMI
  - Pulse
  - Blood pressure
  - Peak flow
- Person-centred approach to health improvement plans
- Setting short- and long-term health goals
- Recommended actions to improve health
- Barriers to improving health and wellbeing
- Preparation for external exam

AAQ BTEC Level 3

UNIT 3: PRINCIPLES OF H&SC PRACTICE

- **Core values & legislation:** Equality, diversity, rights, ethical and legal frameworks in H&SC
- **Person-centred care and ethics:** Confidentiality, choice, dignity, empowerment, informed consent
- **Multidisciplinary teamwork:** Roles of professionals, communication, collaborative practice
- **Social determinants:** Impact of socioeconomic, environmental, cultural and lifestyle factors on health outcomes

UNIT 2: HUMAN BIOLOGY & HEALTH

- Body organisation: From cells → tissues → organs → systems (e.g. cardiovascular, respiratory, endocrine)
- Physiological functioning & homeostasis: Respiration, energy metabolism, blood pressure, internal regulation
- System-specific detail:
  - Cardiovascular: structure, blood flow, heart function
  - Respiratory: gas exchange, lung mechanics
  - Endocrine: hormonal control/regulation
  - Common disorders: e.g. asthma, diabetes, BMI interpretation, peak flow, blood pressure effects and health implications

UNIT 1: HUMAN LIFESPAN & DEVELOPMENT

- Lifespan stages & holistic development: PIES across infancy, childhood, adolescence, adulthood, later adulthood, including key life events and their impacts
- Theories & research methods: Piaget, attachment, cognitive, language development, ethical considerations and cultural/ historical influences
- Factors affecting development: Genetic, environmental, socioeconomic, cultural, lifestyle
- Professional interventions & support systems: Early help, formal/ informal networks, role of H&SC professionals at different life stages

UNIT 5: PROMOTING HEALTH EDUCATION

- Principles & purpose: Aims of health education—awareness raising, behaviour change
- Theoretical models: Health Belief Model, Stages of Change, HAPA, social cognitive theory (e.g. locus of control)
- Strategy components: Audience needs analysis, messaging, delivery channels, culturally sensitive approaches
- Planning & evaluation: Goal setting (SMART goals), monitoring outcomes, evaluating effectiveness, overcoming barriers

HISTORY

YEAR 7

Overall Year 7 Theme: Changing Lives

1. HOW DID THE VIKINGS CHANGE THE LIVES OF THE PEOPLE OF ENGLAND?
The impact of Viking war and trade on Anglo-Saxon lives

2. HOW DID THE BLACK DEATH HAVE AN IMPACT ON THE LIVES OF THE PEOPLE OF ENGLAND?
Causes, cures and consequences of the Black Death on England

3. WHAT IMPACT DID THE RELIGIOUS CHANGES OF THE TUDORS HAVE ON PEOPLE'S LIVES?
Religious differences cause turmoil in England

4. HOW MUCH CHANGE DID THE INDUSTRIAL REVOLUTION BRING TO THE LIVES OF THE PEOPLE OF BRITAIN?
Living and working conditions, and health and hygiene

5. HOW DID THE ROMANOVS CHANGE RUSSIA?
Tsars, wars, peasants and revolution

YEAR 8

Overall Year 8 Theme: Power and Protest

5. WHAT IS THE HISTORY BEHIND THE BLACK LIVES MATTER MOVEMENT?
West African culture, the slave trade and the struggle for equality

4. HOW DID PROTEST AND REFORM CHANGE THE LIVES OF PEOPLE IN BRITAIN FROM THE 18TH CENTURY?
Political protest to challenge authority and how it brought about change

3. HOW DID REVOLUTION CHANGE THE NATURE OF ENGLISH GOVERNMENT BETWEEN 1640 AND 1690?
Civil war, execution and the return of the monarchy

2. WHO COULD CHALLENGE THE POWER OF MEDIEVAL KINGS?
Medieval kings discover that they can't always do what they want

1. HOW SUCCESSFULLY DID THE NORMANS IMPOSE THEIR AUTHORITY IN ENGLAND?
The Norman invasion and how they took control

YEAR 9

Overall Year 9 Theme: Shaping the Nation

1. HOW HAVE MIGRATION AND EMPIRES SHAPED YOUR WORLD?
Early migrants and the British Empire both shaped who we are today

2. WHAT IMPACT DID THE FIRST WORLD WAR HAVE ON BRITAIN AND ITS PEOPLE?
The impact of the war at home and abroad

3. HOW WAS THE HOLOCAUST ABLE TO HAPPEN?
Nazi persecution of the Jews and the road to genocide

4. WHAT WERE THE MOST SIGNIFICANT EVENTS OF WORLD WAR TWO?
Key moments of the war, such as the Dunkirk evacuation, Pearl Harbour and the atomic bomb

5. CASE STUDIES OF THE POST WAR WORLD
The impact of the Cold War, migration to Britain, Apartheid in South Africa and global terrorism

GCSE

Unit 2 - Migration, Empires and the People, c790 to the present day

7. THE 20TH CENTURY WORLD

6. EXPANSION AND EMPIRE

5. LOOKING WEST: BRITAIN AND THE ATLANTIC WORLD

4. CONQUERED AND CONQUERORS

Unit 1 – Democracy and Dictatorship: Germany, 1890-1945

3. THE EXPERIENCES OF THE GERMANS UNDER THE NAZIS

2. GERMANY AND THE DEPRESSION

1. GERMANY AND THE GROWTH OF DEMOCRACY

Unit 3 - Restoration England, 1660-1685

8. CROWN, PARLIAMENT, PLOTS AND COURT LIFE

9. LIFE IN RESTORATION ENGLAND

10. LAND, TRADE AND WAR

11.THE HISTORIC ENVIRONMENT

Unit 4 – Conflict and Tension in Asia, 1950-1975

12. KOREA

13. ESCALATION OF TENSION IN VIETNAM

14. THE ENDING OF THE CONFLICT IN VIETNAM

A LEVEL

Breadth Study – The Making of a Superpower: The USA 1865-1975

8. CONFLICT AT HOME AND ABROAD, 1960–1975

7. POST-WAR AMERICA, 1945–1960

6. NEW DEALS AND NEW DIRECTIONS, 1933–1945

5. RETURN TO NORMALCY, 1920–1932

4. EMERGENCE ON THE WORLD STAGE, 1912–1920

3. PROGRESSIVISM AND IMPERIALISM, 1890–1912

2. THE GILDED AGE, 1877–1890

1. THE ERA OF RECONSTRUCTION, 1865–1877

Depth Study – The Wars of the Roses, 1450-1499

1. THE ORIGINS OF THE CONFLICT

2. THE WAR OF THE BARONS, 1459–1461

3. THE TRIUMPH OF THE YORKISTS, 1461–1471

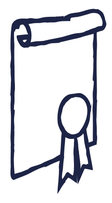
4. THE REIGN OF EDWARD IV, 1471–1483

5. THE DOWNFALL OF THE YORKIST MONARCHY, 1485–1486

6. THE END OF THE YORKIST DYNASTY

Historical Investigation

THE CAUSES OF THE FALL OF AUTOCRACY IN RUSSIA, 1815–1917



KS3 KS4 KS5

LIFE SKILLS

YEAR 7

I AM RESPECTFUL

TRANSITION TO REDNOCK
- Managing change
- Rednock values
- Making and keeping friendship

DIVERSITY AND IDENTITY

I AM TENACIOUS

BULLYING AND DISCRIMINATION
- Bullying
- Disabilities and discrimination

DRUGS AND ALCOHOL
- Caffeine and energy drinks

Computing lessons on cyberbullying

I AM MOTIVATED

CAREERS
- Values and aspirations
- Researching careers
- Personal attributes

FIRST AID
- Basic life support
- Head injuries
- Allergies

I AM AMBITIOUS

MENTAL AND PHYSICAL HEALTH
- Mental health
- Physical health
- Diet, exercise and sleep

YEAR 8

I AM MOTIVATED

CAREERS
- Different types of work
- Stereotypes at work

Science lessons on smoking

I AM TENACIOUS

DRUGS AND ALCOHOL
- Introduction to alcohol
- Legal and illegal drugs
- Vaping

I AM RESPECTFUL

RELATIONSHIPS
- Child sexual exploitation and grooming
- Consent – managing rejection
- Police presentation on knife crime

I EXPLORE CURIOSITIES

PERSONAL SAFETY
- Fraud and identity theft
- Road safety
- Water safety

MANAGING MONEY
- Budgeting
- Banks and savings

I TAKE RESPONSIBILITY

PUBERTY
- Changes in males and females
- Personal hygiene
- Body image

RELATIONSHIPS
- Types of relationship
- Respectful and disrespectful behaviours
- Everyday consent

YEAR 9

I AM AMBITIOUS

MENTAL HEALTH
- Mental health and mental illness
- Healthy and unhealthy coping strategies

I TAKE RESPONSIBILITY

SEXUAL RELATIONSHIPS
- Sexual relationships
- Basics of contraception
- Sexting

History lessons on the development of UK democracy & civil liberties

I EXPLORE CURIOSITIES

DISCRIMINATION
- Gender discrimination
- Racism
- Ageism

I AM RESPECTFUL

PEER INFLUENCES
- Friendship groups
- Gangs
- Knife crime

I AM TENACIOUS

DRUGS AND ALCOHOL
- How much alcohol is in a drink?
- Long and short-term effects of heavy drinking
- Drugs and the law
- County Lines

I AM MOTIVATED

CAREERS
- Skills and attributes
- Options
- Future careers

YEARS 10&11

I AM AMBITIOUS

MENTAL HEALTH
- Depression and anxiety
- Emotional wellbeing
- Managing stress
- Body image

Science lessons on healthy diet, the effects of lifestyle on health, stem cells and immunisation

I AM MOTIVATED

FIRST AID
- Basic life support

CAREERS
- Researching careers
- Work experience
- Making a positive impression

I AM TENACIOUS

DRUG AND ALCOHOL
- Alcohol and the law
- A safe night out
- Cannabis, ketamine and nitrous oxide

RE AND CITIZENSHIP

RELIGIOUS EDUCATION
- Sikhism
- Sikh beliefs and traditions
- Community service and Langar

BRITISH VALUES
- Human rights
- Extremism and intolerance

I TAKE RESPONSIBILITY

RELATIONSHIPS
- Commitment
- Sexual consent
- Sexual harassment

Philosophy & Ethics lessons on families and relationships

SEXUAL RELATIONSHIPS
- Sexual health
- Contraception

I AM AMBITIOUS

MENTAL HEALTH
- Social media and mental health
- Helping a friend in need
- Suicide prevention

I TAKE RESPONSIBILITY

RELATIONSHIPS
- Healthy relationships
- Ending relationships
- Abuse
- Pornography

PHYSICAL HEALTH
- Sexually Transmitted Infections (STIs)
- Health checks and screening

I EXPLORE CURIOSITIES

MANAGING MONEY
- Money and work
- Personal finance

PERSONAL SAFETY
- Fraud
- Gambling

RE AND CITIZENSHIP

RELIGIOUS EDUCATION
- Warn and peace

BRITISH VALUES
- The UN, the Commonwealth and NATO

I AM MOTIVATED

CAREERS
- Researching post-16 options
- Applying for the next steps
- Writing an application form
- Interview skills
- Mock interviews

RE AND CITIZENSHIP

RELIGIOUS EDUCATION
- Crime and punishment

BRITISH VALUES
- Democracy
- The law

I TAKE RESPONSIBILITY

SEXUAL RELATIONSHIPS
- Consent
- Fertility
- Pregnancy
- Honour-based violence and forced marriage

RELIGIOUS EDUCATION
- The environment

YEARS 12&13

I AM TENACIOUS

- Online blackmail and staying safe online
- Racism
- Neurodiversity
- Gender equality
- Alcohol
- Cannabis

I AM AMBITIOUS

- Personal statements
- Apprenticeship applications
- CVs, application forms and letters
- UCAS and EPQ support

I EXPLORE CURIOSITIES

- Personal finance
- Personal safety
- Road safety

I AM AMBITIOUS

- Leadership
- Physical and mental health
- Nutrition, exercise and sleep
- Stress management

I TAKE RESPONSIBILITY

- Healthy relationships
- Breakups
- Harassment and inappropriate behaviour
- Sexual relationships
- Contraception
- STIs
- Pornography
- Sex in healthy relationships

I AM MOTIVATED

- Employability skills
- Skills audit
- Networking
- Personal presentation
- Researching destinations
- Work experience

SKILLS FOR SIXTH FORM

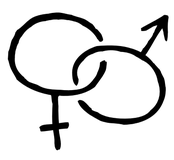
- Study skills
- Personal organisation and time management
- Resilience
- Reading and notetaking
- Target setting
- Revision strategies

I AM MOTIVATED

- Support with applications
- Revision skills and strategies
- Goals and motivation

I TAKE RESPONSIBILITY

- Healthy relationships
- Different kinds of partnership
- Your rights in these partnerships



KS3 KS4 KS5

MATHEMATICS

YEAR 7

1.
- Complete the sequence
- Create the inverse function machine

2.
- Write as a %
- Write a mix of FDP in ascending order
- Write 3 numbers with a range of 5 and a median of 4

3.
- Calculate the perimeter and area of a right-angled triangle with sides of 144, 270 and 306 cm
- There is £2413 in an account. It is charged for 4 months rent at £319 per month. How much remains?
- Calculate the mean of a set of integers

4.
- -7 × 3 - -30
- Calculate 30% of $^4/_5$

5.
- Correctly classify polygons
- Calculate the missing angles in a quadrilateral

6.
- Accurately place events on a blank probability scale
- Create a Venn diagram to calculate HCF

YEAR 8

1.
- Children to adults is 5:3. There are 80 more adults than children, how many adults are there?
- Calculate the perimeter of a building from a scale drawing
- $^3/_5 \div {}^3/_4$

2.
- Calculate the gradient of the line segment from (0,1) to (2,9)
- Plot the graph of $y = 2x + 3$

3.
- Factorise fully $6a + 10ab$
- Simplify $a^5 \times a^3$

4.
- There were 40 boys and 25 girls in a club. There are now 15% fewer boys and 20% more girls. How many are in the club now?
- Answer in standard form: $2 \times 10^3 \times 7.5 \times 10^5$

5.
- Calculate missing angles on parallel lines
- Calculate the area of a circle with diameter 10 cm
- Reflect a shape in the line $y = x$

6.
- What is wrong with the groups £5 – £10, £10 – £20, £30 – £50?
- Justify the best average for: 7, 51, 14, 8 and 11

YEAR 9

1.
- Write the equation of the line from a graph in the form $y = mx + c$
- Solve $2 > 6 - 2y$

2.
- Calculate whether a cuboid or a cylinder has the greater volume
- Compare their surface areas
- Construct an equilateral triangle with sides of 4.5 cm

3.
- A wage of £10.40 is given a pay rise of 4%. Calculate the new wage
- Compare 70% to 29 out of 40
- A value increased by 25% to £1000. What was it before?

4.
- Translate a shape by a column vector
- Rotate a shape by 90° clockwise about (0,0)
- Calculate the length of a diagonal in a square with an area of 36 cm^2

5.
- Enlarge the shape by scale factor 2, centre (1, 2)
- Two triangles are similar. Work out the indicated sides and angles
- 2 workers take 6 hours, how long would 4 workers take?

6.
- Calculate the speed given a car travels 9 km in 20 minutes
- A and B are independent, calculate $P(A \cap B)$, given P(A) and P(B)
- Show x > 2 on a number line

GCSE

FOUNDATION

8.
- Solve by factorising: $x^2 - 5x - 36 = 0$
- Give the solution on a number line: $x - 10 < 3x + 2x < x + 18$

7.
- Give the equation of the line through (2,7) and (5,-5)
- From the distance-time graph, calculate the average speed of the journey

6.
- Without a calculator, evaluate $\frac{17^7 \times 17^{-2}}{17^4}$
- Calculate the missing terms of a geometric sequence

5.
- 40,000 attend an event, to the nearest 100. Create an inequality to show the range of possible attendees
- Calculate the modal class and estimate the mean from a grouped frequency table

4.
- £5000 is deposited at 4% p.a. for 3 years. Calculate the interest earned
- 2 discs are taken from a bag containing 5 red and 4 blue. Calculate the probability both are red if after one disc is taken it is replaced

3.
- A from B is 256°. Give the bearing of B from A
- Calculate the area a sector with r = 12 cm and an angle of 45°

2.
- Solve $3(x + 2) = 5x - 14$
- 2 apples and 3 bananas cost £2.70. 3 apples and 4 bananas cost £3.80. Calculate the cost of an apple and the cost of a banana.

1.
- Enlarge shape A by scale factor ½ about (4,2)
- Calculate a side length, from a side length and acute angle in a right-angled triangle

HIGHER

8.
- Solve by completing the square: $x^2 + 6x - 3 = 0$
- Give the solution on a number line: $3x^2 - 8x + 4 < 0$

7.
- Give the equation of a line perpendicular to $2y = 3x + 1$ that passes through (2,7)
- Use a tangent to estimate the speed at 4 seconds

6.
- Without a calculator, evaluate $\left(\frac{25}{16}\right)^{-1.5}$
- Calculate the nth of 6, 11, 18, 27, 38 …

5.
- Draw a cumulative frequency graph, box plot and histogram from a grouped frequency table

4.
- Calculate the probability that at least one disc is blue, given that the disc is NOT replaced

3.
- A from B is 256° and C from B is 316° and AC is 10 miles. Calculate AB
- ABCD is a quadrilateral. P lies on AC such that AP:PM is 3:7. Prove with vector algebra BPD is a straight line

2.
- Solve $x^2 + x = 30$
- It always costs £5 + £1 per mile but more than £2 + £1.50 per mile. Show this graphically

1.
- Enlarge shape A by scale factor -½ about (4,-2)
- Calculate a side length, from a side length and opposite angle in any triangle

MIXED REVISION

FOUNDATION

9.
- Simplify expressions with algebraic vectors
- Given X is inversely proportional to Y, when X is 6, Y is 24. Calculate X when Y is 16

10.
- Reflect the shape in $y = 0$
- Archie's passcode is 3 digits long and contains 2, 5 and 6 once each. Calculate the probability of guessing the code on the first attempt

HIGHER

9.
- Use algebraic vectors to prove if two vectors are collinear.
- Given X is inversely proportional to Y, when X is 6, Y is 24. Write an equation for X in terms of Y

10.
- Reflect the function in $y = 0$
- Beth's passcode is 3 digits long. Calculate the probability of guessing Beth's code within 2 attempts

KEY TO MATHS AREAS

- Number
- Algebra
- Ratio & Proportion
- Geometry & Shape
- Statistics
- Probability

MATHEMATICS

A LEVEL Year 12

TEACHER 1
PURE MATHS (P) AND MECHANICS (M)

1. P - KEY SKILLS
- Index laws
- Brackets

2. P - ALGEBRAIC METHODS 1
- Algebraic fractions
- Dividing polynomials
- Factor theorem

3. P - PROOF
- Algebraic proof
- Proof by exhaustion or counter example

4. P - EQUATIONS AND INEQUALITIES
- Simultaneous equations
- Linear and quadratic inequalities
- Inequalities and regions on graphs

5. P - CALCULUS 1
- Gradients of curves
- Differentiate polynomials
- Integrating polynomials
- Finding functions
- Definite integrals

6. P - CALCULUS 2
- Gradients, tangents and normals
- Increasing and decreasing functions
- Second order derivatives
- Stationary points
- Areas under curves
- Areas under x-axis
- Areas between curves and lines

7. P - BINOMIAL EXPANSION
- Pascal's triangle
- Factorial notation
- Binomial expansion
- Solving binomial problems including estimation

8. M - MODELLING IN MECHANICS
- Constructing a model and assumptions
- Quantities and units
- Vectors

9. M - CONSTANT ACCELERATION
- Displacement time graphs
- Velocity time graphs
- Constant acceleration formulae
- Gravity

10. M - FORCES
- Forces diagrams and vectors
- Forces and acceleration
- Motion in 2D
- Connected particles and pulleys

11. M - VARIABLE ACCELERATION
- Functions of time
- Differentiation, maxima and minima problems
- Using integration
- Constant acceleration formulae

12. P - VECTORS (2D AND 3D)
- Representing vectors
- Magnitude and direction
- Geometric problems and modelling
- Applications to mechanics

13. P - CALCULUS 3
- Sketching gradient functions
- Modelling

TEACHER 2
PURE MATHS (P) AND STATISTICS (S)

1. P - KEY SKILLS
- Surds

2. P - QUADRATICS
- Completing the square
- Functions
- Quadratic graphs and modelling
- The discriminant

3. P - GRAPHS AND TRANSFORMATIONS
- Cubic, quartic and reciprocal graphs
- Intersections
- Sketching and translation graphs
- Transforming functions

4. P - STRAIGHT-LINE GRAPHS
- Equations of straight lines
- Parallel and perpendicular lines
- Geometric problems and modelling with straight lines

5. P - CIRCLES
- Mid-points and perpendicular bisectors
- Equations of circles
- Tangents, chords and triangles

6. P - TRIGONOMETRY
- Sine, cosine and area rules
- Solve problems with triangles
- Trigonometric graphs and their transformations

7. P - TRIGONOMETRIC EQUATIONS
- Angles in 4 quadrants and exact values
- Trigonometric identities and equations

8. P - EXPONENTIALS AND LOGARITHMS 1
- Exponential functions and e^x
- Laws of logarithms

9. S - DATA COLLECTION
- Populations, sampling and types of data
- The large data set

10. S - MEASURES OF LOCATION AND SPREAD
- Measures of location
- Measures of spread
- Variance and standard deviation
- Coding

11. S - PROBABILITY
- Calculating Probabilities
- Venn diagrams
- Mutually exclusive and independent events
- Tree diagrams

12. S - REPRESENTATION OF DATA
- Outliers
- Box Plots
- Cumulative frequency
- Histograms

13. S - DISTRIBUTIONS
- Probability distributions
- The binomial distribution

14. S - HYPOTHESIS TESTING
- Hypothesis testing
- Critical values

15. S - CORRELATION
- Correlation
- Linear regression

16. P - EXPONENTIALS AND LOGARITHMS 2
- Modelling
- Solving equations with logs and natural logs
- Logs and non-linear data

A LEVEL Year 13

TEACHER 1
PURE MATHS (P) AND MECHANICS (M)

1. P - ALGEBRAIC METHODS 2
- Proof by contradiction
- Algebraic fractions
- Partial Fractions
- Algebraic division

2. M - MOMENTS
- Moments and resultant moments
- Equilibrium
- Centre of mass
- Tilting

3. P - CALCULUS 4
- Chain, product and quotient rules
- Integrating trigonometry including reverse chain rule
- Integration by parts
- Partial fractions

4. P - PARAMETRIC EQUATIONS
- Parametric equations
- Using trigonometric identities
- Curve sketching
- Intersections
- Modelling
- Parametric differentiation

5. P - CALCULUS 5
- Differentiate complex trigonometric functions
- Using second derivatives

6. M - APPLICATION OF FORCES
- Resolving forces
- Inclined planes
- Friction

7. P - CALCULUS 6
- Implicit differentiation
- Rates of change
- Reverse chain rule
- Integration by substitution
- Integration by parts
- Finding area
- Trapezium rule
- Differential equations

8. M - PROJECTILES
- Horizontal projection
- Horizontal and vertical components
- Projection

9. M - FURTHER KINEMATICS
- Vectors in kinematics
- Vectors with projectiles
- Variable acceleration and vectors
- Differentiating and integrating vectors

TEACHER 2
PURE MATHS (P) AND STATISTICS (S)

1. P - RADIANS
- Radians
- Arc length, area of sectors and segments
- Trigonometric equations
- Small angles approximation

2. P - SEQUENCES AND SERIES
- Arithmetic sequences and series
- Geometric sequences and series
- Sums to infinity
- Sigma notation
- Recurrence relations

3. P - GRAPHS AND FUNCTIONS
- Modulus function
- Functions, composite and inverse functions

4. P - BINOMIAL THEOREM
- Expanding $(a+x)^n$
- Using partial fractions

5. P - TRIGONOMETRIC FUNCTIONS
- Reciprocal trigonometric functions
- Trigonometric identities
- Inverse trigonometric functions
- Addition and double angle formulae
- Simplifying acos x +/- bsinx

6. P - TRIGONOMETRIC MODELLING
- Solving trigonometric equations
- Proving trigonometric identities
- Modelling with trigonometric functions

7. S - NORMAL DISTRIBUTION
- The normal distribution
- The reverse normal distribution
- Finding μ and σ
- Approximating a binomial
- Hypothesis testing

8. S - REGRESSION
- Exponential models
- Measuring correlation
- Hypothesis testing for zero correlation

9. S - CONDITIONAL PROBABILITY
- Set notation
- Conditional probability and Venn diagrams
- Probability formulae
- Tree diagrams

10. P - NUMERICAL METHODS
- Locating roots
- Iteration
- Newton-Raphson

MEDIA STUDIES

GCSE

1. ADVERTISEMENTS & MARKETING
- Media language
- Representations
- Media context
- Stereotype

2. MAGAZINE FRONT COVERS
- Mainstream magazine production
- Technological convergence
- Niche publication
- Representation

3. NEWSPAPER FRONT PAGES
- Audiences
- Institutions
- Political bias
- Media ownership
- Mass communication

4. FILM MARKETING
- Media industry
- Global audiences
- Marketing and branding
- Film franchise

5. RADIO
- Audiences
- Institutions
- Media ownership (BBC as PSB)

A LEVEL

1. MUSIC VIDEOS
- Mainstream and niche
- Media language
- Context
- Representation

NON-EXAM ASSESSMENT: DESKTOP PUBLISHING
- Responding to a brief
- Photography
- Photoshop
- Digital publishing or video editing

8. MUSIC
- Media language
- Representation
- Music industry
- Cross-media platforms

7. TELEVISION
- Developing genre
- Technological developments
- Representational developments
- Broadcasting industry

6. VIDEO GAMES
- International media industry
- Development in technology
- Audience implications
- Cross media platforms

2. FILM INDUSTRY (INCLUDING MARKETING)
- Regulation
- Cultural industries
- Power and media
- Mainstream and independent filmmaking

3. ADVERTISING
- Media language
- Representation
- Media context
- Moving image technique

4. RADIO
- Media effects
- Technological convergence
- Podcasts
- Audience
- Cultivation theory
- Reception theory
- End of audience theories

5. NEWSPAPERS
- Media industry
- Regulation
- Media language
- Audience

6. VIDEO GAMES
- Video game franchise
- Audience profiling
- Regulation
- Technological convergence
- Fandom

NON-EXAM ASSESSMENT
- Responding to a brief
- Research and planning
- Cross-media production
- Media language to communicate meanings
- Meeting deadlines

9. MEDIA IN THE ONLINE AGE
- The changing media landscape
- Digital technologies
- Cultural industries
- Specialised audiences

8. MAGAZINES
- Mainstream and alternative media
- Contemporary niche magazines
- Genre conventions
- Values, attitudes and beliefs

7. TELEVISION IN THE GLOBAL AGE
- Technological convergence
- Postmodernisation
- Code and conventions
- Intertextuality
- Patterns of ownership

MUSIC

YEAR 7

1. ORCHESTRA
- The work of Beethoven
- Instruments of the orchestra
- Instrumental sections
- Keyboard performance technique
- Singing and listening skills

2. PENTATONIC MELODY
- Traditional songs
- Pentatonic scale
- Melody
- Composition
- Structure
- Independent music study

3. RHYTHM
- The work of Stravinsky
- Patterns of sound
- Mnemonics
- Pulse grid
- Crotchets, quavers and semiquavers
- Ballet

4. MARCHES AND WALTZES
- Traditional songs
- 3/4 and 4/4 time signatures
- Note lengths
- Pulse and rhythm (revisited)
- Conducting
- Rounds

5. FANFARES
- The work of Aaron Copland
- Rhythm (revisited)
- Note lengths (revisited)
- Dynamics
- Composition for two instruments
- Texture

YEAR 8

1. INTERVALS
- The work of Vivaldi
- Melodic and harmonic intervals
- Augmented 4th
- Concord and discord
- Parallel intervals
- Treble clef notation

2. BLUES
- The work of Robert Johnson
- 12-bar blues
- Blues notes
- Blues song lyrics
- Ostinato (revisited)
- Improvisation

3. ROCK N' ROLL
- The work of Elvis Presley
- Walking bass
- Scat singing
- Bass clef (revisited)
- Styles of rock music
- Syncopation

4. SCAT SINGING
- The work of singer Frankie Valli
- Scat (revisited)
- Acapella
- Multi-track recording
- Riff
- Improvisation

5. CLASSICAL MUSIC (PART 1)
- The work of W.A. Mozart
- Instruments of the classical orchestra
- Classical composers
- Arpeggios
- Alberti bass
- Music written for the harpsichord

6. CLASSICAL MUSIC (PART 2)
- Periodic phrasing
- Melodic composition
- Recognition of stylistic musical elements
- Notation revisited
- Primary chords

6. GRAPHIC SCORES
- The work of Vivaldi and Stravinsky
- Illustrations
- Musical elements (revisited)
- Use of colour to represent sounds
- Basic signs and symbols (revisited)
- Storyboard

YEAR 9

1. INDIAN MUSIC
- The work of Ravi Shankar
- Ragas
- Tala
- Drone
- Improvisation
- Ensemble composition

2. SAMBA DRUMMING
- Syncopation
- Ensemble performing
- Samba
- Periodic phrasing (revisited)
- Music for dance

3. JAZZ (PART 1)
- Pentatonic (revisited)
- Syncopation (revisited)
- Call and response
- Improvisation
- 'blue note' re-visited

4. JAZZ (PART 2)
- The work of Miles Davis
- Performing a 'jazz standard'
- Seventh chords
- Modes
- Jazz patterns
- Extended improvisation

5. FILM MUSIC (PART 1)
- Understanding the importance of film music
- Use of melody and harmony to create a mood
- Analysing the musical elements used in film music extracts
- Using a 'cue sheet' in the music industry
- Diegetic sounds

6. FILM MUSIC (PART 2)
- The work of film composer John Williams
- Non-diegetic sounds
- Soundtrack
- Film composition using all the musical elements
- Use of music technology
- Listening skills focus

GCSE

LISTENING & APPRAISING - Develop knowledge and understanding of musical elements, musical contexts and musical language (Written exam)

COMPOSING - Compose and develop musical ideas with technical control and coherence (NEA)

PERFORMING - Perform with technical control, expression and interpretation (NEA)

1. MUSICAL FORMS AND DEVICES
- Baroque, classical and romantic eras
- Binary, ternary, minuet, trio rondo, variation and strophic forms.
- Using musical devices
- Analysis of western classical set work
- Treble and bass clef notes
- Key signatures
- Texture and intervals
- Alto clef notes
- Binary and ternary form
- Classical forms
- Melody writing
- Primary chords and cadences

2. MUSIC FOR ENSEMBLE
- Instruments of the orchestra
- Introduction to set work
- Texture revisited
- Signs and ornaments
- Arranging
- Practice schedule
- Ensemble performance
- Sonority
- Instrumental and vocal groupings
- Use of texture in:
  - vocal ensembles
  - jazz/blues trio
  - rhythm section
  - string quartet
  - basso continuo
  - sonatas

3. FILM MUSIC
- Score reading
- Music for film
- MuseScore software
- Musicals
- Free composition
- Major and minor keys
- Creation, development and performance
- Timbre
- Tone colour
- Dynamics

4. POPULAR MUSIC
- Pop, rock, bhangra and fusion
- Analysis of popular music set work
- Music technology
- Musical features
- Blues and improvisation
- Jazz: seventh chords
- Solo performing
- Fusion
- Brit pop: song lyrics
- Harmonising a melody
- Multi-track recording

- Creativity and development of musical ideas
- Technical control of musical elements and resources
- Structure and stylistic coherence

- Accuracy
- Technical control
- Expression and interpretation

PHILOSOPHY & ETHICS

YEAR 7

1. HOW HAS THE IDEA OF GOD CHANGED?
- Ancient beliefs of God
- Creation of the universe religion and science
- The design argument
- Humanism
- The problem of evil

2. WHAT DOES IT MEAN TO BE A HINDU?
- Trimurti
- Hindu deities
- Festivals
- Samsara, reincarnation and moksha
- Yoga

3. WHAT DOES IT MEAN TO BE A SIKH?
- The founding of the faith
- The gurdwara and langar
- Festivals
- Challenges of being a Sikhi in Britain

4. CAN RELIGION SAVE THE PLANET?
- Do I care about the environment?
- Dharmic beliefs
- Understanding stewardship
- Argument for being a vegetarian

YEAR 8

1. HELPING THE LESS FORTUNATE
- Causes of poverty
- Religious responses to helping others
- Human rights
- Martin Luther King Jr.
- Refugees

2. DOES THE WORLD NEED PROPHETS?
- How can God communicate with us?
- Prophets for social justice
- Prophets and the arts
- Prophets focused on the environment

3. WHAT DOES IT MEAN TO BE JEWISH?
- Moses and Pesach
- The synagogue and holy books
- Abraham and Shabbat
- Celebrations

4. INTRODUCTION TO PHILOSOPHY
- Ultimate 'Big' life questions
- Understanding the world
- Aquinas' cosmological argument
- Paley's teleological argument

YEAR 9

1. HOW DO WE CREATE PEACE?
- Does religion unite or divide?
- Is war ever justified?
- Christian and Muslim views of war, Just war theory, jihad
- Pacifism

2. HOW TO MAKE ETHICAL DECISIONS
- Divine command theory
- Utilitarianism
- Organ donation, abortion, euthanasia and the death penalty
- Are people born evil?

3. CONTEMPORARY ISSUES IN BRITISH SOCIETY
- Value of human life
- Relationships
- Racial prejudice and discrimination
- Exploitation and social justice

4. ALTERNATIVE BELIEFS
- The difference between a religion and a cult
- Leadership
- Paganism
- Amish
- Heaven's Gate
- Scientology

GCSE

1. CHRISTIANITY BELIEFS AND TEACHINGS
- God and creation
- Incarnation, the life of Jesus
- Resurrection and afterlife
- Sin and salvation

2. CHRISTIANITY PRACTICES
- Forms of worship
- Prayer and sacraments
- Pilgrimage and festivals
- Local and worldwide church

3. ISLAMIC BELIEFS AND TEACHINGS
- Sunni and Shi'a beliefs
- Angels
- Predestination
- The imamate

4. ISLAMIC PRACTICES
- Five pillars
- Ten obligatory acts
- Festivals
- Ashura

5. RELIGION AND LIFE
- Origins of the universe
- Origins of life
- Environment and animals
- Abortion and euthanasia
- Death and the afterlife

6. RELATIONSHIPS AND FAMILIES
- Human sexuality and relationships
- Marriage and divorce
- Same-sex relationships
- Polygamy
- Gender and equality

7. RELIGION, PEACE AND CONFLICT
- War-causes and responses
- Peace, justice, forgiveness and reconciliation
- Violence, war and terrorism
- Holy war and just war theory
- Pacifism

8. RELIGION, CRIME AND PUNISHMENT
- Causes of crime
- Good and evil
- Aims of punishment
- Corporal punishment and the death penalty
- Forgiveness

A LEVEL

A-LEVEL ETHICS

1. ETHICAL THOUGHT
- Divine command theory
- Virtue theory
- Ethical egoism
- Naturalism
- Intuitionism
- Emotivism

2. NORMATIVE ETHICAL THEORIES: RELIGIOUS APPROACHES
- Aquina's natural law
- Fletcher's situation ethics
- Kant's moral teaching
- Bentham and utilitarianism
- Mill's development of utilitarianism

3. APPLIED ETHICS
- Euthanasia
- Sanctity of life principle
- Quality of life principle
- Application of natural law and situation ethics

4. BUSINESS ETHICS
- Corporate social responsibility
- Whistleblowing
- Globalisation

A-LEVEL PHILOSOPHY

1. THE EXISTENCE OF GOD
- Cosmological and teleological arguments
- Ontological arguments
- Challenges and success of arguments

2. RELIGIOUS EXPERIENCE AND THE PROBLEM OF EVIL
- How can religious experiences be understood?
- Types of religious experience
- Evil and suffering
- Soul-making theodicies
- Irenaen theodicies

3. PHILOSOPHICAL LANGUAGE AND THOUGHT
- Understanding reality
- The philosophical views of Aristotle
- The prime mover
- Is the soul a thing?
- Substance dualism
- Materialism

A-LEVEL BUDDHISM

1. THE BUDDHA
- Siddhartha's life and importance
- Birth and upbringing
- The four passing sights
- Asceticism

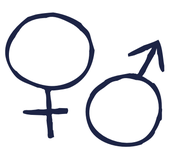
2. TAKING REFUGE
- Significance of the refuges
- Dharma
- Truth or ultimate reality
- The sangha

3. SAMSARA
- The three fires/poisons
- Karma
- Rebirth

4. THE THREE MARKS OF EXISTENCE
- The nature of anicca, dukkha and anatta
- Types of unavoidable suffering

5. FOUR NOBLE TRUTHS
- Truths as the 'sickness' to be cured
- Nirvana
- The Noble Eightfold Path

6. MEDITATION
- Nature of samatha
- Mindfulness in Buddhist practice



KS3 KS4 KS5

PHYSICAL EDUCATION

GCSE

1. APPLIED ANATOMY AND PHYSIOLOGY
Structure and functions of:
- the musculoskeletal system
- the cardio-respiratory system
- Anaerobic and aerobic exercise
- Short and long term effects of exercise

2. MOVEMENT ANALYSIS
- Lever systems
- Mechanical advantage
- Planes and axes of movement

3. PHYSICAL TRAINING
- Health vs fitness and the role that exercise plays in both
- Components of fitness and benefits for sport
- Fitness testing
- Principles of training
- Application of principles of training
- Types of training
- Optimising training and preventing injury
- Effective use of warm up and cool down

4. NON-EXAM ASSESSMENT (NEA)
- Performance assessments
- Practical
- Analysis and evaluation

5. SPORTS PSYCHOLOGY
- Classification of skills
- SMART targets to improve performance
- Basic information processing
- Guidance and feedback on performance
- Mental preparation for performance

6. SOCIO-CULTURAL INFLUENCES
- Engagement patterns of different social groups in physical activity and sport
- Commercialisation of physical activity and sport
- Ethical and socio-cultural issues in physical activity and sport

7. HEALTH, FITNESS AND WELLBEING
- Physical, emotional and social factors
- Consequences of a sedentary lifestyle
- Energy use, diet, nutrition and hydration

8. USE OF DATA
- Collecting qualitative and quantitative data
- Presentation of data
- Analysis and evaluation of data

A LEVEL

1. ANATOMY AND PHYSIOLOGY
- Body systems
- Training principles
- Diet and nutrition

2. SKILL ACQUISITION
- Classification of skills
- Principles and theories of learning movement skills
- Stages of learning
- Memory models

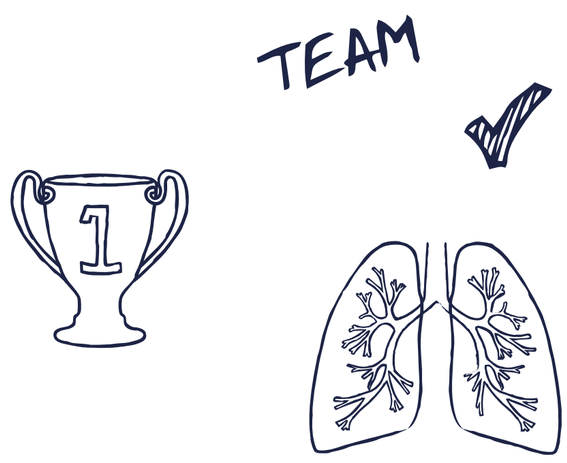
3. SOCIO-CULTURAL FACTORS
- Sport and society
- Emergence and evolution of modern sport

4. EXERCISE PHYSIOLOGY
- Energy systems
- Exercise at altitude and in heat
- Biomechanics

5. SPORT PSYCHOLOGY
- Individual and team differences
- Goal setting in sport performance
- Confidence and anxiety
- Leadership in sport

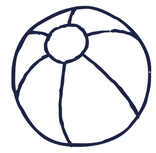
6. CONTEMPORARY ISSUES
- Ethics and deviance in sport
- Commercialisation and media

NON-EXAM ASSESSMENT (NEA)
- Component 5: Practical Performance
- Component 6: Evaluation and Analysis of Performance for Improvement



KS4 KS5

PHYSICAL EDUCATION



Netball, Rugby, Football, Handball, Basketball, Gymnastics, Dance, Badminton, Table Tennis, Tennis, Athletics, Rounders, Cricket, Softball

YEAR 7

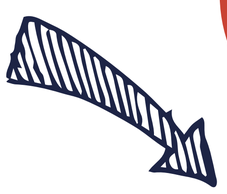
- Basic techniques and skills
- Spatial awareness
- Basic point scoring
- Basic positioning
- Knowledge of rules
- Positive communication skills

YEAR 8

- Outwitting opponents
- Attacking and defending
- Interpreting the rules
- Understanding importance of warm ups and cool downs
- Decision making
- Team work
- Components of fitness
- Advanced techniques

YEAR 9

- Tactical awareness
- Use of strategies
- Implementing the rules
- Leadership
- Evaluation of their own and others techniques



YEAR 10 & 11

Fitness, Netball, Football, Handball, Basketball, Dance, Badminton, Table Tennis, Tennis, Athletics, Rounders, Cricket, Softball

- Developing a variety of tactics and strategies
- Competitive games
- Developing fitness programmes
- Understanding and planning fitness programmes
- Developing techniques – self and others
- Problem solving and creating plans for different scenarios
- Evaluating techniques and applying guidance to allow for improvements

- Understanding of a variety of fitness strategies
- Leading and officiating
- Evaluating performance
- Engaging in alternative methods of fitness and competitive sport
- Exploring ways of maintaining an active and healthy lifestyle
- Developing communication skills in a competitive environment
- Engaging in competitive sport and activity

PHYSICS

YEAR 7

1. PARTICLES
- Changing state
- Density

2. SIMPLE FORCES
- Speed
- Pushing and pulling

3. ELECTRICITY
- Current
- Voltage
- Resistance
- Building circuits

4. SOUND
- Longitudinal waves
- The ear
- Sound proofing by design

YEAR 8

5. ENERGY
- Measuring energy
- Paying for energy
- Renewable and non-renewable sources of energy

6. LIGHT
- Seeing objects
- Dispersion
- Reflection
- Refraction
- The eye

YEAR 9

7. GRAVITY
- Mass
- Weight
- Calculating weight

8. MAGNETISM
- Magnetic materials
- Uses of magnets
- Magnetic fields
- Electromagnets

9. HEATING AND COOLING
- Heat and temperature
- Convection
- Radiation
- Conduction
- Insulation

10. CONTACT FORCES
- Force diagrams
- Resultant forces
- Hooke's Law
- Friction

11. PRESSURE
- Pressure calculations
- Hydraulics
- Atmospheric pressure

12. ELECTRICAL ENGINEERING
- Applications of electrical circuits
- Using resistors
- Building electrical devices

GCSE

1. ENERGY STORES AND SYSTEMS
- Energy transfers
- Efficiency calculations
- Power
- Energy resources

2. ELECTRICITY
- Charge
- Ohm's Law
- AC/DC supply
- Resistors
- National grid
- Static charge
- Electric fields

3. PARTICLE MODEL
- Changes of state
- Density
- Internal energy
- Specific heat capacity
- Particle motion in gases

4. ATOMS AND ISOTOPES
- Nuclear radiation
- Nuclear equations
- Half-life
- Radioactive decay
- Background radiation
- Fusion and fission

5. OBJECTS IN MOTION
- Scalar and vector measurements
- Work done calculations
- Elasticity
- Velocity
- Newton's laws of motion

6. FORCES
- Stopping distances
- Momentum
- Moments, levers and gears

7. WAVES
- Sound waves
- Reflection
- Electromagnetic spectrum
- Lenses

8. MAGNETISM
- Permanent and induced magnets
- Electromagnets
- Microphones and speakers
- Motor effect
- Induced potential

A LEVEL

1. MECHANICS
- Velocity and acceleration
- Determining
- Newton's laws
- Linear momentum
- Projectile motion
- Collisions/Impulse

2. ELECTRICAL CIRCUITS
- Series and parallel circuits
- Kirchoff's laws
- Internal resistance
- Potential divider circuits
- Resistivity
- Mean drift velocity

3. MATERIALS
- Hooke's Law
- Elastic potential energy
- Deformation of materials
- Young's modulus

4. WAVES
- Wave properties
- Diffraction and polarisation
- Electromagnetic waves
- Superposition
- Young's double slit experiment
- Stationary waves

5. PHOTONS AND QUANTUM PHYSICS
- The photon model
- Photoelectric effect
- Determining Planck's constant
- Wave-particle duality

6. OSCILLATIONS
- Circular motion
- Exploring centripetal forces
- Simple harmonic motion
- Damping and driving
- Resonance

7. THERMAL PHYSICS
- Brownian motion
- Specific latent heat
- Gas laws
- Ideal gases
- The Boltzmann constant

8. GRAVITATIONAL FIELDS
- Gravitational potential
- Kepler's laws of planetary motion
- Satellites
- Gravitational potential energy

9. NUCLEAR AND PARTICLE PHYSICS
- Rutherford's alpha particle scattering experiment
- Hadrons and leptons
- Quarks
- Half-life
- Radioactive dating
- Binding energy
- Fission and fusion

10. ELECTRIC AND MAGNETIC FIELDS
- Capacitance
- Charging and discharging capacitors
- Uniform electric fields
- Electric potential and energy
- Charged particles in magnetic fields
- Electromagnetic induction
- Flux and flux linkage

11. THE UNIVERSE
- Hubble's Law/calculating the age of the universe
- The big bang theory
- Evolution of the Universe
- The Doppler effect

12. MEDICAL IMAGING
- Interaction of X-rays with matter
- CAT Scans
- The gamma camera
- Positron-electron tomography
- Ultrasound

9. THE UNIVERSE
- Solar system
- Life cycle of a star
- Satelites
- Red shift

$E=mc^2$

KS3 KS4 KS5

PSYCHOLOGY

A LEVEL

1. ORIGINS OF PSYCHOLOGY
- Psychodynamic approach
- Learning approaches
- Social learning theory
- Humanistic approach
- Cognitive approach
- Biological approach
- Comparison of approaches

2. ISSUES AND DEBATES (PART 1)
- Gender and culture bias
- Free will vs determinism
- Nature vs nurture
- Holism vs reductionism
- Idiographic vs nomothetic approaches
- Ethics

3. RESEARCH METHODS
- Features of science
- Variables and hypothesis
- Experiments
- Sampling
- Ethical issues
- Pilot studies
- Observational techniques
- Self-report methods
- Correlations
- Case studies
- Choosing statistics
- Probability and significance
- Reporting research

4. MEMORY
- Coding, capacity and duration
- Models of memory
- Types of long-term memory
- Forgetting
- Eyewitness interviews
- Cognitive Interviews

5. SOCIAL INFLUENCE
- Conformity
- Obedience
- Resisting social influence
- Minority influence
- Social change

6. BIOPSYCHOLOGY
- The brain and localisation of function
- Split-brain research
- The endocrine system
- The nervous system
- Neural transmission
- Plasticity and functionality
- Biological rhythms
- Endogenous pacemakers and exogenous zeitgebers

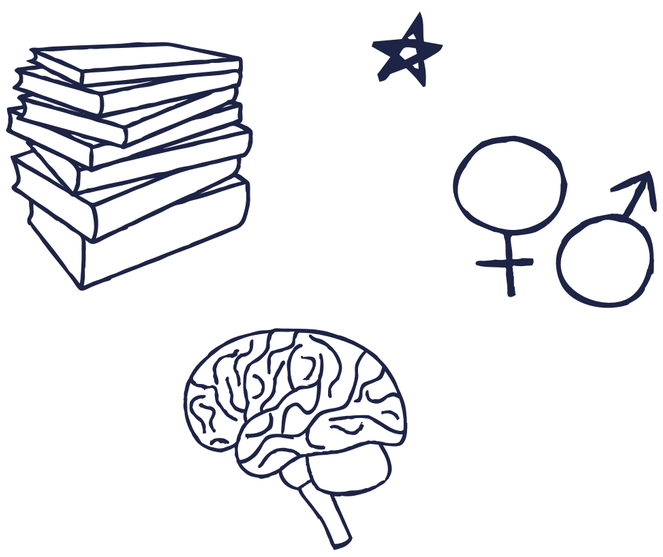
7. ATTACHMENT
- Caregiver infant interactions
- Stages of attachment
- Animal studies
- Types of attachment
- Explanations of attachment
- Cultural variations in attachment
- Maternal deprivation
- Influence of early attachment

8. PSYCHOPATHOLOGY
- Defining abnormality
- Phobias
- Behavioural treatments for phobias
- Depression
- The cognitive approach to depression
- Obsessive Compulsive Disorder (OCD)
- The biological approach to OCD

9. RESEARCH PROJECT
- Designing, planning, conducting, analysing and presenting a project of your own choice

10. GENDER
- Sex and gender
- Androgyny
- Biological explanations for gender development
- Cognitive explanations of gender development
- Psychodynamic explanations of gender development
- Social learning explanations of gender development
- Culture and media influences on gender roles
- Atypical gender development

11. AGGRESSION
- Neural and hormonal mechanisms
- Genetic factors
- Biological explanations for aggression
- Social explanation of aggression
- Institutional aggression
- Effects of the media on aggression



12. SCHIZOPHRENIA
- Diagnosis and characterisation of schizophrenia
- Biological explanations of schizophrenia
- Biological treatments for schizophrenia
- Psychological explanations for schizophrenia
- Cognitive Behavioural Therapy (CBT) for schizophrenia
- The interactionist approach and schizophrenia

13. ISSUES AND DEBATES PART 2
- Gender and culture bias studies
- Free will vs determinism studies
- Nature vs nurture studies
- Holism vs reductionism studies
- Idiographic vs nomothetic approaches studies
- Ethical implication of research studies

SOCIOLOGY

A LEVEL

CLASS

1. INTRODUCTION TO SOCIOLOGY AND BRITISH POLITICS
- What is sociology?
- How has sociology influenced political views?

2. THEORETICAL PERSPECTIVES IN SOCIOLOGY
- Functionalism
- Marxism
- Weberian
- Feminism
- New Right
- Postmodernism

3. SOCIALISATION, CULTURE AND IDENTITY
- Types of Culture:
  - Cultural diversity
  - Cultural hybridity
- Socialisation
- Agents of socialisation
- Social control
- Nature vs nurture
- Types of identity
- Hybrid identities

4. FAMILY AND RELATIONSHIPS
- Types of Families
- Patterns and trends in the family
- Family diversity
- Role of the family debate

5. SOCIAL INEQUALITIES: CLASS & GENDER
- Social class and gender inequality
- Class and gender inequality:
  - Patterns and trends
  - Impact on life chances and opportunities

6. RESEARCH METHODS
- Positivism
- Interpretivism
- Research methods
- Mixed methods
- Research concepts

7. RESEARCH PROJECT
- Create a bespoke piece of research
- Research presentation

8. SOCIAL INEQUALITIES: ETHNICITY & AGE
- Ethnicity and age inequality:
  - Patterns and trends
  - Impact on life chances and opportunities

9. CRIME AND DEVIANCE
- Measures of crime and deviance
- Social distributions of offending behaviour and victimisation
- Patterns and trends in global crime
- Theoretical views of crime
- Social policies and crime

10. GLOBALISATION
- Definitions of globalisation
- Digital forms of communication
- Applying sociological theories
- Impact of digital communication on:
  - Identity
  - Social inequality
  - Relationships
  - Culture

SPANISH

YEAR 7

1. INTRODUCTION TO SPANISH
INTRODUCING MYSELF AND MY FAMILY; DESCRIBING PEOPLE
Grammar content:
- Phonics
- Key present tense verbs
- Articles
- Masculine, feminine and plural nouns and adjectives
- Opinions

2. SPANISH ART
DESCRIBING PAINTINGS BY SPANISH ARTISTS
Grammar content:
- Using *es, está* and *hay*
- Comparatives
- Prepositions
- Revision of masculine, feminine and plural nouns and adjectives

YEAR 8

3. FREE TIME ACTIVITIES
GIVING OUR OPINIONS ON WHAT WE LIKE TO DO IN OUR FREE TIME
Grammar content:
- Present tense verbs
- Frequency phrases
- Asking questions
- Giving varied opinions
- Introduction to the future time frame

4. MY SCHOOL
DESCRIBING SCHOOL LIFE AND LOOKING AT THE DIFFERENCES BETWEEN SCHOOL IN SPAIN AND THE UK
Grammar content:
- Telling the time
- Comparatives
- Giving varied opinions
- Present tense verbs
- Conditional tense verbs
- Modal verbs (must)

YEAR 9

5. MY TOWN
COMPARING DIFFERENT PLACES TO LIVE AND DESCRIBING OUR OWN TOWN IN DETAIL
Grammar content:
- Revisiting *es, está* and *hay*
- Imperfect tense verbs (it was, there was)
- *se puede*
- Expressing agreement
- Conditional tense verbs

6. MY HOLIDAYS
LEARNING ABOUT SPANISH FESTIVALS AND PLACES TO GO ON HOLIDAY
Grammar content:
- Imperfect tense verbs
- Preterite tense verbs
- Talking about the weather
- Using the future time frame

7. HEALTHY LIVING
MAKING DECISIONS ABOUT HOW TO KEEP MYSELF HEALTHY
Grammar content:
- Giving advice (must, should, could)
- Preterite tense verbs
- Imperfect tense verbs
- Future tense verbs
- *Me duele*

8. TECHNOLOGY
TALK ABOUT THE IMPORTANCE OF TECHNOLOGY AND SOCIAL MEDIA IN OUR LIVES
Grammar content:
- Comparatives and superlatives
- Direct object pronouns (it, them)
- Use of *para* + infinitive
- Using language in three time frames

9. WORLD OF WORK
LEARNING ABOUT WHERE LANGUAGES CAN TAKE US AND THE WORLD OF WORK
Grammar content:
- Higher numbers and salaries
- Frequency and time phrases
- *Tengo que* + infinitive
- Using language in three time frames

GCSE

10. GROUP PROJECT
CONSOLIDATE LEARNING AND WORK COLLABORATIVELY TO CREATE A SPANISH TV CHANNEL
Grammar content:
- Opportunities to revise all Key Stage 3 grammar

Grammar content:
- Consolidation of verb conjugation in the present tense
- Consolidation of main past tenses
- Consolidation of main future tenses
- Advanced grammar
- Variety of justified opinions

1. MY PERSONAL WORLD
Family, friends, relationships, equality

2. LIFESTYLE AND WELLBEING
Physical and mental wellbeing, food and drink, sports

3. MY NEIGHBOURHOOD
Places in town, shopping, transport, the natural world, environmental issues

4. MEDIA AND TECHNOLOGY
Social media and gaming, TV and film, music

5. STUDYING AND MY FUTURE
School, future opportunities, jobs

6. TRAVEL AND TOURISM
Tourist attractions, accommodation, transport

A LEVEL

Grammar content:
- Mastery of all tenses and moods
- Introduction to Hispanic texts and culture
- Advanced grammar

ANALYSIS OF A NOVEL

ANALYSIS OF A FILM

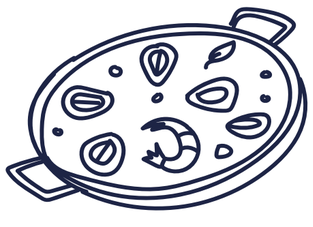
INDIVIDUAL RESEARCH PROJECT

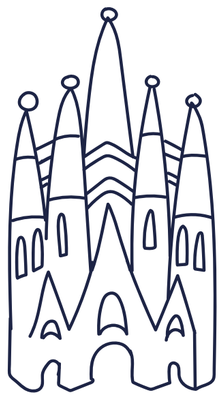
ASPECTS OF HISPANIC SOCIETY
- Modern and traditional values
- Cyberspace
- Equal rights

MULTICULTURALISM
- Immigration
- Racism
- Integration

POLITICAL LIFE
- Today's youth, tomorrow's citizens
- Monarchies and dictatorships
- Popular movements

ARTISTIC CULTURE
- Modern day idols
- Spanish regional identity
- Cultural heritage





KS3 KS4 KS5

SPORT STUDIES

CNAT Level 2
Sport Studies

SPORT IN THE MEDIA

1. DIFFERENT SOURCES OF MEDIA
- Digital sources and social media
- Broadcast media
- Print media

2. POSITIVE EFFECTS OF THE MEDIA
- Golden triangle
- Promotional opportunities for individuals
- Using money generated by sponsors

3. NEGATIVE EFFECTS OF THE MEDIA
- Widening divide in sport
- Prize money and pay
- Body image

PERFORMANCE AND LEADERSHIP IN SPORTS ACTIVITIES

8. REVIEWING OWN PERFORMANCE IN A SPORTS ACTIVITY SESSION
- Reviewing planning
- Reviewing leadership

7. LEADING A SPORTS ACTIVITY SESSION
- Leadership styles
- Delivery styles
- Communication and motivation skills

6. ORGANISING A SPORTS ACTIVITY SESSION
- Factors when planning
- Safety considerations
- Objectives

5. APPLYING PRACTICE TO IMPROVE SPORTING ACTIVITY
- Strengths and weaknesses
- Measuring improvement
- Types of practice

4. KEY COMPONENTS OF PERFORMANCE
- Creativity and decision making
- Tactics vs strategy
- Individual and team performance

CONTEMPORARY ISSUES IN SPORT

9. ISSUES THAT AFFECT PARTICIPATION IN SPORT
- User groups
- Possible barriers
- Possible barrier solutions
- Factors that impact upon the popularity of sport in the UK
- Emerging/New sports in the UK

10. ROLE OF SPORT IN PROMOTING VALUES
- Sport values
- Olympic and paralympic movement
- Sporting values initiative and campaigns
- Importance of etiquette and sporting behaviour
- Use of performance enhancing drugs in sport

11. IMPLICATIONS OF HOSTING A MAJOR SPORTING EVENT FOR A CITY OR COUNTRY
- Features of a major sporting event
- Positive and negative pre-event aspects of hosting a major sporting event
- Potential positive and negative aspects of hosting a major sporting event

12. ROLE NATIONAL GOVERNING BODIES PLAY IN THE DEVELOPMENT OF THEIR SPORT
- National Governing Bodies (NGBs)

13. USE OF TECHNOLOGY IN SPORT
- Role of technology in sport
- Positive and negative effects

CNAT Level 3
Sport and Physical Activity

1. UNIT 1: BODY SYSTEMS AND THE EFFECTS OF PHYSICAL ACTIVITY
- Body systems
- Energy systems

2. UNIT 3: SPORT ORGANISATION AND DEVELOPMENT
- Sports development
- Developing sports

3. UNIT 18: PRACTICAL SKILLS
- One team sport
- One individual sport
- One outdoor adventurous activity
- Evaluation of sports

4. UNIT 8: ORGANISATION OF EVENTS
- Plan an event as a group
- Host an event
- Evaluate an event

5. UNIT 2: SPORTS COACHING AND LEADERSHIP
- Roles and responsibilities
- Planning coaching sessions in a chosen sport
- Deliver coaching sessions
- Evaluate your planning and coaching session