



Year 8 ART

Topic Titles

- Baseline Assessment: Natural Form
- o Pattern & Print
- World Cultures
- o Disguise
- o Ceramics: Natural Forms

Intent

We want our students to recognise and appreciate the wider impact art has on the world around them and be able to engage with it in an informed way. To this end our curriculum aims to develop students who are curious, independent, and resilient; confident in taking intellectual and creative risks with their work. A range of practical skills, including drawing, painting, printmaking, and sculpting are developed in response to a range of themes and subject matter, covering the broad spectrum of art, craft, and design. This is fully underpinned by visual literacy, critical thinking, and the language skills necessary to engage with historical and contemporary contexts and develop an understanding as to how this reflects and shapes who we are. The art department aims to be a stimulating and inviting place where all students feel capable, supported, and challenged, whilst enjoying their learning.

Links with other subjects

DT – Design movements, working to a brief, furniture design, graphic design.

Maths – Pattern, mathematical movement

History – Wider historical and cultural context of artists, themes and movements trade and industry

Geography – Trade and migration

RE - Customs, traditions, beliefs and iconography

English - Myths and legends, storyboarding, narrative art, analysis

Science - Properties of clay and the natural world

How will knowledge and skills be taught?

Students follow a highly creative, skills-based art curriculum through studying a sequence of engaging topics. Art from a range of cultures and periods of history are explored and focus given to the discipline of craft, and the creation of functional as well as decorative objects. Learning outside of the classroom with visits to the Pitt Rivers and Natural History museums in Oxford introduces the ideas of curatorship and ownership and forms an integral part of students learning this year. Key practical skills and knowledge is revisited from Year 7 and deepened. Research and practical exploration help solidify learning throughout the year and enable students to develop their own personal and meaningful responses to a broad range of stimuli.

How can parents help?

By encouraging positive engagement with the subject and practicing of key skills at home. Visits to galleries and museums help enhance what is taught in the classroom and along with watching relevant television programmes such as *Artist of the Year* and *Great Pottery Throw Down* can give the subject real-world context. A familiarity with the resources provided on the VLE would be highly beneficial, as would support with the written aspects of their work. Students should be encouraged to undertake thorough and independent research, draft and edit written work which should always be personal, not copied and pasted and use art specific vocabulary, appropriately. General discussion about lessons and looking at student's sketchbook also helpful.

Recommended Reading and Preparation for Learning

William Morris in 50 Objects – Carien Kremer & Anna Mason William Morris (V&A Guide) – Anna Mason Bitter – Akwaeke Emezi

Websites:

The British Museum
The Vincent Van Gogh Museum
ArtUK.org
Google Arts & Culture
Pitt Rivers / OMNH Museum
William Morris Museum
The V&A Museum
The Craft Atlas





Year 8 **DESIGN TECHNOLOGY**

Topic Titles

PRODUCT DESIGN: Pinball Game

PRODUCT DESIGN: Chocolate Bar

TEXTILES: Felt Food

FOOD & NUTRITION: Diet and Health

Intent

Design and technology prepares students to participate in tomorrow's rapidly changing world. They learn to think and intervene creatively to solve problems and become increasingly autonomous as well as collaborative team members. Students must look for needs, wants and opportunities and respond to them by developing a range of ideas and solutions. They combine practical skills with an understanding of aesthetics, social and environmental issues, function and industrial practices. As they do so, they reflect on and evaluate present and past design and technology, its uses and effects. Through design and technology, all students can become discriminating and informed users of products and innovators. The DT department aims to be a stimulating and inviting place where all students feel capable, supported, and challenged, whilst enjoying their learning.

Links with other subjects

Art – Design process, drawing, rendering, annotation, aesthetics Science – Properties of materials, electronics, safety and risk

English - Literacy skills, analysis and annotation

PSHE – Self-Care (cooking)

Maths - Measurement, units, scale, ratio, area, volume, numeracy

How will knowledge and skills be taught?

During each academic year, students complete four different projects of varying length across all DT areas of product design, textiles and food and nutrition. Whilst specific knowledge and processes underpin each topic, the key skills of designing, making, evaluation and technical knowledge are consistent throughout the programme of study, and link to formative assessment objectives. Students work in booklets designed specifically for each project to record all aspects of their creative journey, including designs, CADCAM, digital research and evaluation of products as well as understanding and evidence of health and safety. We are proud to offer a range of DT opportunities to all students and enable them to develop personal and meaningful responses to a range of briefs.

How can parents help?

By encouraging positive engagement with the subject and a familiarity with the resources provided on the VLE. Students complete all tasks, including homework, in their project booklets so engagement with this resource at home and support with development of their ideas and evaluation of their concepts and products would be very beneficial. Support too with organisation of ingredients ensuring these are brought in on the correct days is essential and very much appreciated. Watching relevant television programmes such as *The Repair Shop, Grand Designs, Great British Sewing Bee and Bake Off* can give the subject real-world context. Students should be encouraged to undertake thorough and independent research, draft and edit written work which should always be personal, not copied and pasted and use subject specific vocabulary, appropriately.

Recommended Reading and Preparation for Learning

Making It: Manufacturing Techniques for Product Design – Chris Lefter
The Complete Baking Book for Young Chefs – America's Test Kitchen Kids
The Complete Cooking Book for Young Chefs – America's Test Kitchen Kids
Process: 50 Product Designs from Concept to Manufacture – Jennifer Hudson
Contemporary Design, Classics of Modern Design – Catherine McDermott
50 Fantastic Ideas for Exploring Food – Judith Horvath
The Eco-Design Handbook – Alistair Faud-Luke
Design of Everyday Things – Don Norman

Websites:

foodafactoflife.org.uk technologystudent.com The Design Museum The V&A Museum





Year 8 ENGLISH

Topic Titles

- Non-fiction Reading and Writing -Social Media
- Novel Animal Farm
- Creative Writing 'Outsiders'
- Poetry War Poetry
- Speaking and Listening 'Female Voices'

Intent

Our intent for our Year 8 English curriculum is for it to be rigorous, exciting and balanced, with the National Curriculum at its core. Our curriculum will be transformational, equipping our pupils, regardless of their starting point, with a wide range of knowledge and skills, enabling them to fulfil their potential and realise their ambitions. Ultimately, our aim for our English curriculum is to ensure that pupils are equipped with the necessary literacy skills so that they can excel in the wider world, in any career that they desire, and that foundation is developed in Year 8

Our key aims and intent for our Year 8 English curriculum is:

To continue to embed and ensure development of pupils' core understanding and knowledge of the skills required to succeed at KS3 and beyond.

To continue to expose pupils to a range and wealth of texts, from varied contexts, aiming to expand their knowledge and understanding of genres, time periods and cultures, building upon the solid base established in Year 7.

To continue to promote and encourage wider reading of increasingly challenging texts and to continue to promote reading.

How will knowledge and skills be taught?

Pupils will be focusing on building a solid foundation of skills or which to develop and progress throughout KS3 and beyond. The skills the pupils will be taught are

Planning and writing creatively, including organising ideas through paragraphing and punctuation. Planning and writing for varied purposes, including to inform, persuade and argue, including organising ideas through paragraphing and punctuation. Reading a range of non-fiction and fiction texts, from different contexts and time periods in order to retrieve information and infer knowledge. Reading a range of text types, including poetry & plays, from difference contexts and time periods. Selecting appropriate quotations to analyse language, structure and form, using appropriate technical devices. Comparing attitudes and methods presented in texts, using their skills of inference. Planning and speaking purposefully, in front of an audience.

The teaching and promotion of tier 2 and tier 3 vocabulary.

Links with other subjects

Literacy is the cornerstone of all subjects, so the work that we do in English is integral. Furthermore, there are many links between: English and History, including exploring the connections between texts and their different contexts.

English and RE, including exploring the connections between texts, their different religious contexts.

English and Drama, including studying plays, exploring context and speaking publicly.

English and MFL, including grammar, sentence organisation and the etymology of words.

English and Personal Development, including exploring empathy

How can parents help?

The single most important practice that parents can help their children with at home is to promote reading regularly. Evidence demonstrates a strong correlation between students who regularly read and those achieving levels 7,8 and 9s in their GCSE exams. Not only does reading boost grades and levels achieved, but it also improves vocabulary, written expression and develops a sensitive understanding and appreciation of contexts different to student's own. As well as encouraging reading, parents can help to encourage and promote the use of tier 2 vocabulary at home, so that it becomes a common part of their everyday speech.

Parents can help support students with their English homework that they'll receive once a week, ensuring that it is done to the very best of their ability and that maximum effort has been put in, to every single piece.

Finally, if parents wish to offer even more support, then we recommend utilising BBC Bitesize and Seneca Learning as interactive learning tools to work alongside our current topics.

Recommended Reading and Preparation for Learning

Recommended reading for Year 8 English at HSL:

- '1984' by George Orwell
- 'Kindred' by Octavia E. Spencer
- 'Chinese Cinderella' by Adeline Yen Mah
- 'The Curious Incident of the Dog in the Night-time' by Mark Haddon
 'The Flame Trees of Thika' by Elspheth Huxley





Year 8 FRENCH

Topic Titles

Revising year 7 work, using classroom language, talking about a past holiday using a helpsheet, the verbs être and avoir.

Talking about events in the past using the perfect tense, including old language in new language.

Making New Year's resolutions, talking about celebrations, talking about typical food in francophone countries.

Technology, free-time activities, shopping, recognising references to past, present and future.

The francophone world, where you live, helping at home, daily routine. Sports, making comparisons, directions, giving rules, illness and injuries.

Intent

Students can use and manipulate a variety of key grammatical structures and patterns, give and justify

opinions, use accurate grammar, spelling and punctuation, initiate and develop conversations, coping with unfamiliar language and unexpected responses, can speak coherently and confidently, with increasingly accurate pronunciation and intonation, read short, suitable tests and understand and enjoy cultural differences

Students understand the importance of language learning, feel successful and are clear about how to make progress.

- Phonics, vocabulary and grammar are key and form the basis of all teaching
- Cultural awareness and cultural capital are a thread running through teaching.

Links with other subjects

Literacy – English. A broader knowledge of English vocabulary and more confidence in reading skills will support foreign language learning.

Humanities – Cultural knowledge is key to understanding different ways of life, customs and traditions.

Maths/Science – The application of rules and the skill of deduction are helpful tools in language learning.

How will knowledge and skills be taught?

Structured and supported tasks to build confidence.
Phonics, vocabulary and grammar are key and form the basis of all teaching. Cultural awareness and cultural capital are a thread running through teaching

Phonics – planned practice and logical progression via a short focus every lesson.

High frequency vocabulary is revisited and retrieved in different contexts – non
negotiables are shared with students and regularly revisited. Confidence and
automaticity of recall are key. Target language use is modelled, taught and expected
from students as well as teachers. Authentic materials are used but will
be adapted to be appropriate.

How can parents help?

Test your child when they have learning homework.

Explain the importance of learning language for cultural awareness, travel, job opportunities, making friends etc. Learn some items with your child and model enthusiasm for language.

Encourage their interest in any cultural aspects of other countries: cooking, travel, music, popular culture.

Recommended Reading and Preparation for Learning

Use the useful French to use in class to help you speak more French than you have to in lessons.

Use the Non-negotiables list to help you revise and learn those key phrases which are so useful.

Explore how you learn best: flashcards, testing yourself, using i.t. copying language out, recording the sound etc.

Watch a film you already know in French with English subtitles.

Google something you are interested in but in French.

Try out French you have learned in class at home or with your friends, even if you can only do half the sentence in French!





Year 8 **GEOGRAPHY**

Topic Titles

- What is my place in Europe?
- What is the importance of Tropical Rainforests?
- What challenges do Earthquakes present?
- Why are some places poorer than others?
- What is the importance of coastal landscapes?
- What role does the Middle East play in the world?

Intent

We believe that a high-quality Geography education should inspire a curiosity and fascination about the world and its people that will remain with students for the rest of their lives. Our curriculum will equip students with knowledge about diverse places, people, resources and natural and human environments, together with a deep understanding of the Earth's key physical and human processes.

As students progress, their growing knowledge about the world underpinned by a focus on place, should help them to deepen their understanding of the interaction between physical and human processes, and of the formation and use of landscapes and environments. Geographical knowledge, understanding and skills provide the frameworks and approaches that explain how the Earth's features at different scales are shaped, interconnected and change over time.

Links with other subjects

History – the world as it used to be, can be a fantastic subject for demonstrating change over time.

Biology – studies of natural processes often require knowledge of biological concepts e.g. nutrient cycling.

Art – Geographers need to be able to display

ideas in coherent ways that allow others to access them

Maths – coordinates, graphing, data manipulation are all core skills of Geography.

English - the ability to express ideas clearly is vital for success in the subject

How will knowledge and skills be taught?

Our topic choices are framed as 'Big Questions', which are then broken into smaller sub-questions to allow students to investigate natural landscapes and processes and human activities.

A wide variety of teaching activities will support students to be inquisitive, ask questions and find answers about the world around them.

Skills are taught embedded throughout the curriculum, so a lesson about the UK's

Skills are taught embedded throughout the curriculum, so a lesson about the UK's climate may involve a range of maths skills e.g., graphing and data manipulation.

Map skills are taught near to the beginning of the year, so that they can be used throughout. Choropleth mapping, climate graphing, fieldwork skills, data presentation, use of Geographical Information Systems and data analysis are all key skills taught.

How can parents help?

Discuss with students the wide-range of contemporary affairs that are seen in the news, asking students questions about their opinions.

Encourage students to watch documentaries about both the natural world and the human environments.

When out of the house, encourage students to take in their surroundings and observe how places differ.

If possible, take students on day-trips to the Natural History Museum (London), the coastline (anywhere in the UK), to mountainous locations (Brecon Beacons, Peak District, Lake District). Encourage students to study a globe or an Atlas to improve place knowledge. Support students with homework, checking quality and ensuring that the students re-draft if necessary.

Recommended Reading and Preparation for Learning

Prisoners of Geography – Tim Marshall
The Power of Geography – Tim Marshall
Brilliant Maps: An Atlas for Curious Minds – Ian Wright
Rainforest: Dispatches from Earth's Most Vital Frontlines – Tony Juniper
Factfulness - Hans Rosling

Play map games at the following: https://www.geoguessr.com/seterra/en https://worldle.teuteuf.fr/ https://www.ordnancesurvey.co.uk/mapzone/





Year 8 HISTORY

Intent

Topic Titles

1485-1603 - How stable was Tudor England?

1603-1688 - What was the impact of the Civil War?

1688-1838 – Did revolution bring about meaningful change?

Was the Industrial Revolution a 'good thing' for Britain?

Breadth study: Movement and migration

Local study: What can we learn about crime and

punishment in Gloucestershire?

Our curriculum is *broad*, *diverse* and *inclusive*. It allows our students to gain a sense of their own national and cultural identity through developing a thorough understanding of key events in the history of Britain and how they relate to global events. Through studying key events between 1066 and 1485 they will begin to develop the key skills of the historian, using evidence critically and understanding history as a constructed narrative that

varies depending on time, place and perspective.

How will knowledge and skills be taught?

The curriculum is framed around enquiry questions. Overarching questions are broken down into smaller enquiries that link to three themes: power, beliefs and ordinary people. Through tackling these enquiry questions students will practice the skills of explanation, questioning interpretations, critical analysis and justifying opinions. These are transferrable and students will become questioning, curious citizens who are able to handle information in a balanced, critical way.

Links with other subjects

The first topic of the year links with RE as students study the changes to religion under Henry VIII. The curriculum links to science as they consider how developments in scientific thinking and understanding led to challenges to religion. A study of the Arts and Crafts movement links to considering if the Industrial Revolution was a 'good thing' for Britain. Geographical skills will help students gain a sense of place when exploring movement and migration later in the year.

How can parents help?

Students will have access to additional reading and online resources throughout the year such as articles from BBC History magazine and extracts from key texts written by historians who are experts in their field. Students can access all of these resources via the VLE, on the History pages.

Parents can help by encouraging students to:

- remain up to date with homework and consolidation tasks
- ask for the term's 'Reach' reading article
- talk about what they are learning and ask questions, demonstrating curiosity
- look at how they can enhance their understanding by going on a family outing to a historic site – for example a local Catholic or Protestant church, Gloucester docks, or the Bristol museums

students have access to the most up to date historical thinking and stay abreast of new discoveries and events.

These resources will be added to throughout the year to ensure

David Olusoga's book for children *Black and British* is an excellent text that explores Black history in Britain over time.

Recommended Reading and Preparation for Learning





Year 8 MATHS

Intent

The intention of the maths curriculum is to foster pupils' interest, enjoyment, and curiosity of maths. By following the National Curriculum, our curriculum will be rigorous, coherent and connected throughout Key Stage 3. We aim to develop competent mathematicians who are able to apply their knowledge across subjects, year on year.

By designing the curriculum around a mastery approach all students will gain depth to their learning leading to secure and sustained progress over time All students will develop their fluency, reasoning and problem-solving skills.

The department has the strong belief that all students can be successful in maths and teaching for understanding is at the heart of every lesson

Topic Titles

- Properties of numbers
- Directed numbers
- Expressions
- Enlargement and bearings
- Probability
- Fractions, decimals and percentages
- Ratio and proportion
- Sequences
- Parallel lines and polygons
- Proportional reasoning
- Solving equations
- Circles and cylinders
- Graphs
- Probability
- · Measuring and presenting data

Links with other subjects

- Averages and data Science
- Geometric reasoning Art
- Fractions Music
- Logical reasoning computing
- Measures Tech
- Percentages and negative numbers History
- Graph interpretation and measures Geography

How will knowledge and skills be taught?

Knowledge and skills will be taught through a combination of teacher-student explanation and student self-discovery.

Teaching will follow the NCETMs Teaching for Mastery approach with lessons consisting of visual representations, modelling, and purposeful practice to help students build and link their knowledge together.

There is a focus in year 8 of building a on the secure foundation of year 7. Students will revisit ideas they have before and build on these in further depth.

How can parents help?

- Present a positive opinion of maths –please change.
- 'I was never very good at maths' to 'I had to work really hard at made
- Encourage your child to attend Sum Up The Week to consolidate their learning
- Highlight the use of maths in your everyday life calculating change, timings etc
- Speak to your child about the maths they are learning in school and ask them to explain their understanding to you.
- Maintain your child's fluency with timestables, mental maths and written multiplication and division.

Recommended Reading and Preparation for Learning

Murderous Maths – Kjartan Poskitt The Number Devil – Hans Magnus Enzensberger The Man Who Counted – Malba Tahan Alex's Adventures in Numberland – Alex Bellos How Long is a Piece of String – Rob Eastaway How Many Socks Make a Pair – Rob Eastaway Humble Pi – Matt Parker





Year 8 MUSIC

Intent

Throughout our lessons, our goal is for students to develop a knowledge of how music is created with the key musical elements, before growing and challenging this knowledge through the exploration of other musical styles across the globe.

Learning to use notation will help us to learn more challenge pieces in lesson, which in turn will allow us to analyse how these pieces work and why they are effective. Taking this information forward, we will discover the ways that music around the world can be interpreted through notation.

Students will discover the relevance of context when talking about music and further explore how this is useful in understanding contrasting genres.

Topic Titles

How can rhythm help us to further understand the music around us?

What are the links between rhythm and pitch in playing music?

Why is the context of music important?

What role does rhythm play in Samba?

How do our experiences of music differ to others around the world?

What can we learn from modern day music?

Links with other subjects

Music has strong links to Geography as we explore other cultures across the globe and the musical differences. Biology and physics are used to explore how we use our voices and how sounds are produced by instruments.

Music often relies on sequences and patterns, which lead to links in Maths.

 $\mbox{\sc Historical}$ context is regularly discussed throughout Music lessons to create context for the pieces.

How will knowledge and skills be taught?

Regular listening examples every lesson will help students to build a breadth of musical experiences. Through their knowledge of notation and musical elements, students will be able to express their understanding of the music they are listening to as well as justify their opinions.

Group work for performances and compositions will teach students valuable lessons about playing music together, but also crucial skills of teamwork and leadership.

How can parents help?

- Encourage students to visit the VLE, especially the "Weekly Listening" section.
- By taking students to live music events; concerts, musicals etc.
- Listen to music in the car with your child and encourage active listening; what can they hear in the music? What instruments? How are musical elements used? Do they like it and are they able to justify their opinion?
- Encourage your child to try extra curricular music activities, especially Voices, which requires no previous musical knowledge. Music is for everyone!

Recommended Reading and Preparation for Learning

Explore the "Weekly Listening" section of the VLE; practice "active listening", using understanding of musical elements and topics to support opinions.

Listen to a variety of music. Spotify, Youtube and services like "Tidal" or "Qobuz" can be useful for this.

Visit IMSLP.org to find a variety of sheet music

Spend time experimenting with different instruments, consider instrument / singing lessons in school





Year 8 PHYSICAL EDUCATION

Intent

As a Physical Education department, our main ambitions fall under three categories:

- Essential & Fundamental Body Management Skills whilst learning Sport Specific Skills.
- Promotion of Physical Fitness as Fun.
- 3. Developing Teamwork, Sportsmanship & Cooperation.

We want to inspire every student to pursue a lifelong participation in sport. Whether this be at the highest professional level possible in a particular discipline or simply to inspire a student to continue to live a healthy-active lifestyle

Topic Titles

Autumn Term Sports:

- Rugby
- Hockey Netball
- Badminton
- **Gymnastics** Football Basketball

Spring Term Sports:

Cricket

- Tennis
- Athletics

Rounders

Extra-Curricular Sports:

- Dance
- Cross Country
- Strength & Conditioning
- Table Tennis

Links with other subjects

Science: Aspects of 'How the Body works. How the body reacts to exercise, Nutrition, What is an injury and understanding the recovery process.'

Maths: Measuring our Athletics times and distances! Music: Understanding Rhythm, Unison & Cannon for Gymnastics and Dance!

Geography: Cross Country, enjoying and respecting the natural environment! History: Why games were invented and the strange rules that they involve, records and how we can train to break them!

How can parents help?

By encouraging and enabling students to attend extra-curricular sports clubs or clubs outside of school.

Watch Live Sport - Live Sport provides a great sense of excitement for anyone involved, whether it on the TV or at the local sports club. Pop out and watch anything you can!

BY JOINING IN! - Your child is much more likely to take part if you do too!

How will knowledge and skills be taught?

A Physical Education lesson at HSL always starts with a Fit in Five. This is a warm-up but also a short window in which the students are encouraged to develop their fitness through: Strength, Cardiovascular Endurance or Skill orientated activities.

Our lessons will then be based upon a variety of different teaching pedagogies, some very much teacher led (Javelin Throwing), with some being fully based on guided discovery, encouraging the students to find the solutions to the problems presented to them.

Recommended Reading and **Preparation for Learning**

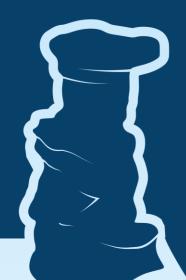
Bounce - Matthew Syed

You are a Champion - Marcus Rashford

Kick - Mitch Johnson

Local Newspapers - Sport Sections (Celebrating local sporting achievements)

BBC SPORT - YouTube BBC SPORT - Website and App (Great highlight videos and some interesting articles





Year 8 RELIGIOUS EDUCATION

Topic Titles

What is Hinduism? What do Hindus believe? How and where do Hindus worship?

What is Buddhism? What do Buddhists believe? How do Buddhists worship?

What is Sikhism? What do Sikhs believe? How do Sikhs worship?

Philosophy - Why do we disagree? Introduction to debate

Intent

Our department aim is to ensure that every child is religiously literate by the time they leave us. All children will be offered a broad and detailed Religious Education curriculum covering the six major world religions, non-religious and secular ideas. They will be given the opportunity to explore their own religious, philosophical and ethical ideas and compare these to the ideas of academic scholars and their peers alike. By the end of year 9 pupils will be able to confidently compare and contrast the views of the various religions studied and apply these to modern philosophical and ethical issues. This will serve them well in the multicultural society we live as well as preparing them for GCSE study.

How will knowledge and skills be taught?

There are two key assessment objectives:

AO1 – Learning about religion

AO2 – Learning from religion

age with and learn about three major world

Throughout the year students will engage with and learn about three major world religions in the first instance – Hinduism, Buddhism and Sikhism. Throughout the curriculum they will consider the experience of those who follow these faiths and what can be learnt from this. Students will learn in a variety of ways, accessing a variety of tasks throughout the year.

Links with other subjects

In RE students will draw on learning from English as they structure extended responses to key questions. There are also important links to the other Humanities subjects of geography and history, as students learn about the origins of world religions. The RE curriculum draws on the arts as students consider the importance of art and music in worship across a range of religions.

How can parents help?

Parents can help by encouraging students to:

- remain up to date with homework and consolidation tasks
- ask for the term's additional reading article
- talk about what they are learning and ask questions, demonstrating curiosity
- look at how they can enhance their understanding by discussing news stories related to the religions studied

Recommended Reading and Preparation for Learning

We would encourage students to read widely to broaden their understanding of all world religions and non-religious or secular viewpoints. BBC Bitesize has some excellent information about each of the world religions.

Students will also find additional materials to support their learning on the VLE. These will be added to as appropriate throughout the year.





Year 8 **SCIENCE**

Topic Titles

8B1 Biology Topic 1 Respiration, Gas Exchange and Biomechanics

8C1 Chemistry Topic 1 Energetics, The Periodic Table and Materials

8P1 Physics Topic 1 Electricity and Magnetism

8B2 Biology Topic 2 Genetics and Evolution

8C2 Chemistry Topic 2 The Earth, Atmosphere and Chemical

8P2 Physics Topic 2 Energy, Machines, Fuels and Power

8WS Working Scientifically Topic Being a Scientist

Intent

Our main aim and ambition in science is for our students to develop a curiosity and a desire to want to find out and understand more about the world around them. Science is a subject rich in knowledge that can change lives and open so many doors for our students. Through teaching a varied curriculum of biology, chemistry and physics, students develop the skills that they require to be able to apply their understanding of science to situations all around them and allow them to make informed choices as an educated citizen who promotes inclusivity. Students will be encouraged to question and recognise the power of rational explanation, fostering a sense of enthusiasm and creativity about natural phenomena.

How will knowledge and skills be taught?

In lessons students will learn from their teacher, and work individually or with others, to develop their scientific knowledge and conceptual understanding.

Practical activities will help students understand the nature, processes, and methods of science, as well as the uses and implications of science for today and the future.

Completing homework using provided resources will help consolidate students' understanding and prepare them for future lessons.

Optional activities will challenge and extend students' scientific application.

Links with other subjects

ART - Drawing accurate, annotated scientific diagrams.

DT - Material and machine properties. ENGLISH - Comparatives, etymology, recalling exact definitions, writing and following detailed instructions.

GEOGRAPHY - Geology and nutrient cycles.

HISTORY - Periodic table, genetics and evolution

theory developments, extinctions & atmosphere composition MATHS - Converting units, calculations, using and rearranging equations, rounding results, drawing scatter and bar graphs.

PE - Effect of exercise on respiration types and gas exchange

How can parents help?

Encourage students to use the topic resources on the VLE, the Year 7 Science Basics booklet and the CGP KS3 Science Study Guide provided.

Extend students' understanding using appropriate YouTube channels [e.g. Cognito, PrimroseKitten, KhanAcademy, FuseSchool, AmoebaSisters, Freesciencelessons, AsapScience, Crash Course, SciShow, Veritasium, Kurzgesagt - In a Nutshell, BBC Earth Lab, TED-Ed, Royal Society of Chemistry and relevant Science-related films, series, and documentaries on various streaming services

Take an interest – be curious and ask students about their learning

Recommended Reading and **Preparation for Learning**

How to Grow a Human: Adventures in Who We Are and How We Are Made - Philip Ball The Periodic Table Book: A Visual Encyclopedia of the Elements - Dorling Kindersley How the Body Works: The Facts Simply Explained – Dorling Kindersley Magnetic Electricity! The Power of Magnets and Their Role in Electricity - Science for Kids - Children's Energy Books Genes and DNA (Kingfisher Knowledge) – Richard Walker The Incredible Human Journey – Alice Roberts Horrible Science Collection - Nick Arnold The Secret Life of Genes – Derek Harvey There Is No Planet B - Mike Berners-Lee Genetics in Minutes - Tom Jackson The Periodic Table - Primo Levi

More recommendations at: