CURRICULUM KNOWLEDGE AND SKILLS SUBJECT REFERENCE GUIDE YEAR 7

ART AND DESIGN

Students will develop their **KNOWLEDGE** of:

- art, craft & design's importance and value as a subject.
- art based media, materials and processes and how these can be exploited within their work.
- art, craft & design practitioners (historical and contemporary) styles and movements.
- cultures, ideas and opinions from the wider world.
- art specific language to support discussion, analysis and evaluation of work.

Students will develop their **SKILLS** in:

- drawing, drawing style and technique.
- the practical application of different media relevant to their project or theme.
- the exploration and manipulation of relevant materials and techniques.
- developing a personal response through creativity within their work.
- discussing and explaining ideas relevant to their work.
- discussing and analysing the work of others (artists and such like)
- analysing and evaluating effectively using relevant language and keywords.

BELIEFS AND VALUES

Students will develop their **KNOWLEDGE** of:

- What it means to be a Christian including the teachings of Jesus
- Who was Jesus? The historical V the Biblical
- What are Islamic beliefs and actions?
- The founding of the Abrahamic faiths and the important people in Judaism
- Divergent beliefs within Judaism
- Positive friendships; how to be a good friend and deal with friendship issues in a productive way.
- The Equality act and being an upstander
- How are we socialised and what are the dangers of stereotypes?
- The changes that happen during puberty

Students will develop their **SKILLS** in:

- Expressing their own ideas with explanation and evidence
- Connecting religious teachings and practices.
- Respecting the views of others.
- Using inclusive language.
- Discussing sensitive issues
- Respectful conversations.
- Evaluating different points of view

COMPUTING

Students will develop their **KNOWLEDGE** of:

- what is acceptable and unacceptable behaviour when using technologies and online services.
- a range of ways to report concerns.
- what software is most suitable for a particular task.
- different ways to keep data safe.
- how binary is used in computing.
- the different data types used in programming.
- the different hardware components that can be used to make up a computer.
- the difference between system and application software and examples of these.
- how to create computer games using visual programming languages.
- how to include advanced features within Kodu games including scores, nested instructions and pages.
- how to include multiple levels within Kodu games.
- the difference between vector and bitmap graphics.
- how to import and combine components such as images and within graphic editing software.
- how to use effects within graphic editing software.
- how to import and combine components such as images, sound, text and video within movie editing software.
- how to add transitions and effects within a movie.
- how to export a movie so it can be played on the appropriate software.
- how to record and edit sound files in sound editing software.
- how to export sound files so they can be played on the appropriate software.

Students will develop their **SKILLS** in:

- being able to add binary numbers together.
- 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.
- making appropriate improvements to solutions based on feedback received, and comment on the success of the solution.
- becoming more confident at creating computer games using visual programming languages.
- including advanced features within Kodu games including scores, nested instructions and pages.
- being able to include multiple levels within Kodu games.
- creating vector and bitmap graphics.
- importing and combining components such as images and text to create an image.
- using effects within graphic editing software to enhance an image.
- being able to import and combine components such as images, sound, text and video within movie editing software.
- being able to add transitions and effects within a movie.
- exporting a movie so it can be played on the appropriate software.
- recording and editing sound files in sound editing software.
- exporting sound files so they can be played on the appropriate software.

DESIGN TECHNOLOGY

D&T is taught as one of three Technology subjects during the year.

Students will develop their **KNOWLEDGE** of:

- developing their knowledge and understanding of the design process.
- understanding the role of a designer and their responsibility to society and the environment.
- describing the basic principles and rules of workshop safety.
- being able to name and use appropriate tools and equipment.
- developing knowledge to make informed choices regarding material selection.
- developing knowledge of a target market's needs and how this affects design ideas.
- applying knowledge of a range of techniques to finish/decorate a product and justify choices.
- developing a basic knowledge of how to apply and follow designing and making techniques and processes.

Students will develop their **SKILLS** in:

- being able to carry out effective research tasks.
- developing and applying evaluation and analysis skills.
- applying and developing basic illustration skills.
- using a range of appropriate technical language when annotating.
- being able to plan and follow a basic design plan.
- developing independence when working on a product.
- using tools and equipment with accuracy, skill and safety in mind.
- demonstrating a range of finishing or decorating techniques with accuracy.
- being able to identify and record areas for improvement and/or modification.

DRAMA

Students will develop their **KNOWLEDGE** of how to create and analyse work using the following conventions:

Style, Genre and Practitioners.

- Mime.
- Freezeframe/still image.
- Tradition of Commedia dell'arte.
- Slapstick.
- Naturalism and introduction to Stanislavski's system.

Approaches to Script.

- Thought tracking.
- Hot-seating.
- Backstory.
- Exaggerated characterization.

Approaches to Devising.

- Flashback.
- Transition.
- Stage space.
- Narration.
- Body as Prop.
- Angel and Devil.

Students will develop their **SKILLS** in:

Throughout all schemes of learning students will develop **Physical Skills** (Facial expression, interaction, gesture, gait, proxemics, levels, posture/body language, stillness) and **Vocal Skills** (emphasis, articulation, accent, tone, pause, pitch, pace, projection).

Students will also develop their **SKILLS** across areas relating to **creating, performing and responding**:

- Communication and Oracy.
- Group and Teamwork.
- Leadership and Directing.
- Analysis and Evaluation.
- Using drama terminology when creating and responding to work.
- Audience awareness and etiquette.

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 for a variety of different purposes.

Speaking and Listening -

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

Students will develop their **SKILLS** in:

Reading –

- 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.
- 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 genres.

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 AND NUTRITION

Food and Nutrition is taught as one of three Technology subjects during the year.

Students will develop their **KNOWLEDGE** of:

- applying basic principles of food safety and hygiene.
- developing a basic knowledge of food preparation and cooking techniques.
- knowing the different methods of cooking.
- developing their knowledge and understanding of ingredients and healthy eating.
- making informed choices with their own diet.
- the nutrients, sources and functions.
- Sensory evaluation of food.
- Food provenance – how food is sourced including free range farming, organic farming and intensive farming.

Students will develop their **SKILLS** in:

- using the bridge hold and claw grip correctly.
- using kitchen equipment safely in food preparation and cooking.
- demonstrating the safe use of sharp knives.
- weighing and measuring ingredients accurately.
- Safe and accurate use of the cooker (hob and oven).
- following a simple recipe using appropriate ingredients and equipment to prepare and cook a range of dishes, mostly savoury.
- carrying out, with growing skill and accuracy, a range of practical activities.
- demonstrating a range of food preparation and cooking techniques.
- developing life skills.
- sensory evaluation of food.

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:

- The Romans.
- Anglo Saxon England.
- The Norman Conquest.
- The Silk Roads
- Medieval England
- The First Crusade

Students will develop their **SKILLS** in:

- Causation.
- Interpretation.
- Change and Continuity.
- Significance.
- Historical Evidence

MATHS

Students will develop their **KNOWLEDGE** of:

- interpreting ratio tables and use these as tools to solve numerical problems.
- using additive and multiplicative strategies (the multiplier is an integer value).
- using and applying ratio tables in the context of division and multiplication.
- making appropriate use of number lines to represent and solve numerical problems including comparing measurements.
- using the area model for long multiplication of integers and decimal numbers.
- using ‘reallotting’ strategies to solve area problems of compound shapes.

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 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:

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

Students will develop their **SKILLS** in:

- hold a short conversation with some spontaneity.
- speak with generally accurate pronunciation and intonation.
- ask questions for communicative purposes.
- give opinions in different ways with reasons.
- write with extended sentences using connectives.
- write with correct punctuation and capital letters.
- use vocabulary books and/or a dictionary to check spellings and find words.
- checking work for mistakes in spelling and meaning.
- write paragraphs which include more complex language.
- identify cognates and key words to understand unfamiliar language.
- understand simple poetry and stories which stimulate their imagination.
- transcribe words and short sentences which they hear with increasing accuracy.
- translate sentences between English and the target language.

MUSIC

Students will develop their **KNOWLEDGE** of:

- Musical terms, symbols and genres.
- a range of musical elements – melody, harmony, tempo, instrumentation, rhythm, pitch, dynamics
- recognising musical symbols
- recognising basic rhythmic musical symbols – crotchets, minims etc.
- recognising various genres of music and know some of the musical features of that genre.

Students will develop their **SKILLS** in:

Performing Music:

- singing in tune with fluency and accuracy.
- performing music on the keyboard, guitar and ukulele.
- keeping in time with others.
- performing by ear and from notation.

Composing Music:

- improvising repeated patterns.
- improvising simple melodic/rhythmic phrases.
- sharing a range of ideas in group tasks.
- creating compositions which have a sense of structure.
- composing using a variety of notations.
- creating compositions which explore different sounds and the musical elements.

Understanding Music:

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

PE

Students will develop their **KNOWLEDGE** of:

- fundamental 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 basic training methods to improve cardiovascular fitness.
- 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:

- a wide variety of activities: team and individual games, athletics and gymnastic activities, dance, health related exercise and outdoor adventurous activities
- teamwork.
- fundamental skills 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
- simple reasoning and questioning in attempting to solve problems.
- identifying strengths and weaknesses of their own and others' work
- leadership of warm ups and cool downs

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.
- 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

Textiles is taught as one of three Technology subjects during the year.

Students will develop their **KNOWLEDGE** of:

- health and safety rules when using textiles specialist tools and equipment.
- Textiles specific tools and equipment.
- a range of hand sewing techniques used to construct a textiles product.
- using artist work as a method research.
- how to use research to support creativity.
- how electronics is used within Textiles.
- subject specific vocabulary.

Students will develop their **SKILLS** in:

- carrying out suitable research.
- producing design work which involves detailed annotation and drawing to a high standard.
- embedding Textiles specific vocabulary in written and verbal responses.
- working independently in a Textiles environment.
- hand embroidery.
- Textiles practical preparation such as threading needles and tying knots.
- Self-evaluation of practical work.

ATTITUDES AND HABITS REFERENCE GUIDE

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

ATTITUDES

- 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