

## Saint Martins Year 8 Geography unit 1 : The Green Planet

### Unit Aims:

*Create an understanding of ecosystem characteristics, interactions between parts of rainforest, tundra and hot desert ecosystems, as well as the challenges and opportunities for humans and how these areas are sustainably managed.*

Topic:	Learning Outcomes	Key Words	Assessment opportunities
L1 What is a Biome? Where are they located and why are they found in these locations?	<p>Define and describe the characteristics of the Earth's biomes.</p> <p>Explain the influence of climate upon biomes.</p>	Biome, Taiga, Climate, Weather, Climate graph, Hydrosphere, Lithosphere, Atmosphere	<ul style="list-style-type: none"> <li>· Knowledge Check</li> <li>Map of biomes</li> <li>Answers to written task</li> </ul>
L2 Where are Tropical rainforests and why are they located in these regions?	<p>Describe the location of Tropical Rainforests.</p> <p>Explain factors influencing the location of Tropical Rainforests.</p>	Equatorial, Tropics, Latitude, Convectional rainfall, Altitude	<ul style="list-style-type: none"> <li>· Knowledge Check</li> <li>Climate vs weather</li> <li>Answers to written task</li> </ul>
L3 What are the characteristics of Tropical rainforest vegetation?	<p>Describe the characteristics of the Tropical Rainforest vegetation.</p> <p>Explain how vegetation adapts to climatic conditions.</p>	Emergent, Canopy, Epiphyte, Renewable resources, Humus	<ul style="list-style-type: none"> <li>· Knowledge Check</li> <li>Analysis of vegetation features</li> <li>Answers to written task</li> </ul>
L4 How have animals adapted to the Tropical Rainforest environment?	<p>Describe how food chains operate in the TRF.</p> <p>Explain how animals adapt in the TRF ecosystem.</p>	Species, Food chain, Food web, Adaptation, Producers, Consumers	<ul style="list-style-type: none"> <li>· Knowledge Check</li> <li>Analysis of animal features</li> <li>Answers to written task</li> </ul>

L5 How do people live in the Tropical Rainforest environment?	Describe the characteristics of the Kayapo way of life. Explain the challenges to indigenous populations.	Population density, Cultivation, Ecosystem, Globalisation, Nomadic, Shifting cultivation	· Knowledge Check Case study of Kayapo people Answers to written task
L6 Why Should Tropical Rainforests be preserved and what is the best way to achieve this?	Describe the challenges to the tropical rainforest.  Explain the impacts of rainforest clearance: locally and globally.	Deforestation, Subsistence, Soil erosion, Global warming, The greenhouse effect	· Knowledge Check Differentiation of preservation methodologies Answers to written task
L7 Where are Tropical deserts and why are they located in these regions?	Describe the location of Tropical Deserts. Explain why deserts are found in these locations.	Peninsula, Evaporation, Condensation, Ocean current, Precipitation	· Knowledge Check LOWERN Characteristics Answers to written task
L8 What are the characteristics of Tropical desert vegetation?	Describe the characteristics of desert vegetation.  Explain how desert vegetation adapts to the climate.	Xerophytic, Halophytic, Dormant, Oasis	· Knowledge Check Case study: The Malaysian Rainforest Answers to written task
L9 How have animals adapted to the Tropical Desert environment?	Describe the characteristics of desert animals.  Explain how desert animals adapt to their conditions.	Peninsula, Food chain, Food Web, Organism, Mammals	· Knowledge Check Analyse animal characteristics Answers to written task
L10 Can people live sustainably in the Tropical Desert environment?	Describe the characteristics of people living in the Arabian Peninsula. Explain how people have adapted to the climate of the Arabian Peninsula.	Indigenous population, Population density & distribution, Sustainable, Carbon neutral	· Knowledge Check Case study: Masdar City Answers to written task
L11 What conflicts exist in desert landscapes?	Describe the causes of conflict over water.	Palestine, Ecology, Freshwater, The hydrological cycle, Conflict	· Knowledge Check

	Explain how water and other conflicts affect people in the Middle East.		Case Study: The Arabian Peninsula and the Bedouin people Answers to written task
L12 What are the physical characteristics of the tundra?	Describe the physical characteristics of the Siberian tundra. Explain how animals adapt to the climate.	Tundra, Hemisphere, Treeline, Infrastructure, Latitude	· Knowledge Check Climate graph analysis Answers to written task
L13 How do people live in the tundra?	Describe the benefits and challenges of life for people in the tundra. Explain how people adapt to tundra conditions.	Tundra, Exile, Geologist, Climate, Population density	· Knowledge Check Case Study: Oymyakon Answers to written task
L14 Should Russia be allowed to claim the Arctic?	Describe the reasons for Arctic expansion. Explain how Arctic expansion affects people and the environment.	Raw materials, Economic, LNG, Ecosystem, Indigenous, Continental Shelf	· Knowledge Check Article analysis: Russia claiming the artic Answers to written task