



LAURUS
RYECROFT

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

BELIEFS AND VALUES

Students will develop their **KNOWLEDGE** of:

- the significance of God and the patriarchs in Judaism
- an awareness of varying cultural images of Jesus
- historical accounts of Jesus' birth, death and resurrection
- the role and significance of Christian and Jewish scripture
- the Sikh religion and the importance of Sikh articles of faith
- 'British' values and what it means to be 'British' today

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 other's lives
- explaining what inspires and influences them, expressing their own and other's views of the challenges of belonging to religion
- connecting religious ideas and practices
- articulating their own personal responses to ultimate questions
- taking a proactive part in decision making activities with your peers
- respecting the views of other

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 a range of ways to report concerns
- knowing what 'if statements' and 'loops' are and how to use them effectively
- knowing what software is most suitable for a particular task
- different ways to keep data safe
- how binary is used in computing

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
- binary conversions and addition

ART

Students will develop their **KNOWLEDGE** of:

- developing ideas through purposeful investigations (researching appropriately)
- demonstrating a critical understanding of relevant different sources (showing clear links with Artists, Craftspersons and Designers, and cultural links)
- recording their ideas effectively
- understanding how to improve their work through using appropriately relevant success criteria
- annotating and evaluating effectively using relevant language and keywords to display a firm understanding
- 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 with regard to 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:

- the accuracy of recording through observational studies and other means (e.g. quality of drawing, photographs, compositional ideas)
- the practical application of different media (how well media is used)
- the exploration and manipulation of relevant materials and techniques (how well they are used)
- 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 (artists and such like)
- annotating and evaluating effectively using relevant language and keywords
- being able to carry out effective research tasks
- developing and applying evaluation and analysis skills
- applying and developing basic illustration skills
- drawing from a range of appropriate technical language when annotating
- being able to plan and follow a basic Design project
- developing independency when working on a project
- 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:

Movement –

- still image (making it interesting, sequence in a piece)
- physical theatre (body as prop, morphing/transitions, unison, mirroring, shadowing, mime, mask work)

Voice –

- thought in the head
- choral speaking/unison
- soundscape/collages
- voice for character (volume, pace, pitch, tone, repetition/echo, articulation)

Characterisation –

- Improvisation
- characters from simple scripts
- hot seating
- teacher/student in role
- role play
- tension

Stagecraft –

- staging/levels
- Music
- costume

Students will develop their **SKILLS** in:

- 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
- the development of texts throughout the history of Literature, including 5 key areas: Ancient, Medieval, Shakespearean and Renaissance, Victorian and War and Hard Times
- an understanding that although historical context may have an impact on how a reader might interpret a text, universal themes transcend time

Writing –

- the methods used to write with engagement and control, including sentence structure, punctuation, vocabulary, whole-text structuring and spelling
- an understanding of different formats and tones to suit a specific purpose

Speaking and Listening –

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

Students will develop their **SKILLS** in:

Reading –

- developing reading skills such as evaluation, prediction, inference and summarising
- 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

Students will develop their **KNOWLEDGE** of:

- developing their knowledge and understanding of ingredients and healthy eating
- knowing 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
- developing a basic knowledge of 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

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:

- What skills a good historian needs, from causation to significance to develop an understanding of each of the key skills used in history throughout Key stage 3
- Students develop their understanding of chronology and learn significant events in early British History
- Medieval monarchs, Medieval life, , where they develop their understanding of how the church, state and society have changed and stayed the same to modern day
- First order concepts such as authority, revolution, liberty, imperialism

Students will develop their **SKILLS** in:

- Applying history skills to investigations, allowing them to become familiar with and begin to use historical skills which will be useful to them throughout their life, both in an educational setting and the wider world
- Describing an important person from history, describing different viewpoints and important changes in history
- Identifying, explaining and giving some reasons why a person or event might be significant, identifying a range of causes and consequences of events
- Analysing how significance can vary according to different viewpoints, from different people or different times. Students can analyse change and continuity, as well as analysing cause and consequences
- Applying chronology, being able to explain the order in which events have taken place.

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'
- 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 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

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 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:

- racquets/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/badminton/tennis).
- 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
- 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, 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 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