



**CURRICULUM
KNOWLEDGE AND SKILLS
SUBJECT REFERENCE GUIDE
YEAR 10**

GCSE ART AND DESIGN

Students will develop their **KNOWLEDGE** of:

- **researching effectively** – the ability to explore the work of a range of artists, designers and craftspeople and draw inspiration from techniques, processes and ideas
- **exploring and communicating ideas using the work of others** to develop and extend thinking, and to help themselves make informed decisions with their own work. Having the ability to discuss and compare the work of others
- **a range of processes**, and how to use them within their work; making informed decisions about when to apply appropriate techniques within their work, and developing this
- how **ideas, feelings and meanings** can be conveyed and interpreted in images, artefacts and products
- how images, artefacts and products relate to **social, historical, vocational and cultural contexts**
- a variety of approaches, methods and intentions of contemporary and historical artists, craftspeople and designers from different cultures and their contribution to continuity and change in society

Students will develop their **SKILLS** in:

- the ability to **record experiences and ideas** in appropriate forms when undertaking research and gathering, selecting and organising visual, and other relevant information
- **exploring relevant resources** – analysing, discussing and evaluating images, objects and products, making and recording independent judgements in visual and other forms
- **generating and exploring** potential lines of enquiry using appropriate new media practices and techniques
- **applying knowledge and understanding** in making images, artefacts and products; reviewing and modifying work and planning and developing ideas in the light of their own and others' evaluations
- **organising, selecting and communicating ideas**, solutions and responses, and presenting them in a range of appropriate visual, tactile and/or sensory forms including the use of new technologies
- working both as individuals and in collaboration with others in a range of situations
- **discussing** the work of relevant artists using correct **Art vocabulary**
- **annotating and evaluating their own work in relation to their intentions**

GCSE ART - TEXTILES

Students will develop their **KNOWLEDGE** of:

- **researching effectively**- the ability to explore the work of a range of artists and designers drawing inspiration from techniques, processes and ideas
- **exploring and communicating ideas** using the work of others to develop and extend thinking, to help make informed decisions with their own work. Having the ability to discuss and compare the work of others
- **learn a wide range of processes**, making informed decisions about when and how to apply appropriate techniques
- **selecting and using specialist tools**, understanding a wide variety of construction techniques, also exploring decorative and finishing techniques
- **learning a variety of approaches**, methods and intentions of contemporary and historical artists and designers from different cultures and their contribution to continuity and change in society

Students will develop their **SKILLS** in:

- **exploring relevant resources** and ideas- analysing, discussing artists/ designers and evaluating images objects and products, making and recording independent judgements in visual and other forms
- **generating and exploring new practices** and techniques suitable for their work
- **applying knowledge** and understanding in making images, artefacts and products reviewing and modifying work and planning and developing ideas in light of their own and others' evaluations
- **organising, selecting and communicating ideas**, solutions and responses, and presenting them in range of appropriate visual, tactile and/or sensory forms including the use of new technologies
- **working both as individuals and in collaboration** with others in a range of situations. Learning techniques to improve independence and resilience
- **discussing** the work of relevant artists using the correct art vocabulary

GCSE – BUSINESS STUDIES

Students will develop their **KNOWLEDGE** of:

- the wider business world, investigating how their everyday life as a consumer, potential employee and stakeholder of society is driven by business organisations. They will look at the role of business to represent our needs and wants, critically evaluating opportunities that businesses both seek to exploit and miss due to external factors.
- a range of businesses within the real world asking students to enquire about their products/services, competitive environment, finances and impact on the environment. We will focus Year 10 on investigations into smaller businesses.

In **BTEC**, we will specifically focus on:

- entrepreneurs and entrepreneurialism investigating a range of local businesses
- the role, function and purpose of business
- aims, Objectives and Ethical/environmental issues
- the business environment
- business ownership, legal structures and stakeholder conflict, including franchises
- business location and the factors affecting location
- marketing of Business products and the 4P's
- business finance – revenue, costs (indirect and direct), ratios and break-even
- sources of finance and business planning

In addition, at **GCSE** we will also look at:

- the dynamic nature of risk and reward and adding Value
- spotting customer needs through market research, mapping and segmentation
- technology and legislation in business
- the economy
- business growth and changing objectives
- globalisation

Students will develop their **SKILLS** in

- written work, producing extended paragraphs to explain business questions. This will include shorter written responses dictating a paragraph of explanation, but also longer answers of an evaluative style, building chains of argument around a written context
- research, providing opportunities to find out about the business world around them, seeking information and asking questions about things they use everyday
- investigation, being able to question business activity and managerial solutions
- evaluation, considering why some companies are successful, whilst other may stagnate, or worse still fail, articulating missed opportunities and possible business solutions

GCSE COMPUTER SCIENCE

Students will develop their **KNOWLEDGE** of:

- system architecture including the purpose of the CPU, Von Neumann architecture and embedded systems
- different types of memory including RAM and ROM
- different storage devices and their characteristics; including optical, magnetic and solid state
- wired and wireless networks including the hardware needed to set one up.
- network topologies, protocols and layering
- system security, including the threats posed to networks and how to identify and protect vulnerabilities
- systems software including operating systems and utility system software.
- legislation relevant to Computer Science
- how data needs to be converted into a binary format to be processed by a computer
- how algorithms can be written using pseudocode and flowcharts
- the difference between searching and sorting algorithms
- the advantages and disadvantages of the different searching and sorting algorithms
- the different Logic Gates and their truth tables

Students will develop their **SKILLS** in:

- how to investigate and discuss Computer Science technologies while considering: ethical issues, legal issues, cultural issues, environmental issues and privacy issues
- planning and carrying out a practical investigation, creating efficient solutions to problems
- selecting suitable techniques to solve all aspects of a problem
- producing notes that effectively demonstrate an understanding of technical terminology/ concepts
- programming techniques including basic programming constructs, loops, basic string manipulation, use of arrays and file handling
- identifying potential risks when using ICT and then developing safe working practices to overcome these risks
- how to convert positive denary whole numbers (0–255) into 8 bit binary numbers and vice versa
- how to convert from binary to hexadecimal equivalents and vice versa
- how to compress files using run length encoding and Huffman Trees
- how to calculate file sizes of images and sound files
- how to create truth tables based on Logic Gates

BTEC IN DIGITAL INFORMATION TECHNOLOGY

Students will develop their **KNOWLEDGE** of:

- modern technologies such as ad hoc networks, security issues, performance issues and network availability
- features and uses of cloud storage including setting and sharing of access rights, synchronisation, availability and scalability
- how selection of platforms and services impact on the use of cloud technologies and how traditional systems are used together with cloud systems
- the implications for organisations when choosing cloud technologies including changes to modern teams, modern technologies, communication with stakeholders and inclusivity/accessibility
- the positive and negative impacts of modern technologies on organisations and individuals
- why systems are attacked, the nature of attacks, how they occur and the potential impact of breaches
- the different measures that can be implemented to protect digital systems with the purpose of different systems, features and functionality
- the need for and nature of security policies in organisations including good security policies, how they are communicated and how to ensure potential threats and impact of security breaches are minimised
- responsible use of digital systems, including how systems and services share and exchange data as well as the environmental considerations of increased use
- the scope and purpose of legislation that governs the use of digital systems and data, how it has an impact on the way in which it is used and implemented
- how individuals in the digital sector plan solutions, communicate meaning and intention and understand how different forms of written and diagrammatical communication can be used

Students will develop their **SKILLS** in:

- definitions of user interfaces, their types, range of uses and factors which affect the choice of user interface
- hardware and software influences and how audience needs are affected by both type and design of interface
- a wide variety of design principles that provide both appropriate and effective user interaction with hardware devices
- project planning techniques to develop a project plan for the development of a user interface
- the concepts of data and that data is meaningless without converting it into information by adding structure and context
- the different ways of representing information and the different situations they can be used in
- methods that are used to ensure data input is suitable and within boundaries so that it can be processed
- data collection methods and data collection features that affect its reliability
- the factors that affect the quality of information and the impact on decision making with different types of organisation with data modelling to help make decisions
- the different threats that face individuals who have data stored about them and to explore how they are stored

GCSE DANCE

Students will develop their **KNOWLEDGE** of:

- choreographic processes and approaches of a number of choreographers
- choreographic devices
- technical, expressive, mental and physical skills, including definitions and how to improve these skills over a length of time
- a number of styles of dance and key characteristic features
- costume, set design, lighting and aural setting, with descriptions and explanations of how these production features enhance a piece
- key anthology dance works, including stimulus, intention and key components
- verbal contribution: verbal evaluation, using dance terminology when creating or evaluating work, verbal analysis and communication of ideas
- written communication: understanding examination requirements and structure, communicating content

Students will develop their **SKILLS** in:

- applying technical skills practically within performance and choreography work. This includes action, space, dynamics, relationships, timing and rhythm
- applying expressive skills practically within performance work. This includes projection, focus, spatial awareness, facial expression, phrasing, musicality, sensitivity to other dancers and communication of choreographic intent
- applying mental skills practically within performance work. This includes movement memory, commitment, concentration, confidence, systematic repetition, mental rehearsal, rehearsal discipline, planning of rehearsal, response to feedback, capacity to improve
- applying physical skills practically within performance work. This includes posture, alignment, balance, control, coordination, flexibility, mobility, strength and stamina
- choreography and improvisation to create an original dance within a group and as an individual
- written communication: this includes grammar and punctuation as well as learning exam technique on the choreographic process, performance skills and key anthology dance works
- oracy in describing and explaining how key features enhance a performance

GCSE DRAMA

Students will develop their **KNOWLEDGE** of:

- Different theatrical styles, genres, forms, practitioners and conventions.
- Aspects of design (costume, lighting, sound, set, props, stage space) and how these contribute to the impact and meaning of a production.
- How to access and engage with culture related to Drama and Theatre.
- The roles and responsibilities of an actor, director and designer.
- Specific plays, and how the writer has created meaning and intention through their writing.

Students will develop their **SKILLS** in:

- Characterisation and creating relationships on stage.
- Physicality. Including: gesture, facial expression, body language, dynamics, control.
- Vocals. Including tone, pitch, pace, volume, articulation.
- Devising techniques (creating original theatre from stimulus).
- Application of conventions to establish style and genre in a performance piece.
- Use of conventions for a purpose. Including: still image, marking the moment, split focus, physical theatre, mime, flash-forward/back, slow motion, thought-tracking, narration, forum theatre, symbolism, climax, contrast.
- Creative expression: group work, leadership/directing, active listening, devising, collaboration, reflection and refining ideas
- Applying mental skills practically within performance work. This includes commitment, concentration, confidence, systematic repetition, mental rehearsal, rehearsal discipline, planning of rehearsal, response to feedback, capacity to improve
- Written communication: this includes overall structure, grammar and punctuation as well as analytical and evaluative skills.

GCSE DESIGN & TECHNOLOGY / MATERIALS

Students will develop their **KNOWLEDGE** of:

- the application of an iterative design process
- the importance of informed and accurate decision making
- a target markets needs and wants and their impact on design considerations
- how to analyse existing products and how to identify design opportunities
- how products have social, moral, cultural and ethical impacts and considerations
- environmental issues, considerations and impacts relating to Design and Technology
- technical and innovative developments in Technology
- a wide range of specialist tools and equipment
- a wide range of materials
- a wide range of construction methods
- a wide range of decorative finishing techniques
- industrial methods and manufacture

Students will develop their **SKILLS** in:

- project planning, research and preparation
- organising information, clearly and coherently using specialist technical vocabulary
- confident, aesthetic presentation of design work
- independent safe working in a practical environment
- selecting from and using appropriate materials
- selecting and using appropriate tools
- constructing innovative, quality products and models
- using quality control to work to tolerances
- applying quality finishing techniques to a product
- effective analytical and evaluation methods
- being able to regularly review and consolidate concepts, key terms and research.

BTEC LEVEL 1/LEVEL 2 FIRST AWARD IN ENGINEERING

The Award gives learners the opportunity to develop sector-specific knowledge and skills in a practical learning environment. The main focus is on four areas of equal importance, which cover the:

- development of key engineering practical and technical skills, such as research, observation, measurement, making, using computer-aided design (CAD) and disassembly.
- knowledge of key engineering sectors (mechanical, electrical, chemical, communication, aerospace, automotive and engineering design) and the interrelation of each in industry.
- knowledge of the stages involved in planning and implementing an engineering project.
- knowledge and skills involved in the investigation of solutions to engineering problems in response to a given brief.

This Award complements the learning in other GCSE programmes such as GCSE Design and Technology by broadening the application of design and make tasks, working with an engineering brief, testing and evaluation.

Students will develop their **KNOWLEDGE** of:

- the various engineering sectors and the role of design in the production of engineered products
- engineering sectors, products and organisations, and how they interrelate
- engineering skills through the design process using drawing skills and ICT
- health and safety rules and considerations of workshop safety
- quality control and quality assurance working within tolerances
- key engineering processes used to manufacture modern products, in a range of engineering sectors
- how engineering materials and technology develops
- how engineering contributes to a sustainable future
- analysing existing products to determine their performance requirements
- a selection of specific materials and components

Students will develop their **SKILLS** in:

- using knowledge of tools, equipment and techniques to make manufacturing decisions and carry them out independently and accurately
- making a range of practical products (Bookend, G-clamp, Bike tool)
- applying safe working practices and communicating understanding verbally and in writing
- literacy, numeracy and ICT including specific design software
- independent working; working to deadlines; efficient use of resources
- using materials and techniques independently and with precision
- planning work in stages; recording costs, materials, machinery, time limits and quality control

GCSE ENGLISH LANGUAGE

Students will develop their **KNOWLEDGE** of:

Reading -

- a range of texts from across the 19th, 20th and 21st Century to help students articulate their ideas in a sophisticated way
- the way in which language, structure, form and context are used to enable a writer to express their ideas
- the significant impact that literature has on the world

Writing -

- the methods used to write with engagement and control
- the ways in which specific audiences can be targeted through linguistic devices.

Speaking and Listening -

- the various ways in which talk and discussion can be used to articulate meaning

Students will develop their **SKILLS** in:

Reading –

- articulating informed interpretations of meanings supported by well-chosen textual reference
- analysing how writers use language and structure to convey ideas, achieve effects and influence readers using relevant subject terminology
- comparing ideas, attitudes, methods and contexts in order to evaluate effectiveness
- relating different texts to their relevant social, historical and literary context across the 19th, 20th and 21st century
- making links between texts
- accessing unseen literature independently
- evaluating texts critically and supporting this with appropriate textual references

Writing -

- communicate clearly, effectively and imaginatively
- selecting and adapting tone, style and register for different forms, purposes and audiences
- organising information and ideas, using structural and grammatical features to support coherence and cohesion of texts
- selecting appropriate words and phrases from a rich and wide vocabulary
- demonstrating control of spelling, punctuation and grammar
- utilising a variety of sentence structures with control for both meaning and effect

GCSE ENGLISH LITERATURE

Students will develop their **KNOWLEDGE** of:

Reading -

- a range of seen and unseen texts from across the 19th, 20th and 21st century to help students articulate their ideas in a sophisticated way
- the way in which language, structure, form and context are used to enable a writer to express their ideas'
- the significant impact that literature has on the world
- different genres of writing and their influences'

Writing -

- the methods used to write with engagement and control

Students will develop their **SKILLS** in:

Reading –

- articulating informed interpretations of meanings supported by well-chosen textual reference
- analysing how writers use methods to convey ideas, achieve effects and influence the reader or audience, including language, structure, form and dramatic devices
- comparing ideas, attitudes, methods and contexts in order to evaluate effectiveness
- making specific links between texts and their relevant social, historical and literary context across the 19th, 20th and 21st century
- comparing unseen texts
- exploring the writer's purpose, ideas and perspectives

Writing –

- demonstrating control of spelling, punctuation and grammar when articulating ideas

GCSE FOOD PREPARATION & NUTRITION

Students will develop their **KNOWLEDGE** of:

- food hygiene, health and safety principles
- food preparation, cooking and presentation techniques
- use of specialist equipment
- food and nutrition: The eat well guide, menu planning, the different life stages, special dietary needs and alternatives, dietary related conditions
- the nutrients: sources, functions, deficiencies, excess, daily requirements
- sensory evaluation and testing, use of attribute profiles and preference tests
- food science: effects of heat on carbohydrates, fats and protein
- gelatinisation, emulsification, shortening, caramelisation, glazing, plasticity, aeration, dextrinisation, coagulation, denaturation, gluten formation, foam formation
- food choice: British and international cuisine
- food provenance; types of farming, GM foods, seasonal foods, sustainability, organic food, local produce, food waste, carbon footprint
- use of correct terminology

Students will develop their **SKILLS** in:

- implementing hygiene and safety rules in food preparation and cooking
- demonstrating accuracy when carrying out food preparation and cooking techniques
- understanding working characteristics and functions of ingredients when producing food products
- presenting dishes authentically and use of finishing techniques
- evaluating the outcome of dishes and understanding how to improve weaknesses
- problem solving when carrying out practical work and understanding how to make changes to rectify issues
- carrying out and evaluating a food science investigation
- researching a topic independently
- developing medium to complex skills in food preparation and cooking in line with GCSE practical controlled assessment

GCSE GEOGRAPHY

Students will develop their **KNOWLEDGE** of a wide range of human and physical Geography including:

- a deep understanding of the UK- considering the the development of the landscapes of the UK in particular the upland, glaciated and lowland environments. Developing greater understanding of coastal and river environments. Students will develop knowledge of the human development across the UK, considering factors such as the N/S divide, trade relations, immigration, development of case study knowledge. Finally, students delve into aspects of sustainability through the environmental challenges unit, considering how energy use has and continues to change, water and food supply issues and what controls the UKs climate.
- a deep understanding of the Global geography, considering how and why ecosystems vary around the world. How development can be controlled by a range of factors. Finally, global issues such as climate change and how there are natural and human causes. Elements of climate change that pose challenges to human survival such as tropical storm and drought.

Students will develop their **SKILLS** in:

- development of key exam technique
- a range of graphicacy, cartographic skills and numerical skills
- fieldwork techniques in a physical geography setting
- linking themes and ideas to make a coherent argument
- revision techniques

BTEC HEALTH & SOCIAL CARE

Students will develop their **KNOWLEDGE** of:

- how people grow and develop over the course of their lives
- the different factors that may affect health and wellbeing
- the different types of health and social care services in the local area
- barriers people may face in accessing health and social care services

Students will develop their **SKILLS** in:

- empathy
- debate and discussion
- research
- working both independently and as part of a team
- using case studies to write extended responses
- time management to work effectively towards a deadline

GCSE HISTORY

Students will develop their **KNOWLEDGE** of:

USA 1920-1973

- Economic Boom of the 1920s
- Economic Bust of the 1930s
- Changes to society from 1945-1973

Conflict and Tension 1918-1939

- Treaty of Versailles
- League of Nations
- Hitler's foreign policy

Britain Health and the people c1000-modern day

- Medical progress
- Public Health
- Surgery

Elizabethan England c1568-1603

- Elizabeth's court and Parliament
- Life in Elizabethan times
- Troubles at home and abroad
- The historic environment of Elizabethan England

Students will develop their **SKILLS** in:

- explaining and analysing historical events and periods studied using second-order historical concepts including continuity, change, cause, consequence, significance, similarity and difference
- analysing, evaluating and using sources (contemporary to the period) to make substantiated judgements, in the context of historical events studied
- analysing, evaluating and making substantiated judgements about interpretations (including how and why interpretations may differ) in the context of historical events studied
- developing as independent learners and as critical and reflective thinkers
- developing the ability to ask relevant questions about the past, to investigate issues critically and to make valid historical claims by using a range of sources in their historical context
- developing an awareness of why people, events and developments have been accorded historical significance and how and why different interpretations have been constructed about them
- organising and communicating their historical knowledge and understanding in different ways to reach substantiated conclusions

GCSE MATHS

Students will develop their **KNOWLEDGE** of:

- accurately recalling facts, terminology and definitions
- using and interpreting notation correctly
- accurately carrying out routine procedures or set tasks requiring multi-step solutions
- making deductions, inferences and drawing conclusions from mathematical information
- constructing chains of reasoning to achieve a given result
- translating problems in mathematical or non-mathematical contexts into a process or a series of mathematical processes
- making and using connections between different parts of mathematics

Students will develop their **SKILLS** in:

- interpreting and communicating information accurately
- presenting arguments and proofs
- assessing the validity of an argument and critically evaluating a given way of presenting information
- interpreting results in the context of a given problem
- evaluating methods used and results obtained
- evaluating solutions to identify how they may have been affected by assumptions made

GCSE MEDIA

Students will develop their **KNOWLEDGE** of:

- a range of media products from different platforms (print, broadcast and e-media)
- an understanding of different media language devices, and how these are used to create meaning in media texts
- appropriate media terminology for each aspect of the Media framework
- the key conventions for popular media products, and why these are used
- an understanding of audience types, and why these are necessary
- an understanding that Media texts change over time as attitudes and values change
- important contextual events, and how these have impacted media products both at the time and long after the event
- the different methods that producers use to appropriately target their audiences
- an understanding of the various industries that media products come from, and how their production processes impact the overall media product
- industry standard editing techniques and how to apply these to media products

Students will develop their **SKILLS** in:

- reading texts to retrieve information and decode the implicit and explicit messages of media texts, and analyse how meaning is created
- analysing elements of media language and how these are used
- decoding explicit and implicit messages from texts, and interpreting these appropriately by considering connotations in detail
- comparing media texts to analyse similarities and differences in their use of language, representation and targeting of audiences
- discussing ideas in a purposeful and meaningful way to explore different ideas and alternative viewpoints
- organising extended pieces of writing to express their analysis in a clear, cohesive way
- relating texts to their appropriate contexts
- Retrieving details about previously taught set products
- creating media products in response to a set brief, using industry standard software

MFL – GCSE FRENCH, GERMAN AND SPANISH

Students will develop their **KNOWLEDGE** of:

- building on basic grammatical principles established in Year 7-9
- using a wide range of regular and irregular verb forms
- using verb forms in past, present and future tenses without prompting
- using time markers to express different time frames
- using adjective agreement confidently in different contexts
- using a wide range of topic specific vocabulary from the GCSE specification to express ideas in creative ways
- manipulating grammar to express more complex ideas.

Students will develop their **SKILLS** in:

- making connections between Target Language and English to support progress
- redrafting their work to improve accuracy
- practising challenging spellings and key expressions / verbs to improve accuracy in writing
- holding longer conversations and reacting spontaneously to questioning
- developing their ideas and points of view using a wide range of structures
- translating texts using their understanding of both the Target Language and English to convey meaning accurately
- independently using a dictionary or vocab book to deepen vocabulary and as reference material
- understanding and appreciating a range of literary texts such as poems, stories and songs, which stimulate ideas and opinions
- reading and understanding texts of varying length to understand both gist and detail
- listening to and understanding speech of varying speed and length to understand both gist and detail
- identifying learning needs from tests and GCSE style assessments (study skills) and responding to feedback.

GCSE MUSIC

Students will develop their **KNOWLEDGE** of:

- **The Elements of Music**
 - Melody
 - Context
 - Metre
 - Articulation
 - Dynamics
 - Tonality
 - Structure
 - Harmony
 - Instrumentation
 - Rhythm
 - Texture
 - Tempo
 - Sonority (Timbre)
- **Musical Genres** (Developing understanding of the musical features within a variety of musical genres. Exploring the contexts, origins and traditions of different musical styles)
 - Musical forms and devices
 - Music for ensemble
 - Film music
 - Popular music
- **Musical Vocabulary** Knowledge of musical terms, including Italian terms and ability to apply them correctly to various musical tasks.
- **Musical Symbols** Notes on a staff, treble clef, staff, time signatures, accidentals.
- **Notes of the Keyboard** Able to know the notes without support.
- **Treble Clef Notation** Have a good understanding of treble clef notation for use in practical tasks.
- **Rhythmical Musical Symbols** Crotchets, Minims, quavers, equivalent rests etc.

Students will develop their **SKILLS** in:

Performing Music

- demonstrating high level of confidence in performance
- maintaining an appropriate role within a group (leading, solo part or support)
- showing awareness of the needs of others in group tasks
- ability to coordinate your part with the other performer(s), considering timing
- performing fluently and accurately on their chosen instrument
- performing longer parts from memory and/or from music notations
- show an understanding of chords & melodies
- perform on an instrument (or voice) with reasonable technical skill and expression

Composing Music

- become proficient on industry standard composing software
- improvising melodic/rhythmic material within extended structures
- using tempo and dynamics creatively
- sustaining and developing musical ideas
- making significant contributions to a group
- composing music for different genres which explore musical features and devices
- using rehearsal time effectively to refine material
- use relevant notations to plan and revise material
- explore contrasts by exploiting the musical elements
- create coherent compositions, contributing developed ideas to individual and group tasks
- adapt, improvise, develop, extend and discard musical ideas within chosen musical styles

Understanding Music

- identifying different genres of music and their features within listening tasks
- analyse music in more detail, using key words and musical terms
- evaluating how venue, occasion and purpose affect the way music is created performed and heard
- exploring the contexts, origins and traditions of different musical styles
- describing and comparing musical features in listening tasks, using appropriate vocabulary
- recognising a variety of different instrument sounds, knowing the instrument families (and the specific instruments)
- knowing the musical elements and be able to describe how they have been used in listening tasks
- have a good understanding of treble clef notation
- considering successful/non-successful outcomes and improve their own and others' work
- using appropriate musical vocabulary when creating or evaluating work
- write accurate descriptions, using technical vocabulary to give detailed answers
- evaluating and making critical judgements about the use of musical conventions and other characteristics

GCSE PE

Students will develop their **KNOWLEDGE** of:

- how parts of the human body function during physical activity and the physiological adaptations that can occur due to diet and training. They also develop skills in data analysis, and an understanding of the principles of training, why we train in different ways and how training plans can be made to optimise results
- the social-cultural and psychological influences on levels of participation in sport, and also how sport impacts on society more broadly. This includes the individual benefits to health, fitness and well-being of participating in physical activity, as well as the influences of commercialisation, sponsorship and the media
- Students are assessed in performing three practical activities and one performance analysis task. In the practical performance, they demonstrate effective performance, the use of tactics or techniques and the ability to observe the rules and conventions under applied conditions. They are also required to demonstrate their ability to analyse and evaluate their own performance to produce an action plan for improvement

Students will develop their **SKILLS** in:

- demonstrating their ability to select and apply appropriate skills, techniques and ideas in a variety of activities
- being able to offer a wide range of solutions to challenges set and make effective decisions about their performance
- analysing and evaluating their own performance, identifying strengths and weaknesses
- having an understanding of the impact of skills, tactics or composition and fitness on the quality and effectiveness of performance

CAMBRIDGE NATIONALS SPORTS STUDIES

Students will develop their **KNOWLEDGE** of:

- Contemporary issues in sport - Students explore a range of topical and contemporary issues in sport, such as participation levels and barriers, promoting values and ethical behaviour, and how sport contributes to society as a whole beyond simply providing entertainment.
- Developing sports skills - Students try out a range of sports-related skills and techniques, including different practice methods for improving both their own performance and that of others. They develop their knowledge of the use of tactics and strategies in both individual and team sporting activities as well as their understanding of the rules, enabling them to carry out a number of officiating roles within the activities.
- Sports leadership - Students learn about some of the knowledge, understanding and practical skills required to be an effective sport leader. They put their knowledge into practice by planning and delivering safe and effective sporting activity sessions. Afterwards they review their performance.
- Developing knowledge and skills in outdoor activities - Students find out about a wide range of outdoor and adventure activities and the organisations that provide access to them. Through planning and participating in these type of activities they will learn about the risks involved and gain an understanding of health and safety, risk assessments and the importance of detailed planning for various scenarios and challenging environments. This will also help them develop their communication, decision-making and leadership skills.

Students will develop their **SKILLS** in:

- demonstrating their ability to select and apply appropriate skills, techniques and ideas in a variety of activities
- being able to offer a wide range of solutions to challenges set and make effective decisions about their performance
- analysing and evaluating their own performance, identifying strengths and weaknesses
- having an understanding of the impact of skills, tactics or composition and fitness on the quality and effectiveness of performance

PE CORE

Students will develop their **KNOWLEDGE** of:

- being able to explain how to plan a sport / activity session and what factors need to be considered when planning sessions
- understanding how communication is used to be an effective leader
- knowing how to plan and review a sport/activity/dance session, implementing changes for future sessions and understand what constitutes a health, active lifestyle.

Students will develop their **SKILLS** in:

- planning, leading and reviewing a sport/activity/dance session
- using verbal and non-verbal communication when leading others
- taking part in a review of a sport/activity/dance session
- taking part in a variety of different sporting activities, leading to lifelong participation in sport

GCSE PSYCHOLOGY

Students will develop their **KNOWLEDGE** of:

- The differences between sensation and perception and visual cues constancies.
- Assessing research such as Gibson's theory of depth perception and Gregory's theory of reconstructive memory.
- Apply and contextualise learning regarding perceptual set to explore the impact of culture, emotion, motivation, expectation and memory.
- Students will explore the social and dispositional factors which can impact individual conformity, obedience and collective behaviour.
- Explore classic research studies such as Asch and Milgram which form the cornerstone of social Psychological studies.
- Identify and explain the structures of the nervous system.
- Assess neuronal pathways and explore the impact of cognitive neuroscience in explaining human behaviour.
- Consider Hebb's theory of neuronal growth and Penfield's study of the interpretive cortex.

Students will develop their **SKILLS** in:

- Critical analysis, independent thinking and autonomy. Students will be able to assess research with objectivity.
- Creativity, acceptance and open mindedness. Students will enhance communication skills through active listening and problem solving.
- Students will apply research methods knowledge to evaluate Psychological research and explore the limitations and strengths.
- Time management and organisational skills in order to prepare for assessments and act on feedback.
- Apply learning to novel scenarios in order to demonstrate a deeper level of processing.
- Apply reasoning skills in order to assess the scientific benefit and ethical cost of classic research studies.

GCSE RELIGIOUS EDUCATION

Students will develop their **KNOWLEDGE** of:

- the key beliefs of Islam including the 6 Articles of Faith and the Five Pillars of Islam
- Christian and Muslim attitudes towards peace and conflict including the Just War Theory, Holy War and Pacifism
- Christian and Islamic scripture relevant to war and peace
- Christian and Islamic attitudes towards matters of life and death including relevant religious scripture and different denominational beliefs

Students will develop their **SKILLS** in:

- interpreting religious scripture
- evaluating different points of view using religious references
- Describe religious attitudes towards thematic studies
- Apply knowledge of religious beliefs and practices to examination questions
- comparing and contrasting religious points of view on a range of topical issues
- using key terminology and Arabic terminology in context
- explaining both personal and religious ideas in detail

GCSE SCIENCE

Students will develop their **KNOWLEDGE** of:

Biology

- The process of diffusion, osmosis and active transport. With reference to gaseous exchange surfaces and transport systems in multicellular organisms
- metabolic processes such as respiration
- how green plants and algae trap light from the sun in photosynthesis
- stem cells which are found in both plants and animals and can divide, differentiate and become specialised to form tissues, organs and organ systems
- the human nervous system
- the role of hormones in the human body
- the role of plant hormones in regulating plant growth and development. They can be used in agriculture to control the rate of growth (Separates only)
- regulation of internal environments (homeostasis) which enables organisms to adapt to change, both internally and externally
- the theory of evolution
- the processes of genetic engineering and cloning
- how scientists classify organisms
- communicable and non-communicable diseases and how the body fights them
- cardiovascular disease, including risk factors and treatments
- methods of scanning the human body, with reference to PET and CT scans

Chemistry

- models of atomic structure
- what happens when chemical reactions occur in terms of losing, gaining or sharing of electrons
- the physical properties of elements and compounds and how the nature of their bonding is a factor in their properties
- using chemical equations to represent the overall change in a chemical reaction
- conservation of mass
- that chemical reactions are accompanied by an energy change and a simple model involving the breaking and making of chemical bonds can be used to interpret and calculate the energy change
- examples of reactions including reduction, oxidation and neutralisation reactions
- electrolysis
- the current Periodic Table and the way it reveals the trends and patterns in the behaviour of the elements. (separates only)
- how metals are extracted from one including displacement reactions
- how the rate of chemical reactions are measured and increased
- the reactivity advances of group 1, group 7 and group 0 elements
- chemical calculations, including relative atomic mass and empirical formula
- the properties of carbon allotropes and uses

Physics

- the relationship between force, mass and acceleration
- scalars and vectors
- the relationship between speed, distance and time
- matter in its different forms, subatomic particles, their relative charges, masses and positions inside the atom.
- nuclear stability and radioactive decay
- uses and dangers of static electricity (separates only)
- interactions between matter and electrostatic fields
- how electrical currents depend on the movement of charge and the interaction of electrostatic fields
- the links between movement of charge and magnetism
- use of magnetic fields to induce electrical currents and the applications of this electromagnetic induction in motors, dynamos and transformers (separates only)
- particle model and its explanation of different states of matter
- specific heat capacity and specific latent heat
- wave properties
- reflection, refraction and dispersion
- impact of non-renewable resources on the environment
- total internal reflection and its applications (separates only)
- solar system and space (separates only)

Students will develop their **SKILLS** in:

- hypothesising and testing theories and concepts
- assessing hazards and taking precautions to minimise the associated risks
- identifying independent, dependent and control variables
- using appropriate apparatus and techniques
- observation, enquiry and problem solving
- how to set up a control condition in investigations and why this is necessary
- analysing methodology, evidence and conclusions
- interpreting and evaluating
- communication, mathematics and the use of technology in scientific contexts

ATTITUDE AND HABITS REFERENCE GUIDE

At school we expect our students to display the following Attitudes and Habits:

ATTITUDE

- Ready to learn and quick to settle
- Takes responsibility for learning
- Has a thirst for learning
- Willing to work independently with focus/without teacher input
- Willing to actively participate in a variety of situations
- Seeks to develop learning by questioning
- Takes risks to further learning
- Maintains a positive relationship with others
- Shows respect at all times
- Always puts effort into learning/classwork/P & P
- Understands the importance of working to deadlines
- Takes responsibility for their own and others' safety in school/classroom/learning environment
- Meets school expectations of behaviour/learning/attendance

HABITS

- Prepared to learn
- Fully equipped for lessons
- Prepared for assessment
- Actively engages with learning
- Always responds to targets/feedback
- Seeks to demonstrate knowledge through answering questions
- Seeks opportunities to be challenged
- Able to work independently with focus
- Willing to ask for help if needed and knows where to find help
- Follows all instructions
- Work is well organised
- P & P is always completed
- Regularly meets deadlines
- Seeks opportunities to participate in extra-curricular activities and/or roles of responsibility
- Attendance follows school's expectations