# CURRICULUM
# KNOWLEDGE AND SKILLS
# SUBJECT REFERENCE GUIDE
# YEAR 7

# ART AND DESIGN

Students will develop their **KNOWLEDGE** of:

- how to explore different artists and make connections with them.
- how to be successful in their work and how to use success criteria.
- how to use the formal elements and understand what they are.
- how to interpret and read artwork through the understanding of Visual Literacy.
- how to collect resources to help in their own work.
- how to use artist concepts to help develop their own ideas.
- Explore themes such as Identity and Materials, and artforms associated with these themes.

Students will develop their **SKILLS** in:

- **drawing** through means such as observational studies, photography and documenting ideas.
- using and experimenting with different **media** such as pencil, pens, different types of paint, collage, clay, inks.
- learning new processes such as 3D design, ceramics, printmaking, mixed media.
- developing a **personal response** through creativity within their work (developing relevant ideas, **CPR**) including problem solving.
- **discussing** and **explaining ideas** relevant to their work using art terminology.
- **discussing** and comparing the work of others (artists and such like).
- **annotating** and **evaluating** using relevant language and keywords.

# COMPUTING

Students will develop their **KNOWLEDGE** of:

- Knowing what data people share online
- knowing the main risks when using the internet
- Knowing how to search for things on the internet effectively
- knowing that not everything on the internet is real – introduction to fake news
- knowing what 'loops' are and how to use them effectively
- knowing how to use subroutines effectively
- Knowing the basic computer components

Students will develop their **SKILLS** in:

- How to be responsible when online
- Understand how tone can be different when communicating online
- How to spot 'fake' news
- How to effectively use search engines - including Boolean terms and quotation marks etc.
- How to add colour into computer programs
- How to add 'loops' in programs
- How to find and correct errors in programs (debugging)
- How the computer understands basic instructions
- How the computer works – which components are needed and why

# DESIGN & TECHNOLOGY

Students will develop their **KNOWLEDGE** of:

- understanding the role of designers and architects and celebrating their work
- developing knowledge to make informed choices with regard to material properties and their selection
- understanding the performance characteristics of materials and the impact this has on sports design
- developing their knowledge and understanding of how to apply iterative design strategies
- developing knowledge of a user needs and how to make designs and outcomes inclusive
- being able to test, evaluate and model ideas
- being able to name and use appropriate specialist tools and equipment
- understanding the wider impact of mobile technology in society
- developing ideas that are innovative and forward thinking.

Students will develop their **SKILLS** in:

- being able to carry out effective research tasks
- applying and developing technical communication skills
- developing and applying evaluation and analysis skills
- being able to plan and follow a range of design approaches
- developing independency when working on a project
- use of modelling and Computer Aided Design in communicating ideas
- carrying out testing strategies and recording results
- being able to identify and record areas for improvement and/or modification
- developing the ability to discuss and articulate ideas.

# DRAMA

Students will develop their **KNOWLEDGE** of:

Theatrical Style:

- Jacques Lecoq and Complicité
- Heightened Naturalism
- Choral speaking and narration

Cultural Enhancement:

- Understanding of social status and hierarchy
- Conflict (Romeo and Juliet)
- Historical belief in the supernatural (Macbeth)
- Stereotypes (BFG)
- Celebrating diversity (Matilda)
- Origins of language
- Ancient Greece
- The Romans
- Moral messages

Theatrical Conventions:

- Mime and physicality
- Freeze frame, still image, mirroring, slow motion, unison
- Thought in the Head
- Narration
- Hot seating
- Flocking
- Choral speech and movement
- Split focus
- Body as Prop
- Soundscape
- Mask work

Students will develop their **SKILLS** in:

- Communication and oracy
- Group work
- Leadership/directing
- Active listening
- Verbal evaluation

- Using drama terminology when creating or evaluating work
- Audience awareness

# ENGLISH

Students will develop their **KNOWLEDGE** of:

Reading -

- a range of texts 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.

Writing –

- the methods used to write with engagement and control.

Speaking and Listening -

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

Cultural Knowledge –

- How English has changed from Ancient Greece to the modern era.
- The influences that the different cultures and eras have had on the English Language and its Literature.

Students will develop their **SKILLS** in:

Reading –

- summarising a range of texts accurately
- articulating informed interpretations of meanings supported by appropriate textual reference
- Embedding references into a response to support interpretations.
- Inferring meaning based upon evidence
- analysing methods used to convey ideas, including language, structure & form
- relating different texts to their relevant social, historical and literary context
- identifying and commenting on the effect of writer's methods, using the author's name when analysing the impact of techniques
- knowing and identifying a range of language and structure terminology.

Writing –

- 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
- organising cohesive whole texts, effectively sequencing and structuring details within texts

- producing texts that match the audience, purpose and register of different genres.

Speaking and Listening -

- talking in purposeful and imaginative ways to explore ideas and feelings
- delivering ideas and views in a confident and clear way
- listening and responding to others, including in pairs and groups
- creating and sustaining different roles and scenarios
- understanding the range and uses of spoken language.

# FOOD AND NUTRITION

Students will develop their **KNOWLEDGE** of:

- and understanding of ingredients and healthy eating.
- the different methods of cooking.
- applying basic principles of food safety and hygiene.
- making informed choices with their own diet.
- consumer food and drink choices.
- specific ingredients to design a dish with specific purpose and can justify their choices.
- food preparation and cooking techniques.
- understanding how heat is transferred to foods.
- understanding of food provenance and food waste.

Students will develop their **SKILLS** in:

- following a simple recipe using appropriate ingredients and equipment to prepare and cook a range of dishes.
- carrying out, with growing skill and accuracy, a range of practical activities.
- demonstrating a range of food preparation and cooking techniques.
- developing creative, technical and practical expertise to perform everyday tasks with growing confidence.
- evaluating and test their ideas and recipes.
- learning and using the cooker (hob, grill, oven) safely.
- weighing and measuring ingredients correctly.
- demonstrating the safe use of sharp knives.
- identifying small items of equipment and their uses.
- using the bridge hold and claw grip correctly.
- using a food processor/ hand blender safely and with confidence.

# GEOGRAPHY

Students will develop their **KNOWLEDGE** of:

- Foundations of Geography
- Earth's Systems
- Economic Activity and Globalisation
- Weather and Climate
- Rivers

Students will develop their **SKILLS** in:

- Cartography
- Graphicacy
- Numeracy
- Enquiry
- Communication

# HISTORY

Students will develop their **KNOWLEDGE** of:

- Ancient Rome
- Anglo-Saxon England
- The Silk Roads
- The Norman conquest
- The Islamic Golden Age
- The First Crusade
- Medieval England
- Medieval African Kingdoms

Students will develop their **SKILLS** in:

- Causation
- Change and Continuity
- Using Historical Evidence
- Interpretation

# MATHS

Students will develop their **KNOWLEDGE** of:

- interpreting bar models to develop their understanding of proportionality
- making appropriate use of suitable models to represent and solve numerical problems including comparing measurements
- extending and developing understanding of our number system
- using the area model for long multiplication of integers and decimal numbers
- using 'reallotting' strategies to solve area problems of compound shapes
- developing geometrical reasoning surrounding shape and space
- developing ways of representing an unknown
- exploring co-ordinate geometry through big picture ideas linking algebra and graphs

Students will develop their **SKILLS** in:

- describing given diagrams and identifying key features. Where appropriate students make sense of a given situation by drawing diagrams
- identifying similarities and differences in situations presented and using these to provide examples of their own of a similar nature. Students are able to provide examples of these, as well as, counter examples
- offering suggestions and beginning to ask 'what if' questions, considering the affects that changing one aspect has on the rest of the situation. Students provide explanations for their reasoning
- beginning to consider if mathematical statements are sometimes/always/never true
- describing and interpreting graphs and, given a context, provide meaning
- accepting that being stuck is a vital aspect of mathematical development and beginning to simplify a given problem to attempt to make progress
- using mathematical language appropriately

# MFL – FRENCH, GERMAN AND SPANISH

Students will develop their **KNOWLEDGE** of:

- understanding that nouns have a gender.
- understanding the difference between the different words used to say 'a/the/some'.
- using different verb forms for regular verbs in the present tense.
- using different verb forms for irregular verbs in the present tense.
- using verbs in the past, present and future tenses.
- understanding how adjectives work.
- understanding and using a variety of vocabulary to add detail to a range of topics.

Students will develop their **SKILLS** in:

- holding a short conversation with some spontaneity.
- speaking with generally accurate pronunciation and intonation.
- asking questions for communicative purposes.
- giving opinions in different ways with reasons.
- writing with extended sentences using connectives.
- writing with correct punctuation and capital letters.
- using vocabulary books and/or a dictionary to check spellings and find words.
- checking work for mistakes in spelling and meaning.
- writing paragraphs which include more complex language.
- identifying cognates and key words to understand unfamiliar language.
- understanding simple poetry and stories which stimulate their imagination.
- transcribing words and short sentences which they hear with increasing. accuracy.
- translating sentences between English and the target language.

# MUSIC

Students will develop their **KNOWLEDGE** of:

**Music Theory:**

- The stave
- Treble clef and bass clef pitches
- Rhythm and rest values (semi-quaver to semibreve)
- Roman numerals and chord notation
- Ukulele chord boxes.

**Appraising Music:**

- Understanding and identifying orchestral and world music instruments and their context.
- Music from a variety of different genres including music from the 'great composers.'
- The musical elements and linked subject specific vocabulary.

Students will develop their **SKILLS** in:

**Performing**:

- Keyboard: performing melodies with the right hand, performing bass lines with the left hand and major and minor triads.
- Singing: singing as a class in unison and in simple parts and performing vocal pieces as a year group.

- Ukulele: major and minor chords in C major.
- Percussion: polyrhythms in 3 parts and syncopated rhythms.

**Composing**:

- Improvising, composing, and notating simple rhythms and melodies.
- Sequencing, arranging, and editing using music technology software.
- Learning about major and minor triads, roman numerals, and chord sequences.

# PE

Students will develop their **KNOWLEDGE** of:

- basic skills, techniques and tactics used in sports and physical activities.
- fundamental rules and regulations for a range of sports and the need for officials.
- the components of a warm up and cool down.
- the immediate effects of exercise of body and names of muscles used in different sports & activities.
- some compositional ideas to improve Dance.
- safety factors during physical activity and sport.
- leading fit and healthy lifestyles including extracurricular sports clubs.

Students will develop their **SKILLS** in:

- striking and fielding/invasion games/athletics/dance/outdoor and adventurous activities/health related exercise.
- Teamwork.
- fundamental techniques in a range of sports in isolation and simple drills.
- overcoming opponents in competitive situations in team and individual games (e.g. Table Tennis/Netball).
- decision making in competitive sports.
- basic dance styles and techniques, including replication and some creativity.
- identifying strengths and weaknesses of their own and others' work.
- leadership of warm ups and cool downs.

# RELIGIOUS STUDIES (RS)

Students will develop their **KNOWLEDGE** of:

- diversity of world views
- the significance of key Christian beliefs, including: The Trinity, the Bible, creation and the afterlife
- an awareness of varying cultural images of Jesus
- historical accounts of Jesus' birth, death and resurrection
- biblical accounts of Jesus' birth, death and resurrection
- the role and significance of Christian scripture

Students will develop their **SKILLS** in:

- posing and suggesting answers to questions of belonging, identity, meaning, purpose, truth and commitment relating these to their own lives and others' lives
- explaining what inspires and influences them, expressing their own and others' views of the challenges of belonging to religion
- connecting religious ideas, beliefs and practices
- judging significance
- interpreting historical and religious sources
- articulating personal responses to ultimate questions
- taking a proactive part in decision making activities with their peers
- respecting the views of others

# SCIENCE – BIOLOGY, CHEMISTRY AND PHYSICS

Students will develop their **KNOWLEDGE** of:

Biology –

- cells as the fundamental unit of living organisms.
- the structure and function of plant and animal cells and the hierarchical organisation of multicellular organisms.
- reproduction in humans (as an example of a mammal) including the structure and function of the male and female reproductive systems, changes to the body during puberty, the process of fertilisation and the events of pregnancy.
- respiration provides organisms with energy.
- the structure and function of different plant tissues and organs, including their adaptations.
- how photosynthesis provides a source of food for plant.s
- how farming practices can impact the environment and plant growth.
- the variation between species and within species and how humans have used this to their advantage through selective breeding.
- the components of a healthy diet and why each is needed.
- students also will understand the tissues and organs of the human digestive. system, including adaptations to function.
- the role of enzymes in digestion.
- how having an unbalanced diet can lead to health problems.

Chemistry –

- safety in the laboratory and using hazardous chemicals.
- fundamental chemistry theory, such as atoms and their behaviour and elements and their arrangement in the Periodic Table.
- the importance of practical skills.
- particle models.
- how atoms and elements can interact in order to form compounds and mixtures.
- acids and bases, the pH scale and neutralization.
- how to formulate word and balanced symbol equations.
- key fundamental chemical reactions.

Physics –

- investigating forces, a topic students are familiar with from primary school, but we move their thinking on to more challenging situations such as solving speed calculations.
- understanding how energy is transformed whenever forces are involved, and how energy is stored, transformed and conserved.

- electric circuits, again a subject covered in primary school but we now stretch their understanding of how a circuit works, introducing concepts such as voltage, current and resistance.
- the physics behind magnets and electromagnets, looking at their differences and similarities.
- The fundamental concept of a wave in Physics and contrasting the behaviour of light and sound waves.
- the empire of the sun, which covers everything under the influence of our closest star, from the moon and seasons to why Pluto isn't a planet anymore. If it's in our solar system, it is covered!

Students will develop their **SKILLS** in:

Biology -

- how to use a light microscope to observe, interpret and record cell structure.
- the use of stains in microscopy.
- how to apply numeracy skills to calculate magnification.
- evaluating the extent to which technology has increased our understanding of biology at the cellular level.
- how to calculate % change.
- how to apply numeracy skills by calculating the daily energy requirement of a healthy diet.
- how to differentiate between quantitative and qualitative data.
- how to comment on accuracy and reliability of experiments and suggest improvements.
- how to calculate averages e.g. the mean result.
- how to describe and explain trends in data.
- how to differentiate between discontinuous and continuous data.
- how to draw line and bar graphs.

Chemistry –

- how to work safely in a laboratory.
- students will also use models to further their understanding of particles and their behaviour.
- to use their practical skills to work precisely and accurately in the laboratory.
- how to apply numeracy skills to science models by writing and balancing symbol equations.
- to demonstrate a range of fundamental chemical reactions safely and accurately in the laboratory.
- investigative skills that they first learn in primary school by forming hypothesis, identifying variables, carrying out controlled investigations, analysing results, drawing conclusions and evaluating their investigative methods.

Physics –

- how to use and manipulate mathematical formulae including appropriate use of units. This is the foundation of the GCSE course and students start making sure that they can do this as a priority.
- investigative skills that they first learn in primary school by; forming hypothesis, identifying variables, carrying out controlled investigations.
- analysing results, drawing graphs, drawing conclusions and evaluating their investigative methods.