

KESTEVEN AND SLEAFORD HIGH SCHOOL

Geography Scheme of Learning Year 8 – Term 3/Unit 3/Palm oil, plants and people

Intent – Rationale

Tropical rainforests have a wider biodiversity than any other biome in the world and play a vital role as a ‘carbon sink’. The issue of deforestation is of global concern and the intent in this unit is to impart knowledge of the threats facing the forest rainforests and the indigenous people who live there and the impact this may have. We also consider opportunities for tourism in the tropical rainforest by designing ecotourism resorts and consider the sustainability of low-impact tourism.

Sequencing – what prior learning does this topic build upon?	Sequencing – what subsequent learning does this topic feed into?
<ul style="list-style-type: none"> • KS2 – Biomes and vegetation belts • KS2 – locational knowledge (Equator) • Y8 Asia (deforestation in Indonesia) 	<ul style="list-style-type: none"> • KS4 (GCSE) – The Living World with a focus on tropical rainforests (characteristics, causes and impacts of deforestation and sustainable forest management) • KS3 – Y8 – Unit 5- Rivers and flood management – impact of building the Belo Monte Dam on the Amazon rainforest
What are the links with other subjects in the curriculum?	What are the links to SMSC, British Values and Careers?
<ul style="list-style-type: none"> • Biology – processes of photosynthesis. • Biology – biodiversity • Biology – plant and animal adaptations 	<p><u>Spiritual development 2</u> – a sense of enjoyment and fascination in learning about others and the world around</p> <p><u>Spiritual development 4</u> – willingness to reflect on student experiences – who has visited a tropical rainforest? Some students may have visited the Eden project</p> <p><u>Moral development 3</u> – interest in offering reasoned views about ethical issues including the impact of deforestation on the indigenous people of the forest and the issue of palm oil production</p> <p><u>Cultural development 1</u> – an understanding of the cultural influences on the indigenous people of the tropical rainforest</p>

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What are the opportunities for developing literacy skills and developing learner confidence and enjoyment in reading?	What are the opportunities for developing mathematical skills?
<p>FROM THE LIBRARY</p> <p><i>Horrible Geography; Bloomin Rainforests</i>-910</p> <p><i>In The Rainforest</i>- 577</p> <p><i>People and Places</i>-Secrets of the Rainforest-333.75</p> <p><i>Rainforest People</i>-304.209</p> <p><i>Trekking in the Congo Rainforest</i>-916</p> <p><i>Ethical Tourism</i>- 170</p> <p><i>Travel and Tourism</i>-338</p> <p><i>Global Tourism Issues</i>- 305</p>	<ul style="list-style-type: none">• Budget management – funding the sustainable ecotourism resort

Geography Scheme of Learning Year 8 – Term 3

Intent – Concepts

What knowledge will students gain and what skills will they develop as a consequence of this topic?

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Know

Characteristics of the tropical rainforest in terms of its structure
 Distribution of the tropical rainforest
 Examples of plant and animal species in the tropical rainforest and how they adapt to the conditions
 Deforestation and its impact on biodiversity of the tropical rainforest and the nutrient cycle
 The lifestyle of indigenous people of the tropical rainforest
 What palm oil is and why it is produced
 What ecotourism is and opportunities for ecotourism in the tropical rainforest

Apply

Knowledge of the sun and the tilt of the earth to explain the climate of the tropical rainforest
 Knowledge of the threats facing the indigenous people of the tropical rainforest to understand how their lives are threatened
 Knowledge of the demand for palm oil products to explain why its production is leading to widespread deforestation
 Knowledge of the suggested cost of materials to budget for and design an ecotourism resort

Extend

Assess whether governments have a role to play in protecting the indigenous people of the tropical rainforest
 Consider solutions/alternatives to palm oil production
 Evaluate the sustainability of ecotourism in the tropical rainforest

What subject specific language will be used and developed in this topic?	What opportunities are available for assessing the progress of students?
canopy, emergent, buttress roots, decomposers, nutrients, biodiversity, convectional rain, distribution, adaptation, indigenous people, slash and burn, shifting cultivation, palm oil, plantation, ecotourism, deforestation, afforestation, sustainability	Assessment will take 3 main forms: <ul style="list-style-type: none"> In starters, plenaries and during the lessons – formative assessment and retrieval practice to reinforce prior knowledge e.g., word searches, bingo, memory recall, definition matches etc.

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	<ul style="list-style-type: none"> • For homework -tasks that require students to research new knowledge. For example, researching how animals and plants adapt to the conditions in the TRF • Summative assessments: multiple-choice, one-mark answers, extended answers in test or exam conditions or as end-of-unit tests. • Key word meaning and spelling tests are included as part of the focus on building a knowledge bank of geographical vocabulary
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Intent – Concepts

Lesson title	Learning challenge	Higher level challenge	Suggested activities and resources
Distribution and structure of tropical rainforests	To be able to describe the characteristics of the tropical rainforest and describe the biomes distribution	To be able to explain the distribution of the TRF.	Powerpoint 1 Sensory task – what can you see, feel, hear, smell, feel in the TRF? http://www.bbc.co.uk/programmes/p00xppgp Climate graph description and explanation Distribution of TRF description Geog. 2 3 rd edition. Pages 56-57 Plenary – line students up in height order. Who would be in the emergent layer, canopy, under-canopy and shrub layer?
Biodiversity of the tropical rainforest	To be able to provide examples of the biodiversity of the TRF	To be able to explain the impact on the nutrient cycle of deforestation	Powerpoint 2 Starter – anagrams True/False quiz Define 'Biodiversity' Video – Planet Earth Jungle – question sheet https://www.bbc.co.uk/iplayer/episode/b0074tgb/planet-earth-8-jungles Gap fill of nutrient cycle

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Plant and animal adaptations in the tropical rainforest	To be able to describe how a range of plants and animals adapt to the conditions in the TRF	To be able to explain through independent research how and why plants and animals adapt to conditions in the TRF	Powerpoint 3: Starter: Watch BBC clip of a sloth and a clip of the Eden Project TRF biome. Discuss plant and animal adaptations. Students play the role of Professor Talltrees who is responsible for writing a report about the plants and animal adaptations in the TRF. Stick in images/draw sketches and annotate them to describe how these species have adapted to cope with the hot, wet and challenging conditions Show success criteria to the students. They have one lesson and a homework to complete the task
Indigenous people of the tropical rainforest (1)	To be able to describe the way of life for indigenous people	To be able to compare our lives and experiences with those of the indigenous people living in the TRF.	Powerpoint 4 and 5 Starter: Recap on features of the tropical rainforest (gap fill task) Watch clips and make notes on the lives of the indigenous people of the TRF https://www.youtube.com/watch?v=RawJ875KCco (up to 10:30) https://www.youtube.com/watch?v=yu88xsGwez Define key terms: shifting cultivation and 'slash and burn' and 'subsistence.' Plenary: Do you think the indigenous people of the tropical rainforest should be protected?
Indigenous people of the tropical rainforest (2-3)	To be able to describe the pressures/threats facing the indigenous people of the TRF	To be able to justify whether governments around the world have a duty to protect the people of the rainforest and their way of life	Powerpoint 4 and 5 Starter: Thoughts and ideas about an image Show clips: 1. https://www.youtube.com/watch?v=sLErPggCC54 2. https://www.youtube.com/watch?v=-WK8QWRZOxo 3. https://www.youtube.com/watch?v=VIM1Wmycslg Discuss advantages/disadvantages of interaction between indigenous people of the TRF and other people. Role play task: Imagine you are investigating the lives of Kayapo indigenous people and as an anthropologist you are finding out more

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			<p>about the lives of these people. In groups of 3 or 4 write an interview for a TV documentary with an indigenous person about their lifestyle. Present and peer-evaluate using feedback sheet</p> <p>Homework: What is your opinion and why? <i>“Governments around the world have a duty to protect the people of the rainforest and their way of life.”</i> <i>“The indigenous people of the rainforest lead a life that is much worse than ours. They don’t have electricity and all the goods that go with them. They don’t have cars, heated houses, Facebook, Internet, shops and banks”.</i></p>
Palm oil production in the tropical rainforest	To be able to describe that palm oil is used for and the impact of its production	To be able to evaluate the advantages/disadvantages of palm oil production	<p>Powerpoint 6 Starter: Show image of TRF and plantation of palm oil trees: What do you think will happen next and why? Table to shade showing advantages and disadvantages of palm oil production Clips: https://www.youtube.com/watch?v=7jojji-s5w8 https://www.youtube.com/watch?time_continue=12&v=w-1DQwaaauwE Iceland advert https://www.youtube.com/watch?v=TQQXstNh45g</p> <p>Homework: Should palm oil production be banned? Resources: https://www.youtube.com/watch?time_continue=241&v=UGFmP_wWztU https://www.bbc.co.uk/newsround/39492207</p>

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<p>Ecotourism opportunities in the tropical rainforest (2 lessons)</p>	<p>To be able to describe ecotourism and its characteristics/features</p>	<p>To be able to justify the design of an ecotourism resort with reference to a financial budget</p>	<p>Powerpoint 7/8 Clips: https://www.rgs.org/schools/teaching-resources/ecotourism-projecting-the-heart-of-borneo/ https://www.youtube.com/watch?v=0fv055Sgi4o (up to 2.55)</p> <p>Worksheet – Designing an ecotourism resort Evaluation sheet Plenary: How much fun? https://www.youtube.com/watch?v=bwrYJ-5g8OA Jungle gondola lift in Ecuador or: Imagine that you and your partner are two macaws. Have a short conversation discussing whether or not it is a good idea to allow tourists into the rainforest.</p>
<p>End of topic assessment</p>			