Topic Sequence:

1	2	3	
Tectonic hazards	Weather hazards and climate change	Changing economic world	The living world

Topic Overview:

The last topic at KS4 in Year 10 is the living world. This section focusses on Tropical rainforests and cold environments. There are quite substantial links between this Geographical topic and what students learn in Science. This unit has links with previous aspects of Geography in Year 10, significantly the global atmospheric model as pupils apply this understanding to where Ecosystems are found globally. Pupils are then able to use this knowledge to understand that plants and animals have to adapt to their surroundings so that they can thrive. We identify these issues in both tropical rainforests and cold environments. Furthermore, we then identify how these fragile environments are impacted by humans. We analyse how these environment bring economic gain but at a cost to the environment. Finally we look to the future and have understanding of how we can manage these environments so that future generations benefit.

Lesson Sequence:

The sequence of lessons are linked to the AQA specification and follow a logical sequence. Initially pupils will learn about local ecosystems, how they link in relation to the nutrient cycle, biodiversity and human impact. We study a local example in Avington Park in Hampshire where change happened due to natural factors and human factors. To provide background knowledge to this, pupils will have identified an understanding of food chains and food webs. Pupils will learn how energy is lost at each trophic level and why this has occurred. Finally in this section pupils need to have an understanding of the nutrient cycle. This will form a base knowledge to how fragile environments can be impacted by human activity. Following on from gaining this base knowledge of ecosystems, we begin to focus on tropical rainforests. In this section we focus on tropical rainforests. We initially gain a sense of place, understanding where tropical rainforests are on our planet. This is followed by the structure of the rainforest where pupils analyse each layer of the rainforest and identify how animals and plants have adapted to each layer. Malaysia is an area that suffers from high levels of deforestation, pupils will analyse the cause of this deforestation and the consequences on communities such as the Kenyah tribe. Finally, all pupils should be able to identify the reasons why a rainforest should be protected and the management humans can use to protect these vital environments.

The Geography department chose for the last topic cold environments over hot desert environments. These cold environments like tropical rainforests are fragile ecosystems. Initially we identify where cold environments are on our planet and link learning from the atmospheric circulation model to improve that understanding. Identifying characteristics that are shared across cold environments and related opportunities such as mining, fishing in the Barents sea and tourism. However, there are many challenges faced in these fragile ecosystems and pupils gain an understanding of the Exxon Valdez disaster. Finally, pupils identify the management that is required for these ecosystems to thrive and how countries work together to protect them.

Sequence of Lessons:

1	Introduction to ecosystems
2	Location of ecosystems
3	Food chains and food webs
4	TRF location and climate
5	TRF structure and adaptation
6	TRF deforestation
7	TRF case study Malaysia
8	TRF why should they be protected
9	Sustainable management
10	Characteristics of cold environments
11	Opportunities of Svalbard
12	Challenges of cold environments
13	Management of cold environments
14	Revision
15	Assessment
16	
17	
18	

Topic Resources:

Knowledge Map:	The Living World	Any other Resources:	

Assessment:

Knowledge:	15 mark knowledge test
Application of Knowledge:	39 marks related to application of knowledge

Supportive Reading:

Any supported reading listed here	DFID report Malaria net consortium Regional difference in the UK