

The Rainforest : Cross-Curricular Topic : Year 3/4

Geography

1	Discover where the rainforests are in the world and locate them on a world map.
2	Explore what it is like in a rainforest and learn about the four main layers of vegetation.
3	Define the word 'climate' and use charts and graphs to explore the climate of tropical rainforests.
4	Discover the indigenous rainforest tribes and compare their lives with life in modern society.
5	Explore how the rainforests are under threat and the actions that we can take to help save them.

- KS2 - locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities
- KS2 - identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night)
- KS2 - describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle
- KS2 - describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water
- KS2 - use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied

The Rainforest

A KS2 cross-curricular topic for Year 3 and 4

Art

1	Learn and refine techniques to observe and draw animals.
2	Explore the art of Henri Rousseau and replicate some of his work using collage.
3	Design and make an animal mask.

- KS2 - to improve their mastery of art and design techniques, including drawing with a range of materials
- KS2 - to improve their mastery of art and design techniques, including painting with a range of materials
- KS2 - to improve their mastery of art and design techniques, including sculpture with a range of materials
- KS2 - about great artists in history

Science

1	Investigate the different parts of a plant and their purpose.
2	Identify and describe the different types of plants found in the rainforest.
3	Identify different animals who live in the rainforest using branching databases.
4	Identify, organise and group animals based on different classifications.
5	Discover how animals and plants in the rainforest are linked through food chains.

- Year 3 - asking relevant questions and using different types of scientific enquiries to answer them
- Year 3 - gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- Year 3 - recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- Year 3 - reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- Year 3 - identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers
- Year 4 - recognise that living things can be grouped in a variety of ways
- Year 4 - explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment
- Year 4 - construct and interpret a variety of food chains, identifying producers, predators and prey

Computing

1	Learn about the most effective and efficient search terms when researching facts about the rainforest.
2	Use word processing to present a rainforest glossary.

- KS2 - use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- KS2 - select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

DT

1	Design, sew and evaluate poison dart frog beanbags.
2	Design, make and evaluate an information book with moving parts.

- KS2 - use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- KS2 - generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
- KS2 - select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- KS2 - select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities
- KS2 - evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- KS2 - understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]

The Rainforest

Teacher's Topic Planner

English

Science
5 Lessons



Maths

History

Geography
5 Lessons



RE

Computing
2 Lessons



Art
3 Lessons



DT
2 Lessons



Languages

Music

The Rainforest : Cross-Curricular Topic : Year 3/4

Teacher's notes:

Geography

Science

Art

DT

Computing

The Rainforest : Cross-Curricular Topic : Year 3/4

GEOGRAPHY				
	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To find out what a rainforest is and where they are found.	Children will use a world map to identify the areas where rainforests can be found. They will use these maps to identify the Tropics of Cancer and Capricorn and are challenged to transfer this knowledge and understanding on their own maps, identifying the countries and continents where rainforests are found.	<ul style="list-style-type: none"> • Can children locate the Tropic of Capricorn, Tropic of Cancer and equator on a world map? • Do children know that rainforests lie between the two tropics? • Can children name continents and countries that have areas of rainforest? 	<ul style="list-style-type: none"> • Slides • Worksheet 1A/1B/1C/1D/1E • World Map sheets • Rainforests Map sheets • Country Cards (FSD? activity only)
Lesson 2	To explore the layers of vegetation in a rainforest.	Children have the opportunity to discover how the climate in a tropical rainforest makes it perfect for plant growth. They will investigate how the rainforest can be split into four main layers of vegetation and are challenged to describe each of these layers.	<ul style="list-style-type: none"> • Can children describe what the rainforest is like? • Can children name the four layers of vegetation in a rainforest? • Can children describe the features of each layer of vegetation and identify animals that live there? 	<ul style="list-style-type: none"> • Slides • Worksheet 2A/2B • Information Sheet • Challenge Cards (FSD? activity only) • Art materials, e.g. brown/green paper, paints, tissue paper, paints, chalks, etc. (FSD? activity only)
Lesson 3	To investigate the climate of the rainforest.	This lesson will teach the children about the climate of the rainforests and allow them to research the climate using charts and graphs, including temperature and rainfall. They will also investigate the role rainforests play in the water cycle.	<ul style="list-style-type: none"> • Do children understand the word 'climate'? • Can children describe the climate of a tropical rainforest? • Can children compare the climate of the rainforest with climates in other parts of the world? 	<ul style="list-style-type: none"> • Slides • Worksheet 3A/3B/3C/3D/3E • Challenge Cards (FSD? activity only) • Coloured paper, art materials, etc. (FSD? activity only)
Lesson 4	To find out about the people and settlements of the rainforest.	In this lesson the children will discover the lives of the indigenous tribes of the rainforest and compare them to their own lives. They will look in particular at the Yanomami tribe, including their housing, clothing, hunting, traditions etc.	<ul style="list-style-type: none"> • Do children know that there are settlements in the rainforest? • Can children describe the way of life of traditional tribespeople? • Can children explain how people use the rainforest sustainably to survive? 	<ul style="list-style-type: none"> • Slides • Worksheet 4A/4B/4C/4D/4E • Access to internet, books, etc. • Question Cards (FSD? activity only)
Lesson 5	To explore why the rainforest is under threat and the measures taken to protect it.	This lesson has the children investigating the reasons behind deforestation and what they can do to help reverse the effects that this has on the world. They are then challenged to show their understanding of deforestation and what can be done to help save the rainforests by writing a newspaper report.	<ul style="list-style-type: none"> • Do children know that rainforests around the world are under threat? • Can children describe reasons why rainforests are destroyed? • Can children describe ways in which rainforests can be protected? 	<ul style="list-style-type: none"> • Slides • Worksheet 5A/5B/5C/5D • Books, access to internet, etc. • Information Sheet (FSD? activity only)

The Rainforest : Cross-Curricular Topic : Year 3/4

SCIENCE				
	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To be able to identify the different parts of rainforest plants and their uses.	In this lesson the children will identify different parts of a plant and their functions whilst studying a variety of rainforest plants. They are challenged to draw and label different rainforest plants and describe what each part of the plant is for.	<ul style="list-style-type: none"> • Can children identify some of the plants in the rainforest? • Can children identify the different parts of a plant? • Can children use appropriate vocabulary to describe rainforest plants? 	<ul style="list-style-type: none"> • Slides • Worksheet 1A/1B/1C/1D • Picture Cards • Label Cards (FSD? activity only)
Lesson 2	To be able to identify a variety of rainforest plants.	Children will investigate rainforest plants in more detail, learning about the different leaves, shapes and fruit that grow there. They then use a branching database to identify the different plants based on their descriptions.	<ul style="list-style-type: none"> • Can children identify a variety of rainforest plants? • Can children describe a variety of rainforest plants according to their characteristics? • Can children match a plant to its description? 	<ul style="list-style-type: none"> • Slides • Worksheet 2A/2B/2C • Picture Cards A/B • Branching Database • Riddle Cards • Plant Cards (FSD? activity only) • Access to books, internet, CD ROMs, etc. (FSD? activity only)
Lesson 3	To be able to identify a variety of animals from the Amazon rainforest.	In this lesson the children will be describing different rainforest animals and identifying them based on their features. They will use branching databases to help them identify the different animals that live in this kind of habitat.	<ul style="list-style-type: none"> • Can children identify a variety of animals that live in the Amazon rainforest? • Can children use a branching database to identify animals? • Can children describe what an animal is like based on a variety of characteristics? 	<ul style="list-style-type: none"> • Slides • Worksheet 3A/3B/3C • Branching Database A/B • Picture Cards • Name Labels • Animal Cards (FSD? activity only) • Books, CD ROMs, access to internet, etc. (FSD? activity only)
Lesson 4	To be able to classify rainforest animals according to various criteria.	Children are reminded of the criteria for classifying different types of animals into their various classes based on their features. They are then challenged to look carefully at some Carroll diagrams and think of the possible labels for each group in the diagram. They then think about different ways they can sort different animals based on their features.	<ul style="list-style-type: none"> • Do children know that the number of species means it is important to be able to sort animals into groups? • Can children identify ways of sorting animals into groups? • Can children sort animals into groups according to various criteria? 	<ul style="list-style-type: none"> • Slides • Worksheet 4A/4B/4C/4D • Picture Cards • Animals Cards (FSD? activity)
Lesson 5	To understand and identify food chains in the Amazon rainforest.	In this final lesson the children will learn to use scientific vocabulary such as consumer, producer, carnivore, omnivore and herbivore to describe different food chains which exist in the rainforest ecosystem. The children are challenged to complete and create food chains based on the diets of rainforest animals.	<ul style="list-style-type: none"> • Do children know what a food chain is? • Can children explain terms such as producer, consumer, herbivore, carnivore and omnivore? • Can children create food chains to see feeding relationships in the Amazon rainforest? 	<ul style="list-style-type: none"> • Slides • Worksheet 5A/5B/5C/5D/5E/5F • Organism Cards (FSD? activity only)

The Rainforest : Cross-Curricular Topic : Year 3/4

ART				
	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To be able to draw rainforest animals.	This lesson guides the children through different artistic techniques they can use to create an accurate sketch or cartoon of different rainforest animals. They observe how different shapes can make up the bulk of an animal before adding detail as well as thinking about where the features line up with one another.	<ul style="list-style-type: none"> Do children know that animals can be separated into shapes to make them easier to draw? Can children follow step-by-step instructions to draw cartoon animals? Can children draw from observation? 	<ul style="list-style-type: none"> Slides Worksheet 1A How to Draw sheets Picture Cards (FSD? activity only) Sketchbooks Drawing pencils Variety of options for colouring, e.g. paints, pastels, etc.
Lesson 2	To explore and replicate the art of Henri Rousseau.	Children are introduced to Rousseau's work and how he was inspired to paint rainforest scenes, despite not actually having seen a rainforest himself. They investigate his use of colours and shapes before moving on to find different ways of mixing colours to create multiple shades of green to use in their recreation of Rousseau's work.	<ul style="list-style-type: none"> Can children explain who Henri Rousseau was and describe his artwork? Can children replicate the artwork of Henri Rousseau? Can children evaluate their artwork and the artwork of others, saying what they think and feel about it? 	<ul style="list-style-type: none"> Slides Picture Sheets Paints and painting equipment Materials for collages (FSD? activity only)
Lesson 3	To be able to design, make and evaluate a rainforest animal mask.	This lesson challenges the children to make decisions on shapes and materials to use when creating a rainforest animal mask. They have the opportunity to see existing masks and base their choices on what they've seen. After evaluating these existing designs they begin to make their mask based on their decisions and evaluate them after the mask is complete.	<ul style="list-style-type: none"> Can children design an animal mask, making decisions about materials, tools and colours they will use? Can children follow their designs to create an animal mask? Can children evaluate their finished work? 	<ul style="list-style-type: none"> Slides Worksheet 3A/3B/3C/3D Design Sheets Mask Templates Materials, e.g. card, paint, tissue paper, elastic, sequins, coloured pencils, Modroc, newspaper, etc. Tools, e.g. scissors, craft knives, hole punches, masking tape, glue, etc.



The Rainforest : Cross-Curricular Topic : Year 3/4

COMPUTING				
	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To be able to use the internet to find out facts about the rainforest.	This lesson will give the children the opportunity to reflect on the phrases they use to search for information using the internet. They will look at different facts and discuss the best search phrases to find out if they are true or not. They then move on to think about the most effective and efficient search terms for finding relevant information.	<ul style="list-style-type: none"> Do children know what a search engine is and how it is used? Can children use appropriate search terms to find out facts online? Do children understand the importance of checking information found online for accuracy? 	<ul style="list-style-type: none"> Slides Worksheet 1A/1B/1C/1D Challenge Cards (FSD? activity only) Access to internet
Lesson 2	To be able to present a glossary of words relating to rainforests.	In this lesson the children will learn about how to insert tables into a word processor in order to create a glossary about the rainforest. They must use their understanding of search terms from the previous lesson to define rainforest vocabulary and place them into their table. They can then change the fonts and colours of their table.	<ul style="list-style-type: none"> Can children talk about what information they need and how they can find it? Can children insert tables, text and images into a Word document? Can children evaluate their work and identify what went well and what could be improved on? 	<ul style="list-style-type: none"> Slides Worksheet 2A/2B Rainforest Keywords sheet

DT				
	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To be able to design, make and evaluate a poison dart frog beanbag.	Inspired by the bright colours and patterns of poison dart frogs, the children will design, sew and evaluate their own bean bag frog. They will think carefully about the colours and patterns they will use as well as the method they will carry out to make their frog.	<ul style="list-style-type: none"> Can children create a design and describe how they will make a poison dart frog beanbag? Can children follow their designs to make their frogs? Can children evaluate their finished product and say what they think and feel about it? 	<ul style="list-style-type: none"> Slides Worksheet 1A/1B/1C/1D/1E Template Sheet Picture Cards (FSD? activity only) Felt, thread, glue, needles, pins, felt-tips, etc. Lentils or similar to fill
Lesson 2	To be able to design, make and evaluate a rainforest information book with moving parts.	Children are introduced to different methods of making moving parts within a book. They then use this information to plan, make and evaluate an information book about the rainforest or a specific aspect of the rainforest they have learnt about.	<ul style="list-style-type: none"> Can children design a book with appropriate moving parts? Can children work with a variety of tools and techniques to create moving mechanisms? Can children evaluate their finished work and the work of others? 	<ul style="list-style-type: none"> Slides Worksheet 2A/2B/2C/2D/2E Challenge Cards (FSD? activity only) Paper and card (various colours) Tools, e.g. split pins, scissors, craft knives, rulers, etc.