



Topic Overview

Faculty/Subject: Geography

Year Group: 9

Topic: Hot Deserts



What **BIG IDEAS** will you cover in this topic?

Adaptation and Survival: Students will discover the highly specialized ways that plants and animals have evolved to survive in extreme temperatures with a severe lack of water.

Interdependence in Ecosystems: We will look at the desert as a complex system, understanding how the climate, water sources, soils, plants, animals, and humans are all intricately linked.

Human Impact and Desertification: A major focus will be on the changing desert fringes. We will explore the causes of "desertification" (where fertile land gradually turns into a desert) due to both climate change and human activities.

What other key concepts, knowledge and skills will you learn in this topic?

Opportunities and Challenges: Using a specific case study, students will learn how humans utilize the desert for economic development (e.g., mineral extraction, solar energy, tourism) and the massive challenges they face (e.g., extreme heat, limited water supply).

Data Interpretation: Reading and analyzing climate graphs showing average monthly temperature and rainfall.

Map Skills: Using world maps and atlases to locate deserts in relation to the Equator, the Tropic of Cancer, and the Tropic of Capricorn.

What important prior knowledge will you use from your prior learning?

Students will need to have a prior understanding of different lines of latitudes and their locational geography such as continents and countries.

Where does this topic fit into the curriculum plan for this subject?

This is the third topic in year 9. This builds on what they have done in previous years on ecosystems such as in year 7 when we covered biomes.

Assessment:

How and when will you be assessed on this topic? What will the success criteria be?

Mini assessment - Students will complete a small assessment made up of multiple choice questions and some written questions to test their understanding up to that point in the topic.

End of topic assessment - students will be assessed on their knowledge of hot deserts. They will encounter knowledge based questions, skills/ graphical questions and longer answer questions.

What is the key vocabulary that you will need to know in this topic?

Arid
Equator
Tropics (Cancer and Capricorn)
High Pressure
Flora and Fauna
Adaptation
Nocturnal
Irrigation
Desertification
Overgrazing
Overcultivation
Soil Erosion

What is the structure of learning/ lessons in this topic?

1. Location of deserts
2. Climate of Hot Deserts
3. Animal and plant adaptations
4. Green planet - Adaptations
5. Green Planet - Adaptations
6. Desert opportunities
7. Mid topic assessment
8. Desertification
9. Great Green Wall