

LEARNING JOURNEY

Biology



B7 – Humans and the environment (SEPS)

Year 10 Summer Half Term 1

This module continues your learning journey from previous learning in Key Stage 3 about the environment.

You will develop a much greater understanding of interdependence between consumers and producers and how they photosynthesis and respiration aids the cycling of elements.

You will also study how the impact of exponential human population growth has impacted on the environment and what methods we're using to minimise the damage being done.

Humans and the environment

Materials cycling

In this lesson you will learn how nutrients are cycled through the ecosystem and how organisms are interdependent on each other

Carbon cycle

In this lesson you will learn about how carbon is cycled through the atmosphere in organic and inorganic methods

Rate of decay RQP

In this lesson you will learn how organisms cause decay and what factors will speed up the rate of decay

Human population explosion

In this lesson you will learn how population growth has had an impact on biodiversity

Deforestation and peat bogs

In this lesson you will learn how deforestation and peat bogs are under threat

Global warming

In this lesson you will learn how greenhouse gases maintain the global temperature and how these gases have increased

Air pollution

In this lesson you will learn how the sources of air pollution has had an impact on biodiversity

Land and water pollution

In this lesson you will learn how the sources of land and water pollution have had an impact on biodiversity

Impact of change

In this lesson you will learn how climate change is affecting the distribution of organisms

Maintaining biodiversity

In this lesson you will learn about the methods that are in place to minimise human influenced extinctions

Trophic levels and biomass

In this lesson you will learn how communities are organised into levels of hierarchy

Biomass transfers

In this lesson you will learn how living matter is transferred through a community and how to represent this in pyramids

Food security

In this lesson you will learn how the sources of food insecurity are causes for conflict and how to improve food security

Efficient food production

In this lesson you will learn about the benefits and drawbacks with intensive farming

Sustainable food

In this lesson you learn how fishing quotas and biotechnology is used to ensure that the impact on food security is limited

TUDOR HABITS: You will develop the Tudor Habit of responsibility as we consider the responsibility of humans to conserve and protect the natural world.

VOCABULARY

Biodiversity

Cycle

Pollution

Biomass

Food