# Geography Year 7: Topic 5 – Ecosystems

## **Assessment Opportunities**

During each topic students complete a mid-unit knowledge test based on the unit knowledge covered. Students also complete an end-of unit assessment which includes key vocabulary, knowledge questions, geographical and extend writing.

During each year, students complete a mid-year and end-of year assessment which assesses students on all content covered.

# Literacy/Reading opportunities

Tier 2 vocabulary is identified on page 2 of this SOL in the key knowledge list and is shown in italics.

Tier 3 vocabulary is identified on page 3 of this SOL in the key knowledge list and is shown in hold

Reading opportunities take place regularly throughout all Geography schemes of learning. This is identified within this SOL (highlighted in blue).

Extended writing opportunities take place regularly throughout all Geography schemes of learning. This is identified within tis SOL (highlighted in yellow).

## **CEIAG Links**

- Climatic factors factors influencing global weather systems.
- Links made to conservation of different environments and biomes.

# Career industry/ sector links

 Environmental protection and conservation Meteorology Environment and agriculture

# Curriculum vision:

"Our aim is to deliver a curriculum that is inclusive, relevant and progressive for all learners."

















#### Possible Lesson Breakdown:

Lesson I – Components of Ecosystems

Lesson 2 – The factors affecting ecosystems distribution

Lesson 3 – The location of The Arctic

Lesson 4 - Animal adaptations in the arctic

**Extended writing** 

Lesson 5 – Collective feedback Arctic ecosystems

Lesson 6 – Why should we care about plankton

Lesson 7 – Knowledge test Collective feedback

Threats facing The Arctic

Lesson 8 – Location of Tropical Rainforests

Lesson 9 – Animal adaptations in Tropical

Rainforests extended writing

Lesson 10 – Individual Feedback Threats to

Tropical Rainforests

Lesson I I – Final knowledge test Collective

feedback

## Unit Knowledge (key terms in bold) (Tier 2 words in Italics)

- What is an **ecosystem**: The main *components*: **soil**, **water**, **biomass**, **climate** and the balance between them
- Locate different **ecosystems** are around the world
- Factors affecting the distribution of ecosystems latitude, altitude, prevailing winds
- How plants and animals have **adapted** to survive in the conditions of The Arctic
- The importance of **Plankton** in Arctic Ecosystems
- The threats facing Arctic Ecosystems, including climate change, rising sea levels and resource exploitation.
- How plants and animals have adapted to survive in the conditions of Tropical Rainforests
- The threat facing Tropical Rainforests, including commercial farming, logging and resource exploitation.

#### Writing Tasks

How have species adapted to live in The Arctic?

How have species adapted to live in Tropical Rainforests?

## **Reading Tasks**

Animal adaptations in The Arctic Animal adaptations in Tropical Rainforests

#### **Assessment:**

Lesson 7 Knowledge Test

Lesson II Knowledge Test **Feedback** 

Lesson 5 Collective feedback Lesson 7 Knowledge

test feedback
Lesson 10 Individual
feedback

**Geographical Skills** 

- Using aerial photos
- Interpreting photos
- Using GIS google earth/Edina Digimap

#### CEIAG

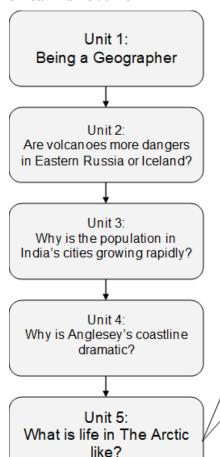
- Climatic factors factors influencing global weather systems.
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# Career industry/ sector links

Environmental protection and conservation Meteorology Environment and agriculture



#### **5 Year Plan Outline**



#### Notes

This unit is an introduction to climatic factors that the students will need for students to deepen their knowledge on climate issues in Year 8 and Year 9.

The basics of the topic are focussed on how ecosystems work and the basics of latitude and altitude. Students will have opportunities to practice their map skills learnt in Unit 1: Being a Geographer.

# **Key Knowledge Themes:**

**Changing weather and climate –** Factors affecting the distribution of ecosystems (latitude and altitude). The climate of The Arctic.

**Global Ecosystems –** The components of ecosystems, distribution of major world ecosystems.

Place knowledge - The Arctic

A connected world - Processes that affect world climates

## Links to Prior Learning:

KS2 (based on primary experience):

Changing weather and climate - climate zones

**Global Ecosystems –** Biomes and vegetation belts should have been covered at KS2

**Place knowledge** – dependent on primary school experience – students should know: Russia, North and South America, UK, Equator, Hemispheres, Tropics

#### National Curriculum Links:

**Locational knowledge –** Russia – environmental regions including polar deserts **Physical Geography relating to –** weather and climate