PRIESTNALL
SCHOOL

CURRICULUM KNOWLEDGE AND SKILLS SUBJECT REFERENCE GUIDE YEAR 7

ART AND DESIGN

Students will develop their **KNOWLEDGE** of:

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

Students will develop their **SKILLS** in:

- **drawing** through a range of techniques in observational studies
- experimenting and using different **media** such as pencil, pens, types of paint and collage
- learning new processes such as printmaking and mixed media
- developing a **personal response** through creativity withing their artwork
- **discussing** and **explaining ideas** relevant to their work using art terminology
- **discussing** and comparing the work of others (artists and other sources)
- **annotating** and **evaluating** using relevant language.

COMPUTING

Students will develop their **KNOWLEDGE** of:

- knowing if a task would be best completed by humans or computers
- knowing that different solutions exist for the same problem
- knowing what is acceptable and unacceptable behaviour when using technologies and online services
- knowing what 'if statements' and 'loops' are and how to use them effectively
- knowing what software is most suitable for a particular task
- digital computers using binary to represent all data.

Students will develop their **SKILLS** in:

- using logical reasoning to predict outcomes
- being able to break down a problem and create a suitable solution
- being able to effectively use search engines
- collecting, organising and presenting data and information that is suitable for the purpose
- making appropriate improvements to solutions based on feedback received, and comment on the success of the solution
- being able to create digital products for a particular audience
- being able to use arithmetic operators, 'if statements' and 'loops' to create a game
- being able to find and correct errors in programs (debugging)
- being able to declare and assign variables.

DESIGN AND TECHNOLOGY

Students will develop their **KNOWLEDGE** of:

- develop design specifications to guide their thinking
- work confidently within a range of relevant domestic, local and industrial contexts to develop ideas
- use research including the study of different cultures, to identify and understand user need
- consider factors such as ergonomics, anthropometrics
- Functionality and aesthetics in design
- the key principles of Design Thinking
- developing their knowledge and understanding of how to apply iterative design
- strategies
- being able to test, evaluate and model simple ideas
- follow procedures for safety and hygiene and understand the process of risk assessment
- visual communication skills
- working with tools and equipment to make products
- user needs and wants
- evaluate new and emerging technologies
- different cultures, to identify appropriate imagery when designing modern graphics
- fonts and typography
- the importance of a healthy and varied diet as depicted in the Eatwell Guide and eight tips for healthy eating.

Students will develop their **SKILLS** in:

- prototype modelling using a range of materials
- visual communication skills to draw and develop ideas
- embellishment techniques including tonal shading, textures and line weight
- 2D and 3D drawing techniques
- evaluating their products against a design brief and identify ways of improving them
- how to select and modify patterns and use in textile construction
- to produce ordered sequences and schedules for manufacturing products they design, detailing resources required
- applying a range of finishing techniques, including those from art and design, to a broad range of materials including textiles and polymers.
- developing and communicate design ideas using annotated sketches
- developing the ability to discuss and articulate their ideas, including
- to actively involve others in the testing of their products
- producing prototype models of their ideas using CAM to test out their ideas.

DRAMA

Students will develop their **KNOWLEDGE** of:

- the basic foundation of a still image and key performance skills (facial expressions, body language, gestures, posture, levels)
- how to effectively use movement, mime and gestures to creating meaning and to communicate narratives
- the historical and social context of Victorian Britain and the common wealth through teacher in role
- The origins, traditions and history of European theatre from ancient Greek theatre to Commedia dell' Arte
- Mime, stock characters and the development of physical theatre through the practitioner of Jacques Lecoq and through the dramatic style of Commedia dell' Arte
- The play scripts of Roald Dahl and will begin to develop their understanding of how to create and perform in character
- the narrative of Shakspearian plays such as The Tempest and Romeo and Julliet.
- the roles of both an actor and a director
- devising and creating performance based upon different global myths and legends.
- how to develop a performance from page to stage and in line with the writer and director's intentions.

Students will develop their **SKILLS** in:

- Characterisation (naturalistic and non-naturalistic)
- Naturalistic and physical theatre performance style
- Physical performance
- Vocal performance and use of voice (Narration, choral speech, pitch, pace, projection, volume, tone)
- The creation of role plays
- Exploring the context and characters within a script
- Group work and cooperation
- Leadership/directing
- Active listening
- Verbal evaluation
- The use of drama terminology when creating or evaluating work
- Audience awareness and expectations during performance
- Development of new drama techniques, strategies and conventions.

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 Norman conquest
- Challenges to medieval power and authority
- the Crusades

Students will develop their **SKILLS** in:

- causation
- change and continuity
- historical evidence
- interpretation
- significance.

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.

MODERN FOREIGN LANGUAGES:
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:

- various musical terms, symbols and genres
- a range of musical elements - pitch, dynamics etc
- being able to recognise basic musical symbols – treble clef, stave etc
- being able to recognise basic rhythmic musical symbols – crotchets, minims etc
- being able to recognise various genres of music and know some of the musical features of that genre.

Students will develop their **SKILLS** in:

Performing Music -

- sing in tune with reasonable fluency and accuracy
- perform simple parts on the keyboard and tuned percussion
- keep in time with others
- perform by ear and simple notations.

Composing Music -

- improvise repeated patterns
- improvise simple melodic/rhythmic phrases
- share a range of ideas in group tasks
- create compositions which have a sense of structure
- compose using a variety of notations
- create compositions which explore different sounds and the musical elements.

Understanding Music -

- recognise a variety of different instrument sounds, knowing the instrument families
- know the musical elements and recognise some in listening tasks
- make improvements to their own work
- identify different genres of music and some of their features in a listening task
- begin to use appropriate musical vocabulary when creating or evaluating work.

PHYSICAL EDUCATION (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. rugby/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
- specialised cells
- the structure of the respiratory and circulatory system and the function of organs within each system
- 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 plants
- 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
- asexual reproduction.

Chemistry -

- characteristics of solids, liquids and gases
- particle models
- role of the particle model in diffusion, Brownian motion and gas pressure
- naming drawing and describing uses of common laboratory equipment
- safety in the laboratory and recognising international hazard symbols
- how mixtures can be separated and how the type of mixture will determine the separating technique to be used
- What makes a solution, factors affecting solubility
- acids and bases, the pH scale and neutralisation
- using word equations to represent chemical processes
- everyday applications of acids and neutralisation reactions.

Physics -

- forces including balanced and unbalanced, mass and weight, friction
- investigating springs and pressure
- understanding how energy is transformed whenever forces are involved, and how energy is stored, transferred and conserved
- understanding how fuels are formed and used as sources of energy
- learn how electricity is generated using a variety of renewable and non-renewable resources
- 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
- Organisation of the universe with a focus on our solar system
- Understanding the interactions between celestial bodies including day and night, seasons, gravity and orbits and Earth’s magnetic field

- Uses of artificial satellites.

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.

Chemistry -

- how to work safely in a laboratory
- use laboratory equipment to accurately measure volumes of liquids and weigh masses of solids
- safe use of Bunsen burners
- using separation techniques including filtration, evaporation and crystallisation to purify salt
- investigate the effects of temperature and solubility of a salt
- prepare an indicator from red cabbage
- perform and monitor the process of neutralisation reactions
- to use their practical skills to work precisely 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 equations 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.
- constructing circuits using simple circuit diagrams
- using scientific models to represent abstract concepts
- investigating relative energy content of different foods
- 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.
- how to draw line and bar graphs.
- 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.

Priestnall School
Priestnall Road
Heaton Mersey
Stockport
SK4 3HP

t: 0161 549 7300
e: enquiries@priestnallschool.org.uk
w: www.priestnallschool.org.uk