

Topic: What is a biome? Why are rainforests and oceans important to our lives?

Year Group: 4 Term: Summer 1 and 2

Ambition:

To know about livelihoods in Birmingham and how they are linked to the wider world

Community:

Know that some communities are self-sufficient on the use of the land
Know how beliefs and lifestyles are different in the wider community and how cultural practices are
different

Know that some communities' lifestyles are under threat and the impact of our choices on these communities

Equality

Know that some people choose to settle and live in less inhabited areas of the world Know that some animals are protected

Links to Prior Learning

Y2 – human/physical features

Y4 – understanding of what is meant by the word settlement Y3 – experimenting in sketchbooks by choosing from a picture bank for inspiration

Y1 – Sorting different types of animals

Writing Opportunities Through Topic Lessons

Information text about the layers of the rainforest

Persuasive advertisement Why fair trade is important Debate about the destruction of the rainforest (developers verses natives)

Write a report about why rainforests are important to our lives

Letter: Dear Greenpeace

Information text: the ocean biome

Information: The Great Barrier Reef Persuasive writing: protect our oceans

Double page spread: food from the oceans

Somebody swallowed Stanley, Sarah Roberts & Hannah Peck Independent hot task –
Science /geography
Information text: The
Sea Life Centre

Independent hot task Geography diary: Life of a child in the rainforest

Key Texts

The Great Kapok Tree Lynn Cherry The Explorer Katherine Rundell Running Wild Michael Morpurgo Free Verse Rainforest (Poems for a Geography Classroom – electronic)

Rainforest acrostic poems (Let's do Poetry in Primary schools p.111) Haiku The Haiku Monster by Paul Cookson (The Works 4 p.468) RE: Free verse poetry marriage

Dear Greenpeace, Simon James

Flotsom, David Weisner 20,000 Leagues Under the Sea, Jules Verne

Where the forest meets the sea, Jeanine Baker



Key Vocabulary

Geography

biome, rainforest, Amazon, Tropic of Cancer, Tropic of Capricorn, climate, temperature, rainfall, the emergent layer, the canopy, the understorey, the forest floor, vegetation, climate zone, de-forestation, palm oil, lumber ocean, habitat, coral reef, natural materials, pollution, erosion, overfishing, tourism, the trenches, the abyss, midnight zone, twilight zone and sunlight zone

Computing Sum 1
Digital image, editing,
composition,
retouching

Computing Sum 2 algorithm, sequence, repetition, input, output

Art
primitive,
complementary,
composition, layered,
depth, tone, compare,
simple, texture, style

DT propellers, motors, switches, circuit, electricity, battery, motor, water resistant, sturdy DT – Food coat (breadcrumbs), texture, smooth, whisk, shell, egg whites, egg yolks, peeler, tuna, spring onions

Projects

Art project:
Collage (layered piece
of art work based on
the rainforest using
collage and mixed
media)

Sketchbook experiment with ideas
of shape, texture and
media in sketchbook,
deciding which is
effective

DT project: Make a motor boat **Cooking project:**

Fishcakes



Concrete Knowledge

Geography

- Know the names of at least 3 South American countries
- Know where the world's rainforests/oceans are located including The Amazon Rainforest (tropical rainforest) and The Great Barrier Reef
- Know at least 4 types of biome including the ocean and tropical rainforests
- Know the different layers of the rainforest, (the forest floor, the understory, the canopy, the emergent layer) types of vegetation that grow in each layer and the animals that live there
- Know the importance of the Amazon River to the settlements
- Know that natural resources are produced in the rainforest (fair trade)/ocean (oil and gas)
- Know that the ocean is a biome and can name some features of the ocean and rainforest biomes
- Know how humans impact on the world:
- Know what is meant by de-forestation and its impact on the world
- Know how tourism affects The Great Barrier
 Reef (coral mining, overfishing, pollution)

Community

Know about the communities that live in The Amazon Rainforest

Art

- Know that primitive artists are self-taught with a simplistic style
- Know that Rousseau used simple shapes and depth of colour in his work
- Know the similarities between the work of Rousseau and Senanayake
- Know what complementary colours are

Music

 Know the features of Samba music (layers of rhythm – polyrhythmic, percussion instruments, call and response, lead by one player with a whistle and a repinique (a lead drum, taught aurally – no written music)

DT

- Know how to use learning from science to help design and make products that work
- Know that materials can be combined and mixed to create more useful characteristics
- Know that mechanical and electrical systems have an input, process and output
- Know how simple electrical circuits and components can be used to create functional products

DT - Food

- Know how and where fish are reared
- Know where and how a variety of ingredients are caught (double page spread in topic)
- Know the names of the ingredients and where it comes from (potatoes, spring onions, chives)
- Know the name of kitchen tool (masher, peeler)



Ed. visit follow up Create a brochure for the Sea Life Centre

Science

Know animals that live in the ocean and how they are suited to the habitat

Skill Progression

Geography

- I can locate the Amazon Rainforest on a map of South America
- I can locate and label the Great Barrier Reef on a map
- I can use an atlas to label countries (Brazil, Peru, Argentina) on a map of South America
- I can identify the position the Tropic of Cancer and Capricorn in relation world rainforests
- I can research geographical information (Amazon rainforest settlements and how the Amazon river is important to them, natural materials produced in the Amazon rainforest and their importance for medicines)
- I can record the average temperature and rainfall of the Amazon rainforest in graphs
- I can label diagrams to show key features (Ocean biome: The Trenches, The Abyss, Midnight Zone, Twilight Zone and Sunlight Zone)
- I can explain the environmental impact of human behaviour
 - -Plastic pollution

Art

- I can show how I have used different textures by collaging paper
- I can experiment in my sketchbook with different lines to create different leaf shapes
- I can use the styles of Rousseau and Senanayake in my work
- Know how to use sketchbooks to experiment with different texture (creating texture using different materials e.g. collaging)
- Know how to use marks and lines to show texture in art (leaf shapes, overlapping drawings)

Computing summer 1

Teach computing photo editing – Befunky.com
Final project: Topic - Edit biome images found online

- I can identify changes that need to be made to an image and can explain the effect of editing and image
- I can describe how images can be changed for different uses
- I can make good choices when selecting editing tools
- I can recognise that not all images are real
- I can evaluate how changes can improve an image

Computing summer 2

Teach Computing Programming B – Repetition in Games (FMS Logo, Scratch)

- I can identify conditions in a program.
- I can create a program with different outcomes using selection.
- I can identify the outcome of user input in an algorithm.



DT: Design

- I can describe the purpose of my product
- I can indicate the design features of my products that will appeal to intended users
- I can explain how particular parts of my product work
- I can gather information about the needs and wants of particular individuals and groups
- I can develop my own design criteria and use these to inform my ideas
- I can use exploded diagrams to develop and communicate my ideas
- I can generate realistic ideas, focusing on the needs of the user
- I can make design decisions that take account of the availability of resources

DT: Make

- I can order the main stages of making
- I can follow procedures for safety and hygiene
- I can assemble, join and combine materials and components with some accuracy

DT: Evaluate

I can investigate and analyse:

- how well products have been designed
- how well products have been made
- why materials have been chosen
- what methods of construction have been used
- how well products work
- how well products achieve their purposes
- how well products meet user needs and wants I can investigate and analyse:
- who designed and made the products
- where products were designed and made
- when products were designed and made
- whether products can be recycled or reused

DT: Evaluate

- I can identify the strengths and areas for development in my ideas and products
- I can consider the views of others, including intended users, to improve my work
- I can refer to my design criteria as I design and make and to evaluate my completed product

DT – food

- I can crack an egg and beat with a balloon
 whick
- I can use a masher to mash hot food to a fairly smooth texture (with supervision)
- I can peel harder food using a peeler (with supervision)
- I can coat food with egg and breadcrumbs



Science, Music, R.E., PSHE, French and P.E. units

Science
Sum 1 Living things and their habitats
Sum 2
Science
Electricity

Music Brass lessons R.E. Sum 1
Living by Rules
Being Temperate,
Exercising SelfDiscipline and
Cultivating Serene
Contentment

R.E. Sum 2
Being imaginative and exploratory
Appreciating beauty

P.E.
Sum 1 Athletics
CT: Health related
fitness
Sum 2 Strike & FieldCricket
CT: Strike and field
rounders

French
Sum 1 In the classroom

Sum 2 At the tea room

PSHE – sum 1 Being my best

Sum 2
Understanding and appreciating positive relationships

E-safety
Privacy and security

Copyright and ownership

Maths in Context

Graphs of temperature and rainfall (line graphs)

Know that some people live off the land and do not rely on money

DT – Food: Measure with weighing scales and measuring jugs

Cultural Capital

Self-control and selfdiscipline Adaptability & Resilience

Taking responsibility

Self-reflection

Our place in the world

Ambition

Care and respect

Appreciation

Livelihood

Communication

Cultural diversity and equality

Technological advancements

Cultural and Artistic Icons

Henri Rousseau

Senaka Senanayake

Samba music

Robert Lyn Nelson -underwater images



Health Education, Money Management, Environmental Education

Know that the products
we buy impact the lives
of other people in
other communities (fair
trade)

Know why the rainforest is important to the world

Rights Respecting

Article 6: Every child has a right to life

Wider links 36: Protection from exploitation Wider links 24: Right to the best healthcare, food and water Wider links 27: Right to food, clothing and place to live

Enrichment experiences and Community Involvement

Make a fair trade advert for the community

Science - Sea life centre: exploring the Ocean biome

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