



LAURUS
CHEADLE
HULME

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

ART AND DESIGN

Students will develop their **KNOWLEDGE** of:

- appropriate and relevant research
- artists, crafts persons' and designers' work
- cultural capital
- developing and recording ideas
- how to improve their work using success criteria
- using art vocabulary and terminology appropriately

Students will develop their **SKILLS** in:

- drawing through means such as observational studies, photography and documenting ideas
- using different media
- experimenting with media and developing control
- developing a personal response through creativity within their work (developing relevant ideas, CPR)
- discussing and explaining ideas relevant to their work
- discussing and comparing the work of others
- annotating and evaluating using relevant language and keywords

COMPUTING

Students will develop their **KNOWLEDGE** of:

- Computational thinking
- Algorithms and how to create them
- Output, input, variables, operators and selection in block based programming
- Staying safe online – how to recognise threats, report concerns, evaluate sources of information and protect digital devices.
- How numbers are represented as binary
- Computer systems and the components that they consist of.
- Software
- Physical computing devices and their use for everyday tasks.

Students will develop their **SKILLS** in:

- Applying computational thinking to problem solving.
- Collecting, organising and presenting data and information that is suitable for the purpose.
- Tracing and using output, input, variables arithmetic operators, selection, and iteration in block-based programming.
- Being able to find and correct errors in programs (debugging)
- Binary conversions and addition

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

- how to anticipate a text's content based upon the context and title
- how to recognise the writer's intentions in a text
- the narrative structure and how ideas are sequenced to affect meanings
- a range of fiction and non-fiction 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
- what an archetype is

Writing

- What tone is and how to use vocabulary to create one
- the methods used to write with engagement, including developing vocabulary, imagery and figurative language
- how to structure writing so that ideas are crafted into a planned sequence
- the methods used to write with control, including spelling, grammar and punctuation

Speaking and Listening

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

Students will develop their **SKILLS** in:

Reading

- selecting apt references
- summarising a range of texts accurately
- articulating informed interpretations of meanings supported by textual reference.
- analyse methods used to convey ideas, including language, structure & form
- compare ideas, attitudes, methods and contexts in order to evaluate effectiveness
- relate different texts to their relevant social, historical and literary context
- identify and comment on the effect of writer's methods
- know and identify a wide range of language and structure terminology

Writing

- select appropriate words and phrases from a rich and wide vocabulary to create an appropriate tone/style/mood
- demonstrate control of spelling, punctuation and grammar

- utilise a variety of sentence structures with control
- organise cohesive whole texts, effectively sequencing and structuring details within texts
- produce texts that match the audience, purpose and register of different formats

Speaking and Listening

- talk in purposeful and imaginative ways to explore ideas and feelings
- deliver ideas and views in a confident and clear way
- listen and respond to others, including in pairs and groups
- create and sustain different roles and scenarios
- understand the range and uses of spoken language

FOOD & NUTRITION

Students will develop their **KNOWLEDGE** of:

- The current healthy eating advice and understand that a healthy diet is characterised by variety and balance.
- The Eatwell Guide and develop an understanding of the 8 tips for healthy eating.
- Nutrients and the concept of energy in food.
- Changing dietary requirements, including those of people who follow a religious diet. Students will know the terms allergy and intolerance and have knowledge allowing them to interpret food packaging and labelling.
- Where and how a variety of ingredients are grown, reared, caught and processed and know the basic steps in the producing food.
- Food safety- meaning to prevent contamination, spoilage and decay of food, when handling and storing food.

Students will develop their **SKILLS** in:

- Food hygiene and safety. Students will be able to store, prepare and cook a variety of predominantly savoury dishes safely and hygienically.
- Selecting and using appropriate tools and equipment safely when preparing and cooking food.
- Critical analysis of their own practical skills and the dish itself through written and verbal forms of evaluation.
- Demonstrating an increasing range of food preparation skills, including use of hand-held electrical equipment.
- Weighing and measuring.
- Knife skills.
- Using the cooker.

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
- Medieval England
- The Crusades

Students will develop their **SKILLS** in:

- Causation
- Change and Continuity
- Historical evidence
- Interpretation

LANGUAGES

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'
- different verb forms for regular verbs in the present tense
- different verb forms for irregular verbs in the present tense
- 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

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.
- Develop geometrical reasoning surrounding shape and space
- Develop ways of representing an unknown
- Explore co-ordinate geometry through big picture ideas linking algebra and graphs

Students will develop their **SKILLS** in:

- describing given diagrams, 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, as well as, counter examples
- offering suggestions and beginning to ask 'what if' questions. Considering the effect that changing one aspect has on the rest of the situation. Students provide explanations for their reasoning
- Manipulation of algebraic expressions and solving equations
- 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 and symbolism appropriately

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

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 muscular system; Bicep, Tricep, Pectorals, Abdominals, Quadricep, Hamstring, Gastrocnemius, Deltoids, Trapezius, Gluteus Maximus, Latissimus Dorsi.
- The immediate effects of exercise of body.
- Choreographic devices in Dance.
- Safety aspects during physical activity and sport.
- Leading fit and healthy lifestyles including extracurricular sports clubs.

Students will develop their **SKILLS** in:

- Invasion Games (mixed), Dance, Table Tennis, Trampolining, Rounders, Athletics, Cricket.
- Fundamental techniques in a range of sports in isolation and simple drills.
- Overcoming opponents in competitive situations in team and individual games.
- Decision making in competitive sports.
- Basic Dance choreographic devices.
- Simple reasoning and questioning in attempting to solve problems.
- Identifying strengths and weaknesses of their own and others' work.
- Officiating low stakes practices in some sports.

SCIENCE

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
- the process of cell division to allow growth and repair
- 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 plants
- 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 move their thinking on to more challenging situations including 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 now to stretch their understanding of how a circuit works with the ideas of 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 behavior 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

TEXTILES

Students will develop their **KNOWLEDGE** of:

- Appropriate and relevant research
- Different fabrics, their properties and sources
- How different fabrics are constructed
- Surface treatments and finishes
- Understanding what a design brief and target market is
- Understanding the process of constructing a product
- How to improve their work using success criteria
- Using textile vocabulary and terminology appropriately

Students will develop their **SKILLS** in:

- Using different media
- How to carry out a variety of techniques
- How to use equipment effectively and safely in the work room
- Experimenting with media and developing control
- Developing a personal response through creativity within design and carrying out techniques independently
- Discussing and explaining ideas relevant to their work