

Subject	Year	Term
Geography AQA	11	Spring term 1 and 2
Tavia		

#### Topic

# The Living World

# Content + skills (Intent)

### **Prior Learning (Topic)**

#### KS1/KS2-

Identify seasonal and daily weather patterns in the United Kingdom and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles.

Key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather. Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).

Describe and understand key aspects of: physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.

#### **KS3 at Balcarras:**

Year 7 - Pole to Pole

Year 8 - Weather the Storm, Cut down Deforestation, Perishing Places

Year 9 – Paradise Lost, The Delicate Balance Ecosystems,

#### **KS4 at Balcarras:**

Year 10 – UK Physical Landscapes

In this section, students are required to study Ecosystems, Tropical rainforests and one from Hot deserts or Cold environments. We study cold environments out of the optional areas.

#### Key ideas of this topic include:

Ecosystems exist at a range of scales and involve the interaction between biotic and abiotic components.

Tropical rainforest ecosystems have a range of distinctive characteristics.

Deforestation has economic and environmental impacts.

Tropical rainforests need to be managed to be sustainable.

Cold environments (polar and tundra) have a range of distinctive characteristics.

Development of cold environments creates opportunities and challenges.

Cold environments are at risk from economic development.

## **Future Learning (Topic)**

#### KS5

Year 12 – Coastal systems and Landscapes and Global Systems and Global Governance

Year 13 – Global Systems and Global Governance, Water and Carbon Cycles and Population and the Environment

# How will knowledge and skills be taught? (Implementation)

How will your understanding be assessed & recorded (Impact)

# A series of lessons split into key themes covering:

- The scales at which ecosystems exist and the relationship between abiotic and biotic factors.
- A small scale UK ecosystem.
- The distribution of large scale global ecosystems.
- The physical characteristics of rainforests and adaptations to this environment.
- Changing rates of deforestation.
- A case study of a tropical rainforest exploring the causes and impacts of deforestation.
- The value of tropical rainforests to the people and the environment.
- Strategies used to manage the rainforest sustainably.
- The physical characteristics of cold environments and adaptations to this environment.
- A case study of a cold environment focussing on development opportunities and the challenges of developing cold environments.

Provide SHORT and FREQUENT re-call tests in a low threat environment – mix of formative and summative.

Pupils will receive a past paper question booklet which covers all previous exam questions available to us. These will be regularly set and marked

This topic will be assessed via an in-class assessment under examination conditions.

GCSE record sheet, progress analysis data, data shared in interim reports and formal reports and parents evening.

- The value of cold environments as wilderness areas and why these fragile environments should be protected.
- Strategies used to balance the needs of economic development and conservation in cold environments

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Teacher led lesson content GCSE exam style questioning Group discussion/debates and questioning Reading key articles and textbooks

# Misconceptions

# A species high on the food web is a predator to everything below it.

Species/organisms higher in a food chain eat some, but not necessarily all, of the species/organisms below them in the food web.

## Logging Companies drive deforestation.

It's true that logging wreaks havoc on the rainforest: Often conducted illegally, it creates significant carbon emissions and reduces species richness. It can also lead to future deforestation by building roads that increase access to remote areas. But logging is currently responsible for less than 10 percent of deforestation in the world's largest tropical rainforests, according to a recent study in the journal Science.

### The rainforest is an uninhabited wilderness.

This misconception has had tragic consequences for local and indigenous people. According to a U.N. report from 2018, countries including Peru, Panama and Indonesia have forced communities from their traditional lands to create protected areas of "pristine" nature. In truth, these areas are not naturally uninhabited. People have lived in tropical rainforests for thousands of years and continue to occupy large areas within them: Indigenous territories cover 35 percent of the Amazon, for example.

# Tropical rainforests are doomed.

Some countries have managed to significantly slow deforestation. Global Forest Watch reported a 40 percent decline in Indonesia's forest loss in 2018 compared with its 2002-2016 average, thanks in part to the government's response to the massive fires in 2015. Before its recent policy reversals, Brazil actually reduced large-scale deforestation in the Amazon by 70 percent between 2004 and 2012.

# We need to clear rainforests to feed the world's growing populations.

It's entirely possible to feed billions of additional people without expanding agriculture into forests. Boosting crop and livestock productivity can help the world produce more food on existing farmland.

# How can parents help at home?

Support with homework and revision techniques for graded assessments. Discuss current affair issues by watching/reading the news. Download the BBC or Guardian news app and set to environmental notifications to receive the most update articles. Watching relevant documentaries e.g. David Attenborough, wildlife/environments.

### Places to explore

The Living Rainforest, Newbury - <a href="https://livingrainforest.org/">https://livingrainforest.org/</a>

The Eden Project, Cornwall - <a href="https://www.edenproject.com/visit/things-to-do/rainforest-biome">https://www.edenproject.com/visit/things-to-do/rainforest-biome</a>

Cotswold Wildlife Life, Burford – <a href="https://www.cotswoldwildlifepark.co.uk/">https://www.cotswoldwildlifepark.co.uk/</a>

Kew Gardens, London – <a href="https://www.kew.org/kew-gardens/whats-in-the-gardens/temperate-house">https://www.kew.org/kew-gardens/whats-in-the-gardens/temperate-house</a> Virtual Tours:

## Watch this

The Green planet – Tropical Worlds - <a href="https://www.bbc.co.uk/iplayer/episode/m0013cl5/the-green-planet-series-1-1-tropical-worlds">https://www.bbc.co.uk/iplayer/episode/m0013cl5/the-green-planet-series-1-1-tropical-worlds</a>

Our wild adventures: rainforests - https://www.bbc.co.uk/iplayer/episode/m000wvxh/our-wild-adventures-series-1-4-rainforests

 $A frica: Congo - \underline{https://www.bbc.co.uk/iplayer/episode/m000wvxh/our-wild-adventures-series-1-4-rainforests}$ 

Planet Earth: Jungles - https://www.bbc.co.uk/iplayer/episode/b0074tgb/planet-earth-8-jungles

Arctic with Bruce Parry: Canada - https://www.bbc.co.uk/iplayer/episode/b00ydbl9/arctic-with-bruce-parry-4-canada

 $Arctic\ with\ Bruce\ Parry:\ Northern\ Europe-\ \underline{https://www.bbc.co.uk/iplayer/episode/b00ylx9f/arctic-with-bruce-parry-5-northern-bru$ 

<u>europe</u>

Ted Talks: What can save the rainforest? - https://www.youtube.com/watch?v=xPK2Ch90xWo

Ted Talks: Hopeful lessons from the battle to save rainforests-

https://www.ted.com/talks/tasso azevedo hopeful lessons from the battle to save rainforests

Jungle - Movie with Daniel Radcliffe

#### Listen to this

Ted Talks Daily: Check out this website for a variety of current affairs podcasts: <a href="https://www.ted.com/about/programs-initiatives/ted-talks/ted-talks-daily">https://www.ted.com/about/programs-initiatives/ted-talks/ted-talks-daily</a>

#### Check this out

Virtual Rainforest by Gerald Urguhart - http://www.virtual-rainforest.org/

The Virtual Rainforest is an interactive, educational tour of a Central American rainforest with beautiful photos and videos.

#### **Conversation Starters**

Does all palm oil contribute to unsustainable deforestation?

Is it too late to save the rainforest?
The Arctic: A Resource or a reserve?

Who owns the Arctic?

Exploitation of the Arctic Region should be ceased.

# Helpful further reading/discussion

# Reading

#### Non fiction

The Chimpanzee and Me by Ben Garrod

How Bad Are Bananas? The Carbon Footprint of

Everything by Mike Berners-Lee

Running Wild by Michael Morpurgo

Mother of God: An Extraordinary Journey Into the

Uncharted Tributaries of the Western Amazon by Paul Rosolie

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 $\label{lem:conditional} \textit{Jungle: A Harrowing True Story of Adventure, Danger and} \\$ 

Survival by Yossi Ghinsberg

Walking the Amazon: 860 Days. The Impossible Task. The

Incredible Journey by Ed Stafford

# **Academic reading**

Global restoration opportunities in tropical rainforest landscapes

https://www.science.org/doi/full/10.1126/sciadv.aav322

Brazilian policy and agribusiness damage the Amazon rainforest

https://www.sciencedirect.com/science/article/abs/pii/S0 264837719314899

Interdependencies and telecoupling of oil palm expansion at the expense of Indonesian rainforest

https://www.sciencedirect.com/science/article/abs/pii/S1 364032118308529

# Fiction

Journey to the River Sea by Iva Ibbotson

# **Vocabulary Lists**

Speaking like a geographer (Splag):

Abiotic

Biotic

Consumer

Decomposer Ecosystem

Food chain

Food web

Nutrient cycling

Global ecosystem

Producer

Biodiversity

Commercial farming

Debt reduction
Deforestation

Ecotourism

Logging

Mineral extraction

Selective logging

Soil erosion

Subsistence farming

Sustainability

Fragile environment Infrastructure

Permafrost

Perma<sub>.</sub> Polar

Tundra

Wilderness area

Please click on the link for an AQA glossary of these key terms:

https://filestore.aqa.org.uk/resources/geography/AQA-8035-SSV.PDF

# **Careers Links**

A variety of careers available with organisations like the Rainforest Alliance.

https://www.rainforest-alliance.org/careers/

Conservation officer:

https://www.bbc.co.uk/bitesize

/articles/zfdsd6f

A variety of roles to explore and work in the Arctic:

http://www.workarctic.com/

A variety of jobs in Antarctica: <a href="https://www.bas.ac.uk/jobs/jobs-in-antarctica/">https://www.bas.ac.uk/jobs/jobs-in-antarctica/</a>

# Conservation careers:

https://www.conservationcareers.com/15-keyconservation-jobs-ultimateguide-for-conservation-jobseekers/