

Year 11 - GCSE Geography

Within the GCSE we aim to dedicate learning time to 5 key themes to assist students in both being fully prepared for their GCSE assessment, alongside helping them develop as geographers. These themes are all essential in assisting young geographers with the skills they need to understand the world around them.

Location Knowledge and Places.

Understanding of Physical Geographical Processes.

Understanding of Human Geographical Processes.

Geographical Skills.

Enquiry Skills/ Decision Making, Applying Knowledge.

Autumn Term

Global Hazards

We follow on to one of our more technical units. The study of **meteorological hazards** and **tectonic processes**. Students will be able to capitalise on their prior learning from Yr 7 and 8 units on meteorology and their Yr9 unit on natural hazards in order to further understand the complex scientific process involved in **hazard creation, impact and response**. Through this topic students will begin to grasp the enormity of routine and **scale of the earth's climatic system** and the **astrological factors** that influence our climate.

Through studying the **tricellular model** students consider the varying **climate zones** of our planet and the role of **air pressure** in influencing systems.

Students will locate extreme world environments on a variety of scales alongside reflecting on the notion of extreme weather. We feel it is important for students to be able to reflect on the **intensity and relevance of extreme weather events**, alongside considering the importance of awareness and frequency in predicting a country's capacity to **mitigate against events**.

Students can consider a variety of weather processes contributing to hazardous weather. These include tropical storms, drought and heatwaves and El Nino. Students will develop skills in both **mapping and describing the distribution** of the frequency of these events, alongside the opportunity to reflect on the relationship between these stand alone events and the current process of **global warming** in influencing these events.

The development of these case studies will incorporate place-specific causes, resources and opportunities for mitigation. Students will gain a rich insight into the use of **technology and future solutions** at solving these problems, we aim here to enthuse students into the potential careers available in hazard mitigation and solving world problems. There are growing opportunities in hazard planning and architecture that we would like students to consider.

Through studying the structure of the earth students will recap and take a detailed look at tectonic processes and the diverse landforms and features that they create. Students will study a tectonic events to exemplify the **challenging interaction between people and earth science**, students will then have the opportunity to consider wider impacts of tectonic activity in creating opportunities for areas of the world, building on KS3 to consider the benefits of tectonic activity as opposed to the one-sided perspective of damage and destruction.

Students will reflect on the effectiveness of mitigation strategies in managing these events and consider the long-lasting impacts of these events on **communities**

Changing Climate

One of the most important and poignant topics that we study. Students will build on the work from Yr9 exploring the more complex science around climate change and issues of environmental justice and evidence that exist around the climate change debate.

Our aim is to offer students a fact-based introduction to the complex science and topical debates around climate change as a process. We are ethically driven to ensure that students have an awareness of the future challenges of climate change and the role of **global stakeholders** to slow the process and ensure equality for the world population. **This unit is in Year 11 as it is one of our more technically challenging topics, and one that is very useful for students to reflect on their previous units and consider the links to climate change. For example global hazards and dynamic development.**

Students will consider historical trends in climate change. **Evaluating ice cores, ocean sediment, historical records and fossil data.** Students will learn about the natural phases of warming and cooling the world has experienced. **Students will consider the reliability of the evidence in order to develop a fact-based, critical interpretation of climate change.** Following this students will master these skills in evaluation and analysis through looking at the modern day evidence, **considering glacial retreat, sea level rise, temperature data and the frequency of extreme weather events.** As students move into Yr11 we wish for them to use a wider base of **resources to evaluate geographical phenomena** and climate change provides an excellent basis for this.

Students will learn about theories on historical cooling and warming, including solar orbit theory, solar output theory and eruption theory. Students will then build on their Yr9 knowledge to study the **enhanced greenhouse gas effects** alongside the positive feedback mechanism (**cloud cover, low plant growth and albedo**) which are exacerbating these effects. Whilst we don't wish to scaremonger over the likely impacts of climate change we do wish students to develop realistic perceptions of the likely outcomes in the future.

Finally students will consolidate their **global location knowledge** to reflect on the varying impacts of climate change, considering both the veracity of these impacts and the longer term impacts for communities across the globe. As global citizens we want students to be aware of the winners and losers of climate change and develop an imperative to be active global citizens against the systematic pollution and neglect that has come to epitomise our current time on earth.

As this is an ever-changing, contemporary issue, we endeavour to keep this unit as current as possible, with a key focus on any socio and political development surrounding climate change. We explore the COP26 climate summit and critically evaluate the role of all stakeholders in the fight to protect our planet.

Spring Term

Sustaining Ecosystems

One of our most interesting topics is considering the **unique ecosystems** of our planet, considering what the future holds for these spaces and analysing the complex physical and human interactions that make up these environments.

Students will start by studying the distribution of global ecosystems including the ecological diversity present in these. This will build on students' prior understanding from climatic hazards and the global distribution of biomes. Students will use skills from global hazards to analysing the factors leading to the creation of **deserts, rainforests, coral reefs, temperate zones and the polar tundra.** In order to appreciate

these unique environments, students will consider the **flora and fauna** that exist there. We deliver this unit in Yr11 to complement the higher level understanding that students require to understand the complex interrelationships present in these ecosystems.

Through studying tropical rainforests, students will appreciate their environmental and economic value. Students will consider the **fragile cycles (water and nutrients)** within this ecosystem to reflect on the **impact of human activity and the longer term impacts of this activity, making clear links to climate change.**

Students will study the **Crocker Range Biosphere Reserve** to **evaluate local sustainability and begin to appreciate local initiatives to solve global problems.**

Through comparing the **Arctic and Antarctica**, students will be able to reflect on the **changing nature of these places and the physical geographical features that define these seemingly similar environments.**

Moving forward, students will consider the human threat to the polar zone and the impact on its flora and fauna. Through studying **Antarctica** students are able to reflect on management techniques at different scales. **Considering the entrepreneurial opportunities that some have used through studying Union Glacier and the more strategic role that the Antarctic Treaty provides.** We want students to be informed about the effectiveness of global actions in order to help them gain a sense of the need for unity and direction when establishing meaningful global change.

Resource Reliance

Students' final unit really helps to summarise the learning from previous units. This unit challenges students to reflect on the ability of the planet to meet the needs of all the people within it.

Initially students consider the **carrying capacity** of our planet, this draws on prior learning about Ethiopia, the UK and global hazards. Students will then reflect on the various theories of the **population-resource relationship** (Malthus and Boserup) and how these are evidenced through global examples.

Students then consider the impact of human activity on ecosystems in order to meet the needs of the population. These include irrigation of the **Aral Sea**, fishing within the **North Sea and Southern Ocean** and **intensive farming and land grabbing** across **Asia and Sub-Saharan Africa.**

Through focussing on **Ethiopia** students will study the changing idea of food security. Students will consider the effectiveness of historical initiatives, local schemes, **large scale modern-day methods and global intervention in meeting Ethiopia's food security needs.** **This is designed to help kickstart the revision of this country from the initial unit and begin to help students make links between these different topics.**

Lastly students **will consider a range of technological advances** to help solve the global food crisis. This will help give students the opportunity to reflect on solutions for the future and inspire them to become solution makers in the future themselves.