

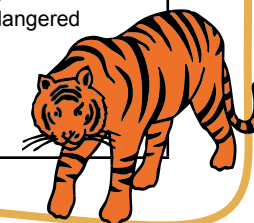
# SUSTAINABLE PALM OIL WHOLE SCHOOL SUBJECT PROGRESSION

## SPO ENGLISH EYFS KS1 KS2

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EYFS	1	2
<p>Communication and Language -</p> <p>Listening, Attention and Understanding -</p> <ul style="list-style-type: none"> <li>Listen to class teacher and video clips explaining which animals and plants live in rainforests and how they are being affected by their removal to make room for more palm tree plantations.</li> <li>Respond to and join in with group work and discussions.</li> </ul> <p><b>Speaking -</b></p> <ul style="list-style-type: none"> <li>Pretend to be a rainforest animal living in their habitat. Talking to other animals about how scared they are of the plantation farmers who have come to cut down their rainforest home to plant palm oil trees.</li> <li>Use newly learnt words about rainforest plants, palm trees and animals.</li> <li>Give own opinions on the effect of taking rainforest away to make more palm oil plantations has on the plants and animals.</li> <li>Make suggestions on how they can encourage others to shop with SPO awareness.</li> </ul> <p><b>Literacy -</b></p> <p><b>Comprehension</b> - Use and understand recently introduced rainforest animal or plant (including palm oil tree) vocabulary.</p> <p><b>Word Reading</b> - read words (looking at initial letter sounds) on rainforest plants and animals consistent with their phonic knowledge by sound-blending.</p>	<p><b>Use phonic</b> decoding skills to decipher new or unfamiliar words, such as the names of animals and plants they may come across during their SPO work.</p> <p>Listen to rainforest <b>stories</b> and act them out through their own <b>roleplay</b>.</p> <p><b>Lists, label or captions</b> of collections of rainforest animals, insects or plants.</p> <p><b>Write mini factual information notebooks</b> on rainforest plants and an endangered rainforest animal, including <b>title pages, labels and captions</b>.</p> <p><b>Recount</b> - of sustainable palm oil shopping.</p> <p><b>Instructions</b> for their own sustainable palm oil recipe.</p> <p><b>Letter</b> writing to shop owners to encourage them to stock sustainable palm oil products.</p> <p><b>Poetry</b> encouraging shopping in a sustainable way.</p> <p><b>Non-fiction</b> writing of a short promise about something they personally promise to do which will help prevent the extinction of rainforest animals, or one way in which they can help lead a more sustainable life.</p> <p><b>Information poster</b> on a how to know when they are buying sustainable palm oil products.</p> <p><b>Reading</b> - Comprehension tasks of factual information related to rainforests. Ask children questions to test reading skills i.e. comprehension and retrieval</p>	<p><b>Explanation text</b> on SPO - answering key questions about SPO: What is SPO? Where in the world does it come from? What are the good points about palm oil? What are the bad points about palm oil? What can we do in the UK to encourage supermarkets to buy from SPO farmers?</p> <p><b>Information texts</b> about why it is important to do Chester zoo's SPO challenge; shop for products which contain certified SPO.</p> <p><b>Poetry</b> about palm oil deforestation; inspired by: singing 'The Sustainable Palm Oil Conga' and unpicking its song lyrics; watching videos explaining the importance of sustainable palm oil production and from reading poetry from Chester Zoo's recommended conservation books list.</p> <p><b>Non-fiction</b> information texts on the production of palm oil and the importance of SPO production. Instructions on how to shop in a sustainable way.</p> <p><b>Non-chronological report</b> about the journey from a oil palm tree to our homes after gathering information from various sources.</p> <p><b>Letter</b> writing to cafe owners to encourage them to buy SPO products.</p> <p><b>Recount</b> of a real event - children writing about how they held a SPO information session for parents.</p> <p><b>Non-fiction</b> writing a <b>promise</b> about something they personally promise to do which will help prevent deforestation, pollution and the extinction of endangered rainforest animals.</p>



Some children may read aloud simple phrases and sentences about rainforest plants or animals.

**Writing** - Write initial letters or begin to write animal or plant names, labels, notes and phrases about rainforest plants or animals.

Phonetically write words, labels, simple phrases and sentences about a particular rainforest animal as part of a class study.

Write simple phrases about rainforest plants or animals  
Some children may:

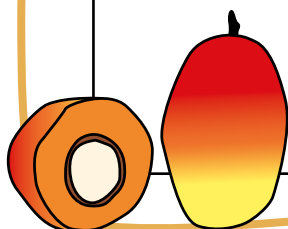
- Write simple phrases and sentences about promises to care for plants and animals by buying SPO products.
- Write simple phrases and sentences to encourage others to shop sustainably.

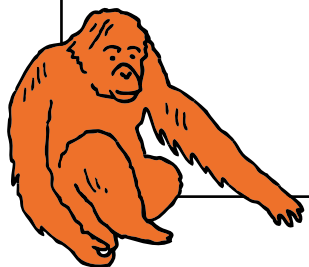
Phonetically write words, labels, simple phrases and sentences about model insects or birds, roleplay habitats or sustainable palm oil roleplay shop. Including writing names on their own shop items packaging.

**Reading** - Comprehension tasks related to CZ resources and other resources e.g. information texts on rainforest animals affected by deforestation. Ask children questions to test reading skills i.e. comprehension and retrieval.



3	4	5	6
<p><b>Report writing</b> - a detailed report about an endangered animal affected by the unsustainable palm oil production in Borneo and Sumatra.</p> <p><b>Report writing</b> - the rights of the animals to the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat. (Facts can be obtained from CZ fact files).</p> <p><b>Retrieve information</b> - on SPO from the factual information given by Chester Zoo, using dictionaries to check the meaning of words that they have read.</p> <p><b>Poetry</b> about an endangered rainforest animal.</p> <p><b>Persuasion</b> - design and write a poster persuading shopper to purchase SPO products. Posters to be displayed in local supermarkets.</p> <p><b>Information texts</b></p> <p>On the production of unsustainable and sustainable palm oil - produced and illustrate by children for display.</p> <p>And/ or <b>poster</b> about endangered animals, including important facts and eye-catching illustrations.</p>	<p><b>Retrieve information</b> - Explore different viewpoints when deciding whether to change to more sustainable farming. Retrieve information about SPO from the factual information given by Chester Zoo and other reliable sources. Conscience Alley activity: supermarket manager given different viewpoints for and against use of sustainable palm oil and/or hot seating.</p> <p><b>Persuasive writing</b> - To write persuasive sentences about sustainable palm oil. Learn about the dilemmas faced by plantation farmers who are faced with making wildlife corridors through their plantation to ensure animals reach food in surrounding rainforest (sustainable palm oil production) v farmers who focus only on deforestation for palm oil production. Reading reports/ letters.</p> <p>Write a <b>persuasive letter</b> to persuade a supermarket CEO to sell RSPO palm oil products.</p> <p><b>Explanation text</b> - on what is PO, what is the effect of PO production on rainforest animals and the environment.</p> <p>Create <b>poster</b> about a specific product that contains SPO. Focus on presentation techniques e.g. exaggeration, alliteration, etc.</p> <p><b>Newspaper report writing</b> - about the effect of deforestation on the animals</p> <p><b>Poetry</b> - about deforestation caused by unsustainable palm oil production</p>	<p><b>Debate</b> - Understanding roles and issues within a debate, based on the pros and cons of Palm Oil production. Seen from various viewpoints.</p> <p><b>Retrieve information</b> - from fact files, videos and leaflets from CZ and other reliable sources on SPO and write a report about these findings and/ or use notes for debate scripts. Compare and contrast to South American palm oil plantations - see Geography.</p> <p><b>Debate</b> - Following on from understanding roles in a debate and retrieving information needed (see English 1 and 2), plan a debate speech.</p> <p><b>Instructional writing</b> - for making a healthy lunch (containing SPO products).</p> <p><b>Poetry</b> - about SPO from the point of view of either the animals, workers, producers or consumer.</p> <p><b>Letter writing</b> - to the press as a conservationist describing the effects of actions over times.</p> <p><b>Diary</b> - of the thoughts, feelings and actions of a rainforest animal from before and during unsustainable palm oil production.</p> <p><b>Reading</b> - Comprehension tasks related to CZ resources and other resources e.g. animal fact files and non-chronological reports about Bornean orangutan. Pose questions to test reading skills i.e. understanding, retrieval, inference</p>	<p><b>Retrieve information</b> - Researching information about sustainable palm oil from fact files, videos and leaflets on SPO and how a company becomes certified CSPO. Also, link the restrictions imposed in Indonesia on the palm oil industry with growth of Palm Oil production in South America - see Geography.</p> <p>Following the retrieval of information about becoming a CSPO discuss the issues related to the labelling of products so they are clearly labelled to indicate they contain sustainable palm oil.</p> <p><b>Letter writing</b> - Plan a persuasive, formal letter to local MPs about the importance of clear labelling of products containing palm oil and CSPO palm oil.</p> <p>Letter writing to local suppliers to ask them to only stock products which contain CSPO, giving reasons why.</p> <p>Plan and write a <b>newspaper article</b> about how they have had an impact on local suppliers to only stock products which contain SPO.</p> <p><b>Report</b> writing on the rainforests in the world.</p> <p><b>Non-chronological</b> report on class rainforest animal.</p> <p><b>Creative Writing</b> - As an orangutan, describe the day your home was destroyed through deforestation for palm oil growth.</p>

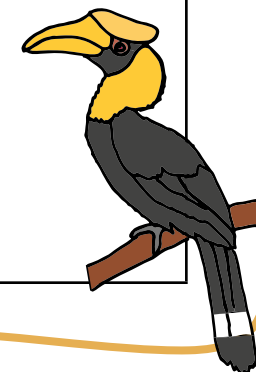




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		and prediction.	<b>Reading</b> - Comprehension tasks related to CZ resources and other resources of varied genre e.g. persuasive texts and information texts. Pose questions to test reading skills i.e. understanding, retrieval, inference and prediction.

# SPO MATHS EYFS KS1

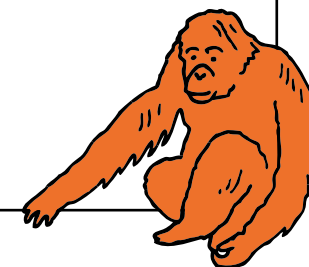
EYFS	1	2
<p><b>Number -</b></p> <ul style="list-style-type: none"> <li>• Practise counting rainforest animals / insects / leaves / trees/ plants / palm oil fruit with one-to-one correspondence, saying one number name for each item (developing a deep understanding of number up to 10).</li> <li>• Count the number of fruits on a 5 frame (and later in the academic year, a 10 frame).</li> <li>• Write number digits to represent different amounts.</li> <li>• Make playdough / plasticine palm oil fruit branches with a given number from a teacher, placing them on a 5 or 10 frame, or on a number track.</li> <li>• Practise subitising how many grouped fruits / trees / oil palm trees there are, without counting, including different patterns or arrangements like on a die or domino.</li> </ul> <p><b>Some children to:</b></p> <ul style="list-style-type: none"> <li>• Explore even and odd quantities of rainforest insects</li> <li>• Explore doubling with rainforest insects</li> <li>• Explore distributing items equally, such as animal / insect spots/ fruits or leaves.</li> </ul> <p><b>Numerical Patterns -</b></p> <ul style="list-style-type: none"> <li>• Compare different sets of animals found in rainforests, saying which set has the most and working out which set has the least.</li> <li>• Continue a repeating pattern started by their class teacher (using images or mini models): [such as: bird, orangutan, bird, orangutan] ... or [green palm leaf, red fruit, green palm leaf, red fruit, red fruit].</li> <li>• Answer questions such as: 'How many fruits does this branch have?' 'How you know?' 'Prove it' (children could count them out, placing them on to a manipulative such as within the holes of a Numicon, on sections of a number track or alongside a number line to check or prove it).</li> </ul>	<p>Make simple class charts and pictograms on the different types of animals which live in rainforests. Write number facts about the chart and pictogram.</p> <p>Find out simple numerical facts about endangered rainforest animals (such as how long they typically live for).</p> <p>Make 3 different rainforest animals, comparing, ordering and problem solving with them.</p> <p>Sort food and soap products from the shops into separate SPO and non SPO groups.</p> <p>Find out the weekly food consumption of their endangered rainforest animal at Chester Zoo. Weighing the equivalent of this out in non- standard units of measure.</p>	<p>Present data on SPO products using pictograms, tally charts, block diagrams or simple tables.</p> <p>Survey parents about their knowledge of SPO products. Construct simple block diagrams or simple tables to present the data and findings.</p> <p>Rainforest animal study, choosing and using appropriate standard units to estimate and measure to make a scaled 2D paper outline.</p> <p>Compare and order different rainforest animal length and mass and record the results using <math>&gt;</math>, <math>&lt;</math> and <math>=</math></p> <p>Plant study, choosing and using appropriate standard units to measure (length/height (m/cm); mass (kg/g) to make a scaled 3D plant or tree.</p> <p>Rainfall study in school grounds using measuring vessels and recording in litres / ml. Comparing this to data online for typical rainforest rainfall.</p>



## SPO Maths KS2

3	4	5	6
<p>Collect data on the amount of palm oil produced from a single palm fruit, children to estimate, measure, compare, add and subtract different volumes (ml/l).</p> <p><b>Differentiated work</b> - focussing on finding fractions, by looking at a plan showing a hypothetical palm oil farm e.g. finding the fraction occupied by orangutans, fraction of open land etc.</p> <p>Measure arm spans. Who has the longest and shortest? How much longer is a male orangutan's arm span than a student's? Compare student heights with orangutan heights.</p> <p>Use orangutan and student arm length and height length data to create bar charts and tables.</p> <p>Children to complete tables at home of 20 products. They are to record the number of products with sustainable palm oil and those without. In school they can create pictograms to show their findings. (Children to be told which types of products may contain palm oil - children to look at these).</p> <p><b>Link to DT</b> - children to measure out the ingredients needed, when following a recipe that uses sustainable palm oil products. Higher ability children could change the quantities to cater for a larger number of people.</p>	<p>Make links from numerical SPO facts, recording this as multiplication number sentences and the related division facts.</p> <p>Solve addition and subtraction two-step problems in the context of rainforest wildlife (plants or animals).</p> <p>Interpret and present numerical discrete data gathered from SPO and rainforest research on bar charts e.g. comparison of the average life span of specific animals, comparison of numbers found in specific rainforests etc. Could plot how numbers of a specific species have declined or increased over a specific time period and plotted as a time graph. Create a pie chart to show how many litres of different oil types (palm, coconut, olive, soyabean, rapeseed and sunflower) can be created from 1 hectare of land.</p> <p>Create an imaginary map of a rainforest animal's habitat on a 2-D grid and use coordinates in the first quadrant to give positions of the different things within its habitat.</p> <p>Describe positions of hypothetical factory buildings and palm oil plantations given on a 2-D grid as coordinates in the first quadrant.</p> <p>Solve comparison sum and difference problems about endangered rainforest animals, using information presented in Chester Zoo's fact files (tables) e.g. compare the difference in lifespan of specific animals.</p>	<p>Use data gathered from SPO research, children to read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit</p> <p>Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000, this will be from data gathered on SPO, given to them by their class teacher.</p> <p>Recognise and use reflection and translation, using images of their block prints (created in Art and Design).</p> <p>Draw a line of reflection parallel to the axes using images of block prints (created in Art and Design).</p> <p>Translation of items on a map to different places e.g. movement of orangutans, trees, buildings etc.</p> <p>Calculation of area of different parts of hypothetical palm oil farm in cm<sup>2</sup>.</p> <p>Find out and record the length and mass of a baby as it grows over a period of months. Record as a time graph. Read and interpret information from the graph. (See Science).</p> <p>Read and interpret graphs/ tables related to Science work, recording and comparing the gestation periods of humans with that of specific rainforest animals. (See Science).</p>	<p>Read, write, order and compare numbers on the quantities of litres of palm oil which are typically transported to different countries (up to 10 000 000) and determine the value of each digit.</p> <p>Interpret and construct their own pie charts on SPO and use these to solve problems e.g. compare the numbers of specific animals in critically endangered group of animals with specific animals in the vulnerable group of animals. (See red list).</p> <p>Interpret and construct their own line graphs on SPO and use these to solve problems e.g. research how a specific animal species' numbers have declined over the past 10 years and show on their own line graph.</p> <p>Use data gathered on SPO to calculate and interpret the mean as an average.</p> <p>Calculate scales to accurately draw a plan for a sustainable PO factory (to a given scale).</p> <p>Calculate the fraction and percentage coverage of e.g. open land, land with wildlife corridors etc. of a hypothetical palm oil farm.</p> <p>Convert the estimated distances between different points on given palm oil plantation maps from miles to kilometres</p> <p>Convert the estimated distances between different points on SPO factory plans pupils have drawn; from miles to kilometres.</p>

3	4	5	6
	Find the area of different parts of a hypothetical palm oil farm e.g. the area of the farm inhabited by orangutans, buildings etc. Area worked out by counting squares, but more able to calculate in cm <sup>2</sup> .		

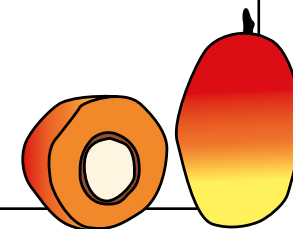


EYFS	1	2
<p><b>Understanding the World -</b></p> <p><b>The Natural World</b></p> <p>In an introduction to where food comes from children will be given the opportunity to say what they already know. They will also be able to say what they would like to learn about where food comes from. This is to be used to explain about how the oil palm tree is used to make an oil which is in lots of different foods, as well as many different household products like cleaning soaps and liquids we can buy from shops.</p> <p>Children to learn about the different animals which live in rainforests such as birds, orangutans and insects. The class is to choose one rainforest animal affected by unsustainable palm oil production to learn and study about in more detail.</p> <p>Children to make a class rainforest and roleplay what it's like to be an animal in the rainforest. To enrich this experience children are to be shown animations, pictures and film clips about the oil palm tree.</p> <p>Understand why it is important to choose food and cleaning products from the shops which have the certified sustainable palm oil logo to help prevent the dying out of animals.</p> <p>Children to learn it is important humans do not cut down the rainforests to make way for oil palm trees, otherwise the animals who live there may have to move and it may also cause pollution and damage to our planet.</p>	<p><b>Plant study -</b> Compare <b>common wild and garden plants</b> with less common plants found in the rainforest, such as the world's largest flower: Rafflesia.</p> <p>Identify and describe the <b>basic structure</b> of a variety of common flowering plants, including trees in the UK and rainforests of the world (including the oil palm tree, planted in their place).</p> <p><b>Animal habitat study -</b> identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals (plus the <i>endangered</i> Sumatran tiger from the rainforest).</p>	<p><b>Living things and their habitats -</b> Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants. They will learn about how the rainforest habitat of endangered animals including the Sumatran elephant are being destroyed by the unsustainable oil palm tree plantation industry and how these animals are going in search of a new place to live and source food. Compare animals in a local woodland habitat (including micro habitats), with animals found in less familiar habitats, such as the seashore, in the ocean and in the rainforests of Sumatra, Indonesia.</p> <p><b>Animals including humans -</b> Find out about and describe the basic needs of animals, including humans, for survival (water, food and air). Learn that some endangered rainforests animals are having their habitat taken away from them and are in danger of extinction because of the growing palm oil demand in the world.</p>



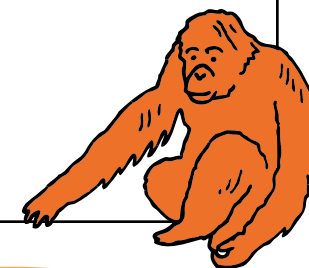


3	4	5	6
<p><b>Animals including humans -</b> Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat. Make links to the rainforest animals e.g. Discuss the plight of orangutans who cannot survive on oil palm fruit – they need a diversity of plants to eat.</p> <p><b>Plants -</b> Investigate the way in which water is transported within plants, linking this to rainforest plants or the oil palm tree.</p> <p>The requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant. Compare the amount of sunshine and rainfall between the UK and the rainforest in Borneo in South-East Asia – how does this affect plant production and growth? Recognise the importance of rainforests to life in general, for the production of oxygen.</p> <p><b>Animals, including humans -</b> Identify that humans and some other animals have skeletons and muscles for support, protection and movement.</p> <p>(Compare how similar human skeleton is to an orangutan).</p>	<p><b>Living things and their habitats -</b> Explore the <b>negative impact</b> of humans on <b>the environment</b> through learning about the deforestation of rainforests in Borneo because of unsustainable palm oil plantations and comparing it to the positive impact when the plantations are sustainably farmed (linked to English persuasive writing and geography map work).</p> <p>Recognise that environments can change and that this can sometimes pose dangers to living things, making links to the reasons for deforestation.</p> <p>Explore how rainforests have been removed to make way for palm oil plantations. (Link to persuasive writing project work – English).</p> <p>Recognise that living things can be grouped in a variety of ways, including categorising the animals of the rainforests: vertebrate animals into groups such as fish, amphibians, reptiles, birds, and mammals; and invertebrates into snails and slugs, worms, spiders, and insects.</p>	<p><b>Living things and their habitats -</b> Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird (Comparing and contrasting UK animals with rainforest animals).</p> <p>Understand how reproduction occurs for amphibians and most insects. Learning about how metamorphosis differs between these groups and how most amphibian and insect reproduction is sexual reproduction. Looking at the similarities and differences between a rainforest animal and a UK animal.</p> <p>Describe the life process of reproduction in some plants and animals. Focusing on different types of reproduction, including sexual and asexual reproduction in plants, and sexual reproduction in animals (including a rainforest plant and animal).</p> <p>Observe and compare the life cycles of plants and animals in their local environment and find out how these plants and animals are similar to those found in the rainforests of Borneo. Focus on how animals and plants in Borneo are affected by deforestation from unsustainable palm oil production.</p> <p><b>Animals including humans -</b> Research the gestation periods of animals and comparing them with humans; by finding out and recording the length and mass of a baby as it grows. (See Mathematics)</p>	<p><b>Living things and their habitats -</b> Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals.</p> <p>Classify common animals (and some rainforest animals) using a classification key into commonly found invertebrates (such as insects, spiders, snails, worms) and vertebrates (fish, amphibians, reptiles, birds and mammals).</p> <p>Give reasons for classifying plants and animals based on specific characteristics. Use a classification key to classify rainforest animals affected by unsustainable palm oil plantations.</p> <p><b>Evolution and Inheritance -</b> identify how the rainforest animals and plants are adapted to suit their environment.</p>



## SPO Geography EYFS KS1

EYFS	1	2
	<p>Identify the four countries England, Scotland, Wales and Northern Ireland which make up the United Kingdom. Identify the capital cities of the United Kingdom and its surrounding seas.</p> <p>Identify the City of Chester on a map (the first SPO City in the UK) and mark their own home town on it to compare where they live in relation to Chester.</p> <p>Learn where the directions North, East, South and West are in relation to their school grounds.</p> <p>Identify the key physical features of their local area and compare them to those in the rainforests of Sumatra in Indonesia.</p> <p>Locate the United Kingdom and Indonesia on a globe.</p> <p>Identify seasonal and daily weather patterns in the UK and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles. Compare and contrast the seasonal climate in the UK to that of Sumatra.</p>	<p>Use world maps, atlases and globes to identify the UK and its countries, the world's seven continents and five oceans. Use the atlas to locate Sumatra in Indonesia.</p> <p>Locate on a map and globe where the United Kingdom is in relation to Indonesia and the surrounding seas. Identify which of the world's seven continents the UK and Indonesia are within.</p> <p>Compare their local surroundings (including the nearest forest), to the rainforests of Sumatra; the natural habitat of the Sumatran elephant. Children will identify key physical and human features in each of the different habitats.</p> <p>Can the children plot a journey line from the UK to Sumatra in Indonesia? Over which countries and oceans would they need to travel?</p> <p>Look at the effects of the weather on themselves and their surroundings (such as to plants and animals) – This is to be recorded termly. Children to compare local rainfall to that in a rainforest in Sumatra, Indonesia.</p>



## SPO Geography KS2

3	4	5	6
<p>Studying maps of the rainforest, the children should recognise how rainforests are found between the Tropics of Cancer and Capricorn, how locations near to the Equator are hotter than locations further away and how they remain hot throughout the year.</p> <p>The children should learn about the importance of the rainforest for biodiversity and the importance for life, including that of humans. (See Chester Zoo video: 'Why are rainforests important?') (See Science activities). Link to English and Science work on deforestation and its effect on the orangutan and the importance of sustainable farming, including wildlife corridors.</p> <p>The children can learn about the different features and layers of a rainforest. Explore rainforest features on aerial photographs. See Chester Zoo 'Rainforest in a box' activity that requires the children to make different boxes of materials (including natural materials) to represent the different rainforests around the world, their layers and example animals. Different groups can focus on different rainforests.</p> <p>Compare and contrast the Amazon or Central American rainforests with that of a forest in the UK e.g. Sherwood Forest, New Forest or Delamere Forest (near Chester). How is it used and managed compared to Amazon or Central American rainforest? Compare the life of people in the rainforest to the local area. What is different? What is similar?</p>	<p>Sketch their own simple sketch map from a bird's eye (aerial) view point of rainforest in Indonesia and/ or the Amazon, from an aerial photograph/ satellite image. Mark in major physical and human features e.g. rivers, deforested land.</p> <p>Create a simple sketch map of a rainforest from a bird's eye (aerial) view using a key.</p> <p>Begin to identify given places (and symbols) on a large and medium-scale OS map, junior atlas, online map and globe.</p> <p>Study the location of major cities and towns in the UK and contrast to a map of South America. Consider how these differ to other areas of the country, in particular the rainforest. Identify rainforest features on aerial photographs.</p> <p>Children to use various map sources/ aerial photos/ satellite images /pictures to locate mountain ranges, rivers and oceans in the UK. Compare to those in South America. Which of these features pass through the rainforest?</p> <p>What animals may be affected by deforestation (by humans) in chosen region e.g. Ecuador? Investigate the cause and consequence of deforestation in the region. See Chester Zoo videos: 'What does Chester Zoo do in the rainforest of Ecuador?' and 'What is deforestation?'</p> <p>Compare to Science work, exploring the negative impact of man on the environment</p>	<p>Use four-figure grid references to locate human and physical geographical features of the rainforest on a drawn map of an area of rainforest. Use of legends.</p> <p>Draw a plan view map of a hypothetical rainforest with human and physical geographical features with some accuracy of scale and a legend.</p> <p>Use atlases with index and contents pages to find out about the world's rainforests. Use an atlas to find out about the weather patterns in the mountain regions and rainforests of South America and in Indonesia.</p> <p>Collect and record the measurements of rainfall in rainforest regions e.g. Ecuador and Borneo and compare to the UK. Compare and contrast the patterns of rainfall across the year.</p> <p>Identify given places on a map, comparing them with aerial photographs. Use an atlas to find Borneo in Malaysia and Ecuador in South America.</p> <p>Compare and contrast the regions of North and South America with the local area. The region of South America will be the rainforest. Study the types of settlements found in the rainforest.</p> <p>Investigate cause and consequence of deforestation on the people and the plants and animals who live in South America and compare to Indonesia. Use information online to investigate the reasons for</p>	<p>Compare and contrast hypothetical sustainable and unsustainable oil palm plantations.</p> <p>Create a sketch map of a hypothetical sustainable oil palm plantation, including suitable buildings, the rainforest, plantations and wildlife corridors. Encourage annotations to explain e.g. the existence of wildlife corridors etc.</p> <p>Collect and record facts (unaided) from primary and secondary sources of evidence on in the different rainforest layers.</p> <p>Use 4 or 6 figure co-ordinates to mark in the rainforests of the world where deforestation is the most prevalent and find out what difference has it made to these environments. How has the rainforest affected the way the people live and work?</p> <p>Research the reasons for the setting of sustainability standards in Indonesia to curb the deforestation in these regions for Palm Oil. Find out about the increase in Palm Oil plantations in South America, the risks posed to this region and what the area needs to do to make certain that land is not lost to deforestation. How might the consumer help this? (Using CSPO products).</p> <p>Locate key places in the transatlantic trade on a world map, including UK ports. Use Google Earth to help with research. Begin to use latitude and longitude on atlas maps to locate key places.</p>

3

Look at recounts/ photographs/ Chester Zoo resources for information.

Draw a sketch map of the rainforest habitat in Chester Zoo, annotating the main features.

Use non-fiction books, stories, atlases, pictures/photos and internet to support investigation.

4

through the deforestation of the Borneo rainforest to create unsustainable palm oil. Relate to the fact that although 85% of palm oil production is produced in South-east Asia new restrictions there will probably increase palm oil plantations in Latin America.

Compare features from the Amazon and Indonesia by creating sketch maps in the local area of the school in the UK, including horizontal view sketch maps, with more detailed keys and using direct observations and measurements. Compare to local maps e.g. OS maps. Possibly use letter/ no. co-ordinates to help others locate features.

Draw a simple map (with key) of the rainforest habitat at Chester zoo from a bird's eye view point.

The children can explore the animals and plants that live in e.g. Ecuador or Guatemala and compare to those that are found in the rainforest in Borneo and possibly Africa. Create a memory card game, matching the animal species with which rainforest it is found in the world.

The children can categorise the vertebrate animals in the rainforests into their specific groups (see Science activities).

5

deforestation. Compare the different historical reasons for deforestation in South America. Discuss how it is thought the growth of palm oil is thought to possibly lead to more deforestation in the future, following on from more restrictions in South-East Asia. Use Google Earth to help with enquiry.

Compare and contrast how the local area has changed over the years with the same period of the rainforest. (See Geography website to look at locations in the UK in the past and use Google maps to compare how it looks now.) Use factual information e.g. on fact cards about life in the past and the present to predict what might happen to areas of the rainforest in the future. Compare to similar factual information about the UK

Compare maps of Borneo from different years between 1950 and 2020 to show the change in rainforest cover during this period, as a result of the deforestation for oil palm tree plantations. Compare to those in Ecuador.

6

Confidently locate or identify given places (linked to palm oil production) on an OS map and world map, recognising this as a flattened globe. They will also describe the OS map features shown. Children will use a scale to measure the distance between different places.

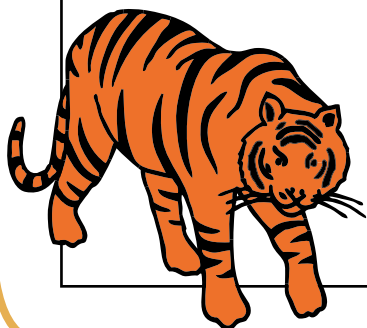
Compare the weather in the main rainforests of the world and describe how latitude can influence geography and climate of these regions. Describe the significance of the Equator, Tropics and Poles. Compare to the UK.

Use the Koppen system, an atlas, information books/ the internet to find out the climate and biomes of specific places around the globe, including specific places in the rainforests of Indonesia.

Use an atlas to identify the main continents of the world and the main countries in North and South America and in South-east Asia. Use an atlas to find the capital cities of these regions.

The children are to carry out fieldwork of their local area to find out the different aspects of human and physical geography. Using secondary resources (videos, factual information given and research), the children are to compare and contrast their local area with a region in the rainforest of South America.

Children to play the Green Gold Game, learning about the negative impact of non-sustainable palm oil production on deforestation and pollution. As well as the positive impact of SPO production has on the rainforest animals, it's workers and us as consumers.



## SPO HISTORY EYFS KS1 KS2

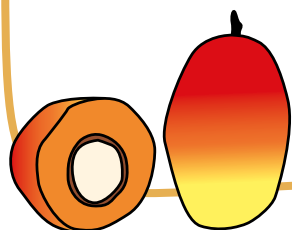
EYFS	1	2
	Children to learn about how David Attenborough has campaigned to raise awareness of the importance of the need to save the remaining rainforests of the world and their endangered animals and plants.	Children to learn about how their local zoo has over time, contributed to preventing the extinction of endangered animals, with a focus on campaigning for people to be more sustainable in their lifestyle.

3	4	5	6
Children to create a class timeline about Chester Zoo and what they have done in terms of conservation from 1930 to present day, with a focus on their recent SPO campaign.	Children to take a step back in time to look at where palm oil came from and how it arrived in other countries around the world. Children to create their own historical palm oil timeline.	Children to create a timeline of deforestation in Malaysia; mapping a visual representation of the changing rainforest coverage on the country over time.	Children to create a timeline of deforestation in Western Africa's rainforest; by mapping a visual representation of the declining rainforest coverage in the rainforest over time.

## SPO PHYSICAL EDUCATION EYFS KS1 KS2

EYFS	1	2
<p><b>Physical Development -</b>  <b>Gross Motor Skills</b> - Children to play rainforest themed games, carefully looking at where they are running to, how much space they have. And climbing on, off, over and under obstacles safely, with consideration for themselves and others. Children to play games involving them moving about (such as running, jumping, hopping, swooping, diving and skipping) like an animal.</p>	<p><b>Dance</b> - Children to create their own dance consisting of a sequence of simple controlled moves. The dance will be inspired by an animals' desire to stay in their natural rainforest habitat.</p> <p><b>Gymnastics</b> - Children to develop their agility, balance and coordination, inspired by the movement of rainforest animals.</p> <p><b>Games</b> - Children to make up their own rainforest themed games in which they improve their distance, stamina and agility. Children to complete against themselves, in a team race and against others.</p>	<p><b>Dance</b> - Children to create dances with a sequence of controlled moves. Dances to be inspired by studying rainforest animal movements. Children to perform their dance to others, evaluating and improving their dance.</p> <p><b>Gymnastics</b> - Children to perform gymnastic movements, (inspired by studying rainforest animal movements); developing their balance, agility and co-ordination.</p>

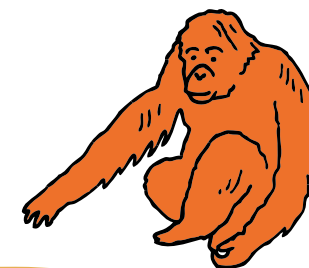
3	4	5	6
<p><b>Dance</b> - Children to explore dance music videos, as seen in 'Truth to Power' by OneRepublic. Through the practising of moves, they will develop their flexibility, strength, technique, control and balance. Children to perform the dance, using a range of movement patterns. Children's performances are to be filmed by peers so they can compare their performance with previous ones and demonstrate improvement.</p>	<p><b>Dance</b> - Children to create their own rainforest dance which tells a story of the plight of the animals living in the rainforest. From the beginning of living in harmony to the woes of deforestation, the removal of their home and pollution.</p>	<p><b>Dance</b> - Children to explore traditional dance typical of that in southern Asia; through the practising of moves they will develop their flexibility, strength, technique, control and balance. Children to perform this traditional dance using a range of movement patterns. Children to compare their performances with previous ones and demonstrate improvement to achieve their personal best.</p>	<p><b>Dance</b> - Children to explore rap dance typical of that in Africa and America. Children to perform a rap dance using a range of movement patterns; developing their technique. Children to film their performance, to compare with previous ones. Children to demonstrate improvement to achieve their personal best rap.</p>



## SPO MUSIC EYFS KS1 KS2

EYFS	1	2
<p><b>Expressive Arts and Design -</b></p> <p><b>Being Imaginative and Expressive -</b></p> <p>Children to sing and perform actions or dances to animal songs from Indonesia, or a song which they have made up as a class to well-known nursery rhyme melody. Children to take a 'musical walk' through the rainforest.</p>	<p>Children to listen to the sounds that can be heard in the rainforest (such as birds, insects and orangutans), exploring with their own voices to create animal noises/calls. Children to create animal sound chants with different timbre dimensions (long / short sounds and different pitch) by using their voices and instruments. Children to work individually, in pairs and small groups. Performing, reviewing and evaluating their sounds and that of others.</p>	<p>Children to listen to the sustainable palm oil conga song from Chester zoo's website &amp; learn it by heart, performing it with enjoyment. Children to record their musical accompaniment notations as a pictorial graphical score.</p>

3	4	5	6
<p>Children to learn and perform the 'Truth to Power' by OneRepublic. Children to use instruments and their voices to sing from <b>memory</b> with <b>accurate pitch</b>.</p> <p>Children to learn the importance of <b>articulating song words</b> to communicate the song to the audience, through writing their own class song about saving the animals of the rainforest.</p>	<p>Children to create their own class palm oil conga, taking inspiration from the Chester Zoo palm oil conga. Children to use tuned and untuned instruments, as well as their voices to mimic the sounds of the rainforests and animals who live there.</p>	<p>Children to explore traditional dance music sung and played by the tribe people affected by the production of palm oil in southern Asia. Children listen with attention to detail and recall sounds with increasing aural memory.</p>	<p>Children to learn and perform a Palm Oil RAP performed and written by rapper Jon Chase in collaboration with Chester zoo. children to listen to the rhythm and rhyme and say sections of the rap to engrain it in to their memory. Children to rehearse, improving each time their aural memory of the raps detail.</p>



## SPO ART AND DESIGN

EYFS	1	2
<p><b>Expressive Arts and Design -</b></p> <p><b>Creating with Materials</b> - In small world and role play children are to create a rainforest habitat, decorated with their own (handing) painted paperchains and imaginary insects and birds made from recycled and natural materials.</p>	<p>Create artwork of animals which live in rainforests.</p> <p><b>Suggested media:</b></p> <p><b>Paint:</b> using thick and thin paint brushes to create effect.</p> <p><b>Pencil and crayon:</b> creating depth, shape and space.</p> <p><b>Textile weaving:</b> layering up different vegetation and different textiles for textures and shading.</p> <p><b>Collage:</b> cutting, ripping and tearing of paper, tissue and card 3D models: adding depth, width and height.</p> <p><b>Printing:</b> designing and printing with vegetables and fruit, to create the desired rainforest animal patterns.</p>	<p><b>Drawing and painting</b> - Children to experiment in their sketch books using hard or soft pencil (such as 4B, HB and 4H) and thick and thin brushes to create the range of colour shades and lines seen in rainforest plants to create light and dark in their drawings and paint work of different leaf shapes. Children to use a view finder to help them focus in on an area of the plant or animal before they draw it.</p> <p><b>Computing</b> - Children to use technology such as tablets and cameras to support them make and adapt images of rainforest or oil palm trees. Children to use the brush, fill, spray and pen tools to create line, pattern, shape, colour and texture.</p> <p><b>3D Sculpture</b> - Children to create their own 3D rainforest animal or plant sculptures. Sharing their ideas and artistic experiences.</p>

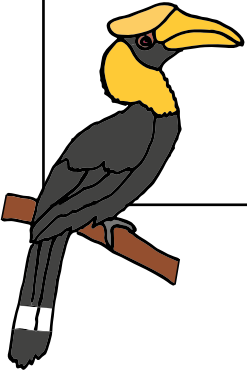
3	4	5	6
<p>Collect in a sketchbook children's own sketches of a chosen rainforest plants or animal, as well as small printed paper clippings.</p> <p>Investigate <b>visual and tactile qualities</b> of a <b>range of materials</b> to create rainforest plant or animal art pieces: including different textured paper and card. Experiment with how ink wash, beryl</p>	<p>Create <b>Batik</b> of their class rainforest animal. Inspired by those traditionally done in Malaysia.</p> <p>Practise skills of creating <b>colour, pattern and texture</b> in sketch book. Create a <b>pencil drawing</b> of their rainforest animal, using the effects of various colour, pattern and texture.</p>	<p>Create own design for a <b>printing block</b> which represents their chosen rainforest animal, this could either be a silhouette, foot print or typical animal markings.</p> <p>Record an <b>observational drawing</b> of their rainforest animal in their sketch book, using various skills learnt. Children to review the effect of these skills and revisit ideas and improve upon them</p>	<p>Use a range of art materials and media such as forest <b>shades of ink, tissue paper and oil pastels</b> to recreate the changing rainforest coverage of the continents of Indonesia and Malaysia (see History).</p> <p>Look at works of art depicting rainforest shades, depth and mystery.</p> <p>Re-create own <b>drawings/paintings</b> based</p>



3

marker pens and crayons can be used to create effect.

Design and make a **sculptured** rainforest animal from **3D materials** such as tape over a wire skeleton.



4

Create a rainforest animal (or oil palm tree plantation) **water colour painting** for display, using different paint effects, such as: dancing, light-filled passages to richly coloured transparent darks, from cascading wet washes to staccato dry brush.

5

Use **wax resist** and create a **wash** to see the effect. This can be used to illustrate their work in other subjects.

Look at the work of **Henri Rousseau**. Experiment and build upon their knowledge of **paint colour mixing** to copy his style; to recreate their own piece of work.

Design and make clay jewellery similar to that worn by tribes people.

Design and make a rainforest animal with a painted design on.

6

on the chosen style.

Practice the technique of **quilling** and create a group forest collage using the technique.

Design, make and evaluate a **clay** rainforest animal with a painted design on.

## SPO COMPUTING EYFS KS1 KS2

EYFS	1	2
	<p>Children to insert images of rainforest plants and animals in to a document or piece of typed writing using 'PicCollage'. Children to label images with the correct names. Children to save and retrieve their work. Children to print their work. This work could be displayed as part of a class fact file on a chosen rainforest animal.</p>	<p>Children to use a simple computing editing programme which allows them to add images of different habitats, animated animals or plants, new pages and text.</p> <p>Children to use specific web addresses to help them safely locate information and seek the answers to questions they may have. Such as <a href="https://facts.kiddle.co/Ask.com">https://facts.kiddle.co/Ask.com</a></p>

3	4	5	6
<p>Children to create a podcast about the importance of SPO using audacity (or other program) to create a podcast with a script, recording a voice, music and 'Ducking'.</p>	<p>Children to create an animation of a stop frame animation on any aspect of their SPO work using titles, credits, transitions</p>	<p>Children to create a blog on their sustainable palm oil project - create a profile, upload text, images and web links and comment constructively on other's pages.</p>	<p>Children to create a podcast about their campaign to get people to be more 'sustainable using and APP such as Audacity to create a podcast with sound effects</p>



## SPO DESIGN AND TECHNOLOGY EYFS KS1 KS2

EYFS	1	2
	Children to design, make and evaluate a vehicle suitable for conservationists to work within. It must have moving wheels and be camouflaged. Children to cut, saw, join and glue junk model items and doweling and cookie / cotton reel wheels. Food – design and make SPO cakes for a class treat or to sell to raise money for endangered rainforest animals.	Children to design, create (cut, shape, join and finish) and make an Indonesian tribal head dress or mask.

3	4	5	6
Design and make a rainforest animal (affected by unsustainable PO production) with moving parts from card with pivots, a lever and slider.	Research practically how pneumatics work. Explore tubing, balloons and syringes. Design, make and evaluate a 'pop up' rainforest using Pneumatics.	Plan, design, make and evaluate a healthy lunch made from ingredients containing SPO.	Design, make and evaluate a healthy smoothie and main course made from ingredients containing SPO.  Design, make and evaluate a 3D cross section of a rainforest, showing the many layers. Children to use a variety of joining and moving techniques  After playing the computing 'Green Gold' game, children to design and create their own decision-making board game.

