

Scheme of Learning: KS3 – Year 9

Topic Sequence:

1	2	3
Rivers and Coasts	Endangered ecosystems	Urban issues and challenges

Topic Overview:

This topic introduces the students to some of the biomes that exist on earth. It combines both physical and human geography and will develop their understanding of the complex relationships between people and the environment. The key biomes to be discussed will be the tropical rainforests, hot and cold deserts, tundra and taiga. Students will learn why each biome exists by linking it to the global atmospheric circulation having had a brief introduction to this in year 7 in the wild weather unit. Once the reasons for locations is established, students will be studying the relationships that humans have with each environment and the impacts that we are having now and how these impacts may affect us in the future.

Lesson Sequence:

Students will start with an overview of the location of world biomes. Links will be made to lessons done in year 7 using latitude and longitude as well as global atmospheric circulation. This is another chance to embed knowledge of place. The first biome to be studied in detail is the tropical rainforest. Students need to understand the nutrient cycle in the rainforest before moving on to look at the impacts of deforestation. There is often a misconception that soils in the rainforest are fertile. Despite infertile soil, forests contain over half of the planet's plant and animal species; many of the important in our everyday lives. The extreme climate makes life for plants and animals that live there challenging. Students will look at how adaptations are made to allow organisms to thrive in this environment. Deforestation is a global issue that will have potential impacts on future climate. Links back to the climate change work in year 7 will be made. Links can also be made to the work done in year 8 on development, with many of the countries having tropical rainforests being relatively poor and therefore having a very different opinion about what should be done with the forests. Evaluation of the reasons behind deforestation will be assessed with students being challenged to look at both sides of the argument. Moving north and south of the equator, students will look at hot deserts with links made to the climate change and population pressure work done previously. Students will be introduced to the concept of desertification and how in the future there could be potential for areas in Europe to become deserts. Before moving to the colder biomes, we will focus on the biomes that exist within the ocean. The oceans are often a forgotten area when it comes to studying climate change and human impact. We will look at the impacts that humans are having on this biome focussing on the Pacific garbage patch and the importance and destruction of the coral reefs. The final biomes to be visited will be those in the far north and south; taiga, tundra and the Arctic/Antarctic. Students will be able to recognise the difference between the three and will explore the impacts of climate change on each of the environments. Links will be made back to the work done in year 8 on energy and resources. As future demand for resources grows and the management of mineral rich continents such as Antarctica come under increasing pressure, students will be encouraged to evaluate the issues surrounding the exploitation of one of the last wildernesses on earth.

Sequence of Lessons:

1	World Biomes
2	Rainforest cycles
3	Plant adaptations
4	Animal adaptations
5	Deforestation
6	Deforestation
7	Hot Deserts
8	Oceans
9	Coral Reefs
10	Tundra
11	Taiga
12	Antarctica
13	Dear future generations
14	Revision
15	Assessment
16	
17	
18	

Topic Resources:

Knowledge Map:	Endangered ecosystems	Any other Resources:	
----------------	-----------------------	----------------------	--

Assessment:

Knowledge:	22 question knowledge test
Application of Knowledge:	12 marks related to application of knowledge

Supportive Reading:

Any supported reading listed here	