

## Unit Overview: The Living World

Half- Term:

AUT 1

AUT 2

**SPR 1**

SPR 2

SUM 1

SUM 2

No of Lessons:

### **Key Focus for Unit:**

*What is the key knowledge being delivered?*

*What is the intent of this unit?*

Students will explore Ecosystems exist at a range of scales and involve the interaction between biotic and abiotic components. They will identify that tropical rainforest ecosystems have a range of distinctive characteristics. That deforestation has economic and environmental impacts and that they need to be managed sustainably. Students will also explore hot desert ecosystems have a range of distinctive characteristics. To see that development of hot desert environments creates opportunities and challenges. To understand that areas on the fringe of hot deserts are at risk of desertification.

### **Key Knowledge and Big Ideas:**

*What **Powerful Knowledge** and **Big Ideas** are explored in this Unit?*

*How have these progressed from previous learning? What **gaps in knowledge** have you identified from **baselining** and how are the being closed?*

#### **Powerful Knowledge:**

- Characteristic of a tropical rainforest and its importance with biodiversity.
- Causes, effects and impacts of deforestation.
- Sustainable management of rainforests.
- Characteristic of hot deserts and its importance with biodiversity.
- Development opportunities within hot deserts
- Desertification and sustainable management of hot deserts.

#### **Case Studies:**

- Amazon Rainforest
- Thar Desert

#### **Big Ideas:**

**Processes:** Students will appreciate that tropical rainforest and hot desert ecosystems have a range of distinctive characteristics.

**Place:** Students will have knowledge of the location of key ecosystems and the significance of these locations. To also be aware of the areas on the fringe of hot deserts that are at risk of desertification.

**Scale:** Students will know that Ecosystems exist at a range of scales and involve the interaction between biotic and abiotic components.

**Sustainability:** Students will understand the value of the tropical rainforest and how it needs to be managed in a sustainable way.

**Environment:** By looking at a real life example (case study), students will appreciate the characteristics, diversity and importance of tropical rainforests and hot deserts.

### **Unit Assessment:**

*How will this unit be assessed?*

*What is the frequency of assessments – baselines etc?*

End of topic GCSE examination taken from an AQA Past Paper. Grades determined based on JCQ grade descriptors. *Assessment theme: All parts of powerful knowledge and case studies assessed which reflects GCSE paper 1, question 2*

Each lesson incorporates a low stakes quiz to interleave and facilitate knowledge retention.  
Weekly Educake homework quizzes to consolidate learning.

<u>Key Skills Explored</u>	<u>Vocabulary Selected for DVI</u>	<u>Links to Previous Unit</u>
<p>Cartographic Skills Graphical skill Numerical skills Statistical skills Use of qualitative and quantitative data Formulate enquiry and argument Literacy</p>	<p>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; Appropriate technology; Desertification; Over-cultivation; Overgrazing;</p>	<p><b>Urban Challenges:</b> pressures of urban growth</p> <p><b>Ecosystems:</b> Scales of ecosystems and the tropical rainforest. Impacts of deforestation.</p>
<u>Links to Careers/Employability</u>	<u>How does this unit prepare students for the next unit?</u>	
<ul style="list-style-type: none"> <li>• Environmentalist</li> <li>• Scientist</li> <li>• Ecologist</li> <li>• Biologist</li> <li>• Marine biologists</li> <li>• Conservationist</li> </ul>	<p><b>Changing Economic World:</b> Growth and development of countries has an impact on the natural environment.</p> <p><b>Resource Management:</b> Increase demand for energy, water and food puts pressures on natural environments and the production of food.</p>	