

Year 9 Spring 1 Lockdown Curriculum

Art

Topics

- Continuing practical work based on the theme 'Architectural Environment'
- Refining first sustained outcome using colour, pattern, texture/mark-making
- Exploring the work of artist Michael Landy and illustrator Lottie Jackson-Eales to develop ideas for second sustained outcome, based on the student's local environment

Recommended Resources

- To support students in considering their career options and in understanding the benefits of studying Art & Design based subjects at GCSE and beyond, we highly recommend this Netflix series for the entire family to watch: Abstract: The Art of Design.
- Check the Art Dept Instagram for various art challenges, celebrations of student work and more! https://www.instagram.com/art_at_wallington_girls

Biology

In Biology this term we will be working through Topic 1 (Key Concepts in Biology).

- Microscopes 1 (use of microscopes and magnification calculations)
- Microscopes 2 (SI units and electron microscopes)
- Bacteria
- Diffusion
- Active Transport
- Osmosis
- Comparing diffusion, active transport and osmosis

Recommended Resources

- [Pearson Active Learn](#) – this is where the GCSE Edexcel Biology text book can be found in addition to several activities that teachers may set for their classes.
- FROG – in the KS4 Biology tab there are lesson resources and revision materials. There is also a recommended further reading list available.
- Additional revision websites:
 - [BBC Bitesize Edexcel](#) – a useful revision website for Edexcel GCSE Biology
 - [Physics and Math Tutor for Biology](#) – a useful revision website for Edexcel GCSE Biology
 - [Seneca Learning](#) – resources for Edexcel GCSE Biology
 - [S-cool](#) – a useful general revision website
 - [Kayscience](#) – a useful general revision website

Chemistry

Topic

C2- The Periodic Table

Recommended Resources

- **FROG:** Chemistry GCSE > Teaching Resources > Home Learning - there is a wealth of resources here and is the first place I would direct students looking for additional resources;

- **Kerboodle** – all students have log in details. Gives students access to the virtual textbook, interactive tasks and assessment material;
- **Oak National Academy Online Classroom:** [Oak National Academy Online Classroom \(thenational.academy\)](https://www.thenational.academy) an excellent website that has a teacher explanation clip, worksheet and assessment quiz for every lesson.
- **Royal Society of Chemistry:** [Education | Royal Society of Chemistry \(rsc.org\)](https://www.rsc.org/education) – a lot of the resources here are aimed at teachers, but there are many very useful resources for students, too. This website is particularly useful for watching demonstration clips of core practicals.
- **YouTube** – below are a list of some of my favourite channels:
 - **Fuse School**
 - **Freesciencelessons**
 - **Cognito**
 - **MrPidge Science**

Computing

Topics:

Using Seneca student will work through the following topics and complete an assessment after each topic.

- Fundamentals of Algorithms
 - Computational thinking
 - Pseudocode and Flow diagrams
 - Interpreting, correcting and completing
 - Searching
 - sorting
- Programming
 - Fundamentals
 - Data Types
 - Operators
 - Program Flow
 - Subroutines
 - Arrays and Strings
 - Lists
 - File handling
 - Good practice
 - Robust and Secure Programming
 - Testing
 - Types of programming languages
 - Translation
- Fundamentals of Data Representation
 - Units of information
 - Number bases
 - Hexadecimal
 - Binary Arithmetic
 - Representing Text
 - Representing Images
 - Representing Sound
 - Data Compression

Recommended Resources

<https://www.w3schools.com/python/> - Excellent Python tutorials with lots of examples of how to use Python.

<https://www.kodewithklossy.com/> an excellent website to get students to increase their confidence and inspire them to get more involved in computing based technology

<https://code.org/learn> Engages students in a variety of coding applications to further enthuse their learning of Computing

[CraignDave](#) – a video channel which explores GCSE level topics using 10 minute videos

Design and Technology (Food, RM, and Textiles)

Food topics:

- Food provenance and exploring farm grown crops. Looking at the differences between intensive farming and organic farming. Practical cook along -locally sourced fruit muffins
- Farm reared animals and distinguishing how animals can be intensively reared. Investigating free range farming and how we can be assured that our meat is safe to eat. Importance of using food which has few food miles and sustainable for the environment. Practical cook along – spinach potato and chickpea curry.
- Wild foods that grow in the UK at different seasons and the benefits of home-grown food. Eating seasonably. Practical cook along – potato croquettes.
- Looking at the advantages and disadvantages of using manufactured and processed foods. Learning about primary and secondary food processes. Practical cook along - home-made flat bread and dip.

Recommended Resources

<https://www.bbc.co.uk/bitesize/guides/zks8jty/revision/2>

<http://eatseasonably.co.uk/>

<https://www.bbc.co.uk/bitesize/topics/zrdtsbk/resources/1>

RM topics: design movements, iterative designing, materials (plastic, paper), drawing techniques, sketching; CAD drawing, sustainability (life cycle)

- Avatar Project – links to paper theory
- Passive amplifier task – sustainability, creativity, making skills
- Designer research project – design movements
- Typography task – create your own font
- Learning about manufacture of everyday products
- Chindogu
- Sketching

Textiles topics:

- Costume design: Taking inspiration taken from Bauhaus. Research and creating a mood-board.
- Costume design: Taking inspiration taken from Bauhaus. Designing and Model Making Practical task.
- Fabric Surface Design. Using CAD to design repeat patterns.
- Textile Entrepreneurs Task. Designing for a client and understanding user needs.

Drama

Topics:

- Recapping “Naturalism”
- Preparation for duologue/ small group performance of script

Recommended Resources

- Summary of Stanislavski’s Method:
<https://www.youtube.com/watch?v=JDDitfsZS1c>

- BBC Bitesize: On Stanislavski
<https://www.bbc.co.uk/bitesize/guides/zxn4mp3/revision/1>
- BBC Bitesize: KS3 Drama (specifically pages 2,3,4)
<https://www.bbc.co.uk/bitesize/guides/zsf8wmn/revision/2>

English

Topics

The Modern Play (The Crucible, A Raisin in the Sun or A View from the Bridge)

- The way in which writers draw on contexts to inform their writing
- The impact of dramatic techniques
- Analysis of literary techniques
- Drawing on the play as a stimulus for writing in different formats

Recommended Resources:

- <https://www.bbc.co.uk/bitesize/guides/zyf6sg8/revision/1>
Useful resources on A View from a Bridge.
- <https://www.youtube.com/watch?v=FCR4blZtjvc>
Crucible – A full length version of the play.
- <https://www.youtube.com/watch?v=jzfgwxENvLk>
A Raisin In The Sun - full length performance of play.
- <https://www.youtube.com/watch?v=comkyLdZUU0>
A View From The Bridge – extract of a performance.

French

Year 9 is currently studying the topic of holidays, in particular:

- Revision of countries
- Introduction of transport, accommodation and leisure activities
- Expressing opinions with comparisons and superlatives
- Focus on use of pronouns
- Revision of present, past and future tenses
- Use of key verbs and structures used in GCSE French
- Translation into English and vice versa.

At the end of the term, students will complete a speaking assessment on the topics studied.

Recommended Resources

BBC Bitesize (select French /KS3; lots of games and fun activities to learn)

<https://www.bbc.co.uk/bitesize>

Education.vic.gov (for interactive activities and worksheets to support class learning)

<https://www.education.vic.gov.au/languagesonline/french/french.htm>

Languages online (go to français tab and complete any of the quick links topics including grammar, vocabulary, quizzes, etc)

www.languagesonline.org.uk

duolingo (also an app)

<https://www.duolingo.com/>

Conjuguemos (go to library/French and select any of the verbs, grammar or listening exercises. Focus on regular present, past and future tenses)

<https://conjuguemos.com>

Geography

This half term students will be starting to study ecosystems, looking what gives different biomes their varied characteristics and how plants and animals adapt to these conditions, whilst looking at the threats and challenges facing these areas. This links into GCSE Geography content.

Ecosystems, biodiversity and management

- How are the world's large-scale ecosystems distributed and what are their characteristics? (tropical, temperate and boreal forests, tropical and temperate grasslands, deserts and tundra) How do climate and local factors (soil and altitude) influence the distribution of different large-scale ecosystems?
- What resources are provided for people by the biosphere? How is the biosphere increasingly exploited commercially for energy, water and mineral resources?
- How are the UK's main terrestrial ecosystems distributed and what are their characteristics? (moorland, heath, woodland, wetland) Why are marine ecosystems important to the UK as a resource?
- Tropical rainforests: Biotic and abiotic characteristics – how are they connected and interdependent? Why do tropical rainforests have very high biodiversity? How have plants adapted to the environment?
- What goods and services are provided by the rainforest? How is climate change threatening the structure, functioning and biodiversity of the rainforest? What are the economic and social causes of deforestation?
- Case study: Madagascar. What are the political and economic factors that have contributed to the sustainable management of a rainforest in a named region – Madagascar? (governance, commodity value and ecotourism)

Recommended resources:

- It's really important that students keep up with what's going on in the world: [Home - BBC News](#)
- BBC Bitesize: [What is an ecosystem? - Ecosystems - Edexcel - GCSE Geography Revision - Edexcel - BBC Bitesize](#)
- Seneca learning – Geography GCSE Edexcel A: [Free Edexcel A Geography GCSE Revision | Seneca \(senecalearning.com\)](#)
- The Great Graph Match: [The Great Graph Match \(basic version\) \(nasa.gov\)](#)

German

What?	Discuss pocket money Talk about how much money they need Use dative pronouns for the indirect object für + acc/ mit/ von+ dat Talk about part-time jobs and give opinions on them Use 3 tenses Talk about the job they would like in the future Use infinitives with and without zu Use word order to work out meaning
Recommend	Quizlet website for all vocabulary: Easy German channel on YouTube; short entertaining videos about aspects of life in Germany Kiraka News for young people to read and listen

History

Topics

- World War One
 - Trench Warfare
 - Theatres of War
 - End of the War
 - Positive and Negative Impacts
 - Treaty of Versailles
- World War Two
 - Did Britain win the war?
 - Key events and moments
 - What did the British do to win the war?
 - Why did Germany lose the war?

Recommended Resources

- A helpful range of resources can be found on Frog. There is a lot of additional articles and reading on Frog.
- BBC Bitesize History KS3
- World War One and Two are easy topics to be immersed in. Lots of documentaries, historical fiction and films to be explored.

Maths

Topics:

- Algebra Terminology
 - equations
 - expressions
 - Identities
- Expanding 3 brackets
- Solving equations
 - With brackets
 - With fractions
 - Forming and solving equations
- Quadratics
 - Factorising
 - Solving
 - Forming quadratics from problems and then solving
- Ratio
 - Sharing ratio
 - Algebraic ratio
- Similar Shapes
 - What are similar shapes
 - Finding lengths of sides

Recommended Resources

- We would strongly advise the use of Hegarty Maths - <https://hegartymaths.com>
- All students have a login, and they are able to watch videos on topics, complete quizzes and seek help or get feedback from their teacher

- Other sites that are useful
- Corbett Maths - <https://corbettmaths.com/contents/> - website with a range of videos, worksheet and exam questions for all GCSE topics
- My Maths - <https://app.mymaths.co.uk/myportal/library/9/85> - website with a range of tutorials, worksheet and exam questions for all GCSE topics. All students have a login.
- Dr Frost - <https://www.drfrstmths.com/resourceexplorer.php> - website with a range of powerpoints, worksheet and exam questions for GCSE topics

Music

Topics:

Popular Music styles of the 20th century, Baroque

- Features, social and historical context, artists/performers, musical examples
- Baroque period
- Features, instrumentation, genre
- Ground bass, sequence, imitation, polyphonic texture
- Recognising baroque music
- Composing a sequence
- Using music software at home
- Making links with baroque music and 20th/21st century styles
- Revising Blues and Rock n' Roll

Recommended Resources

- [baroque music - Bing video](#)
- [Instruments in the Baroque orchestra - Baroque orchestral music - GCSE Music Revision - BBC Bitesize](#)
- [piano guys - YouTube](#)
- [8 Facts about Baroque Music | Fact File](#)
- [BBC - Search results for music](#)
- [GCSE Music - Edexcel - BBC Bitesize](#)

PE and Dance

Topics

- Weeks 1&2 – Fitness Testing Activities/Inter-house competition (Results submitted to their PE teacher using google form emailed to students)
- Weeks 3-6 – Dance and Fitness (1 lesson per week) Each lesson begins with a dance based fitness work-out followed by a Dance tutorial in which students will learn a short dance from 'Commercial Dance' Music videos
- Weeks 3-6 - PE Theory (1 lesson per week) Students will explore the theoretical aspects that underpin the sports performer. This is an exploration of some of the topics explored within GCSE & A-Level PE; Skeletal system, fitness components, illegal use of drugs in sport and the evolution of technology in sport

Recommended Resources

- Students should be using the 'Remote Learning PE Powerpoint sent to them and on FROG, along with the Theory Task sheets
- [GCSE PE Theory Bitesize](#)

Physics

Topics

- Waves (topic 4 part 1), including:
 - Amplitude & wavelength
 - Transverse & longitudinal waves
 - Pitch & volume
 - Sound
 - Hearing & the Ear
 - Ultrasound
 - Infrasound

Recommended Resources

- A huge array of helpful resources & links can be found on the GCSE Physics FROG page:
 - The 'home' tab has links to BBC Bitesize, the IOP, Physics & Maths tutor and many other good websites, plus access to topic checklists and other revision resources.
 - The 'learn' tab includes video links for each specification point of each topic, plus our usual in school lesson resources,
 - The 'school closure' tab is where all remote lessons can be found, including links to pre-recorded videos of these if a student is absent.
- Students also have access to the textbook online plus interactive activities through ActiveLearn.
- Seneca learning is an excellent resource to revise the basics for each topic. Search for 'Edexcel Physics GCSE Higher' to find content specific to our specification.
- It is also worth keeping an eye on BBC2 between 1 & 3 pm each day, which is showing many excellent science documentaries and programmes. These are also available at any time on BBC iPlayer.

Spanish

Year 9 is currently studying the topic of school, in particular:

- Revision of key subjects and jobs
- School facilities
- Comparison between English and Spanish schools
- Pressures and problems at school and opinions, in particular in the past
- Revision of present, past and future tenses
- Use of key verbs and structures such as *gustar*, *encantar*, *desde hace* and negative expressions
- Translation into English and vice versa.

At the end of the term, students will complete a past Reading and Listening paper on the topics studied.

Recommended Resources

Seneca (go to student access/GCSE/Spanish GCSE)

<https://senecalearning.com/en-GB/>

Languages online (go to *español* tab and complete any of the quick links topics including grammar, vocabulary, quizzes, etc)

www.languagesonline.org.uk

duolingo (also an app)

<https://www.duolingo.com/>

Conjuguemos (go to library/Spanish and select any of the verbs, grammar or listening exercises. Focus on regular verbs)

<https://conjuguemos.com>

BBC Bitesize (select Spanish GCSE, lots of games and fun activities to learn)

<https://www.bbc.co.uk/bitesize>

Theology and Philosophy

Topics

This term Year 9 will continue their Philosophical studies by looking at how evil and suffering in this world challenge the faith of theists; The Problem of Evil. They will look at theist responses to the Problem of Evil and critically evaluate both the Problem of Evil and the responses to it. They will study:

- An Introduction to the Problem of Evil
- The Freewill defence
- The Fall
- Test of Faith
- Jewish Responses
- The Devil

Their lessons will also include P4C sessions throughout the topic which will allow students to discuss relevant, and Philosophical, ideas.

Recommend Resources

A History of Ideas - Fantastic BBC website exploring a range of big ideas and big thinkers in Philosophy

Philosophy Bites – Short but fascinating podcasts by contemporary philosophers

Philosophy – The Basics – Great little book introducing key topics and ideas in philosophy

Sophie's World – Lovely novel that introduces the big thinkers of Western philosophy through a great story

Philosophy Foundation – some P4C style questions to keep the philosophical mind occupied

<https://www.philosophy-foundation.org/enquiries/age:39>