ActionAid’s ‘Explore Brazil’ resources bring the rainforest into the classroom and introduce pupils to how the rainforest is changing and the challenging future it faces.

**Objectives:**
- To locate Brazil and the Amazon rainforest
- To identify features of the landscape
- To explore how land is being used and how this is changing
- To understand the connections between Brazil and the UK

**Curriculum links:**

**Geography:**
- Locate South America, Brazil, Manaus, river, equator, rainforest, ocean/sea
- Identify key physical features of the rainforest
- Use aerial photographs to recognise landmarks and basic human and physical features
- Identify types of settlement and land use, economic activity including trade links and the distribution of natural resources

**Science:**
- Recognise that environments can change and that this can sometimes pose dangers to living things
- Growth and nutrition - the effect of light, air, water and temperature on plant growth
- The part played by evaporation and condensation in the water cycle

**PSHE:**
- Living in the wider world, learning about the importance of respecting and protecting the environment
- Living in the wider world, learning about different groups and communities

**English:**
- Articulate and justify answers, arguments and opinions
- Give well-structured descriptions, explanations and narratives for different purposes
- Consider and evaluate different viewpoints, attending to and building on the contributions of others

Why not try our NEW workshop ‘The Lost Suitcase: Explore Brazil’? More information can be found at actionaid.org.uk/schools/book-a-talk or call us on 01460 238 000
KS2 Rainforest Animals

Teachers’ Notes

<table>
<thead>
<tr>
<th>Learning Objective</th>
<th>Learning Outcomes</th>
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<tbody>
<tr>
<td>To identify which layers of the rainforest different animals live in.</td>
<td><strong>All children will be able to:</strong></td>
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<tr>
<td></td>
<td>• Suggest which layer of the rainforest different animals live in</td>
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<tr>
<td><strong>Curriculum Links</strong></td>
<td><strong>Some children will be able to:</strong></td>
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<tr>
<td><strong>Science: Sc3. 5b</strong> – Pupils should be taught about the different plants and animals found in different habitats</td>
<td>• Explain why different animals may live in different layers of the rainforest</td>
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<tr>
<td><strong>Geography: 3a</strong> Pupils should be taught to identify and describe what places are like</td>
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Activity notes

This activity is aimed at encouraging children to think about the different layers of the rainforest and which animals might live in each.

To help with differentiation, a sheet of suggested animals and their pictures has been provided. More able children might be able to complete the task using only the list of animal names, and no visual clues. You can also vary the activity in terms of asking the children to draw the animals, write their names, or even cut and stick the pictures provided onto the layers diagram.

Further points for discussion might include: what makes animals good at living in each layer? Can animals move between the rainforest layers? Which layer has the most animals that live in it and why?
Rainforest Animals

Match the rainforest animals to the layer of the rainforest you think they might live in. One example has been done for you.

- **Emergent layer**
  - **Clue:** Wings or other adaptations for flying or gliding, or very agile climbers.

- **Canopy**
  - **Clue:** Long arms for swinging, claws or other adaptations for climbing.

- **Understorey**
  - **Clue:** Mainly animals who try to hide away from predators in the flowers and plants (need to be able to climb).

- **Forest floor**
  - **Clue:** Camouflaged in the soil and tree trunks. Not very good at climbing.

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The okapi lives on the forest floor.
Rainforest Animals

- Okapi
- Panther chameleon
- Golden lion tamarin
- Horse-headed grasshopper
- Sun conure
- Ocelot
- Orangutan
- Poison dart frog
- Blue and yellow macaw
- Giant anteater
- Brazilian salmon tarantula
- Green tree python
Rainforest Animals

1. Okapi
   (a forest relative of the giraffe)

2. Panther chameleon
   (a type of lizard)

3. Golden lion tamarin
   (a small monkey)

4. Horse-headed grasshopper
   (an insect)

5. Sun conure
   (a small parrot)

6. Ocelot
   (a small cat, similar to a jaguar)

7. Orangutan
   (a great ape)

8. Poison dart frog
   (a small amphibian)

9. Blue and yellow macaw
   (a large parrot)

10. Giant anteater
    (a large mammal)

11. Brazilian salmon tarantula
    (a large spider)

12. Green tree python
    (a kind of snake)
# Rainforest Animals

## Answer Sheet

<table>
<thead>
<tr>
<th>Rainforest floor</th>
<th>Understorey</th>
<th>Canopy</th>
<th>Emergent layer</th>
</tr>
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Activity 1 - Where is the Amazon rainforest?
The rainforest - how places change

A simple outline map of South America encourages pupils to begin investigating the different symbols and markings found on maps. This activity includes a ‘complete the key’ task and a second reveal sheet. Why not use the marked equator to discuss why it might be hotter in Brazil than the United Kingdom?

Curriculum links:

Geography:
Locate South America, Brazil, Manaus, Amazon, rainforest, river, equator, city, ocean/sea

Starter questions:
Where have you been on holiday?
Has anyone been to Brazil?
Can you find Brazil on a globe?

You might need:
A globe - to locate Brazil and the countries you would have to fly over to get there

Works with:
Resource 1 - Brazil fact poster

This might help:
Equator - the National Geographic has an excellent encyclopedic entry on the equator along with a useful photo gallery: education.nationalgeographic.co.uk/
Take a close look at this map of South America. Brazil is highlighted in yellow and green. Here is a key for this map:

- Blue square: __________________
- Dotted black line: ____________
- Green area: __________________
- Black line: __________________
- Red dot: _____________________

A key shows us what different things on the map mean. This key has symbols for different features.

1. What do you think the blue square stands for?
2. What is the dotted black line?
3. What could the blue curvy line be?
4. What is the green area around the blue line?
5. What is the red dot?
The capital of Brazil is Brasilia, you can see it marked in the centre with a red dot. The Amazon rainforest is the world’s largest remaining rainforest and over half of it is in Brazil. Brazil is found on the continent of South America which is highlighted in grey.

Can you name any other countries in South America?
Activity 2 - Amazing Amazon facts
The rainforest - how places change

Use these amazing Amazon facts to begin discovering what the rainforest is like. Group the facts into four piles: ecosystems (4), physical features (3), climate (2) and resources (3). Pupils can underline key words, or words that sum up each card, eg Amazon river, hot and wet, crops.

Curriculum links:

Geography:
- Identify key physical features of the rainforest
- Use aerial photographs to recognise landmarks and basic human and physical features

Starter questions:
- What is an ecosystem?
- What is the climate in the UK?
- What are some of the physical features of the UK?

This might help:
Facts - The National Geographic has its own amazing Amazon facts along with photos of some Amazon animals.
ngkids.co.uk/did-you-know/amazon-facts

Published September 2014. Sources: National Geographic, BBC, Economist, Greenpeace (The Amazon’s silent crisis), Live science, Guardian, WWF.
The tropical rainforest ecosystem covers about 60% of Brazil.

Brazil is rich in gold, diamonds, iron, tin, zinc, aluminium and other minerals.

The Amazon River is the longest river in the world. It is 6,400 km long.

The Amazon contains an estimated quarter of all animal and plant life on earth.

It is hot and wet all year round in Manaus.

Most of Brazil’s mountain ranges have an average height of 2000 m.

Brazil has many different types of soil to grow crops. It exports coffee, sugar, soy beans, and oranges.

The Amazon River rises in Peru and flows through Brazil to the Atlantic Ocean.

Brazil gets 90% of its electricity from hydro-electricity.

The climate in Rio is different. It is mild and wet and has seasons like the UK.

The Amazon rainforest has the largest river system on earth, containing about one-fifth of all fresh water.

The Amazon rainforest has been called the ‘lungs of the Earth’ because of the oxygen released by the trees.
Activity 3 - Rainmakers
The rainforest - how places change

This activity introduces pupils to the water cycle and the important role of trees. It also includes a factsheet showing why rainforest trees are important for our climate.

Curriculum links:
Science:
Growth and nutrition - the effect of light, air, water and temperature on plant growth
The part played by evaporation and condensation in the water cycle

Starter questions:
Where does rain come from?
Why is rain important?
Is rain the same everywhere?

This might help:
Water cycle - for more detail on the water cycle why not try MET Education’s weather resources.
metoffice.gov.uk/education/teachers/key-stage2
Activity Sheet - Rainmakers

Read the sentences and put them in order by numbering them, for example 1 = The hot sun shines through the trees. Try using the outlines to draw a picture for each sentence.

1. The hot sun shines through the trees.
2. Heavy rainstorms soak the forest every afternoon.
3. Trees absorb carbon dioxide from the air.
4. This makes clouds as the water vapour enters cold air.
5. The vapour gets higher, cools and turns back into water droplets.
6. Misty vapour rises into the sky.
7. As the day warms up, water droplets on leaves turn into water vapour.
8. This is called evaporation.
The Amazon rainforest is very hot. Every day billions of litres of water vapour are released into the air through a process called evaporation. As the air moves away from the rainforest to the high mountains of the Andes, it is forced southwards, transporting the water vapour like invisible flowing rivers. This eventually falls as rain not only in South America but also in places as far away as Africa.

If rainforest trees are cut down the air becomes drier. There is less rain in the forest and less water vapour joins the invisible rivers. Without these invisible rivers there would be more drought in the world.

Trees store carbon in their trunks, branches and root. When trees are chopped down, burnt or die, they give off carbon dioxide. About one fifth of all carbon dioxide being released into the atmosphere comes from dying trees.

If all the Amazon rainforest was destroyed, 77 billion tonnes of carbon dioxide would be released into the atmosphere.
Activity 4 - Consequence wheel
The rainforest - how places change

Use this activity to get pupils thinking about how land is being used in the rainforest and whether this is changing. Pupils will need to read the deforestation factsheet and do some detective work to spot what’s going on in the photos.

Curriculum links:

Science:
Recognise that environments can change and that this can sometimes pose dangers to living things

Geography:
Use aerial photographs to recognise landmarks and basic human and physical features
Identify types of settlement and land use, economic activity including trade links, and the distribution of natural resources

Starter questions:
What does the word ‘land’ mean to you?
What can land be used for?

Works with:
Resource 2 - Amazon rainforest photopack
Resource 3 - Deforestation factsheet
Activity Sheet - What’s happening in the rainforest?

How might cutting down trees and clearing land in the Amazon rainforest affect people, places or the climate? Use the photographs and deforestation factsheet to do some detective work. Now fill in the circles and draw more if you need to. Remember the consequences could be positive or negative.

What are the consequences of cutting down trees in the Amazon rainforest?

- carbon released
- people
- wildlife
- more jobs
Activity 5 - Rainforest in trouble
The rainforest - how places change

Use the ‘rainforests in trouble’ activity to stimulate understanding of the impact of deforestation. Pupils rank the nine impacts of deforestation in a diamond and write about the choices they’ve made.

Curriculum links:

Science:
Recognise that environments can change and that this can sometimes pose dangers to living things

PSHE:
Learning about the importance of respecting and protecting the environment

English:
Articulate and justify answers, arguments and opinions

Starter questions:
Why are trees important?
What is logging?
Can you think of things that people farm?

Works with:
Resource 3 - Deforestation factsheet

This might help:
This Google resource uses satellite time-lapse imagery to show deforestation in Brazil.
earthengine.google.org/#intro/Amazon

Published September 2014.
Activity Sheet - Rainforest in trouble

Using the nine statements about the impact of deforestation below, fill out the diamond grid on the next page. Put the statement that you think is the most important at the top and the least important at the bottom. Explain why you think your choice is the most important in the space at the bottom.

- Local people’s way of life is destroyed
- There are less species of animals and plants
- The animals’ habitat is destroyed
- The soil becomes dry and crops cannot grow
- There is more carbon dioxide released into the atmosphere
- Plants cannot grow anymore
- People have to move from the rainforest to the city
- New medicines might not be discovered from plants
- Trees can’t store carbon in their trunks, branches and roots

Explain why you think this impact of deforestation is the most important:
Activity Sheet - Rainforest in trouble

Most important

Least important
Activity 6 - Rainforest solutions
The rainforest - how places change

Sustainable use of the Amazon rainforest is essential for both people and planet. Use the solutions cards to explore and debate the best ways to manage the forest sustainably.

Curriculum links:

English:
Articulate and justify answers, arguments and opinions
Consider and evaluate different viewpoints, attending to and building on the contributions of others

PSHE:
Living in the wider world
Learning about the importance of respecting and protecting the environment

Starter questions:
Why might the rainforest be in danger?
Who can influence the future of the rainforest?
**Growing Trees and Crops at the Same Time**

Different crops and trees are planted together. This helps prevent soil erosion and keeps the soil fertile.

**Selecting Logging**

Only cut down trees when they reach a certain height.

**Price Rise**

Selling products from the rainforest at higher prices, especially those produced in a rainforest friendly way.

**National Forest Parks**

Create more wildlife reserves which generate money for Brazil through responsible tourism.

**‘Special Ops’**

Train special Environment Agents who know and understand the rainforest and can track illegal loggers.

**Eye Spy**

Use high-tech satellites to take photos of people cutting down trees illegally.
Activity 7 - Talking Tapir
The rainforest - how places change

This activity gets pupils using their creativity to write a piece of persuasive writing from the perspective of someone or something living in the rainforest. The photos from the KS1 rainforest animals quiz may be helpful as a starting point.

Curriculum links:

English:
Give well-structured descriptions, explanations and narratives for different purposes

PSHE:
Living in the wider world
Learning about the importance of respecting and protecting the environment

This might help:

This Guardian article introduces some of the new species discovered in the Amazon in the last couple of years: [www.theguardian.com/environment/gallery/2013/oct/23/new-species-amazon-rainforest-in-pictures](http://www.theguardian.com/environment/gallery/2013/oct/23/new-species-amazon-rainforest-in-pictures)
Activity Sheet - Talking Tapir

Could you write from the perspective of ‘someone or something’ living in the rainforest, imagining the sights, sounds and smells? Can you make your writing really descriptive and include a message about sustainability? Here's an example from Tapirus Kabomani:

Hello,

My name is Tapirus Kabomani but you can call me Tapir.

I live in the Amazon rainforest in Brazil but sshh, it’s a secret - I’m endangered, just like my home, and not many people know I’m here. It’s not hard to spot me though; I look like a pig with a long, funny snout. Some people say it’s like an elephant’s trunk, but I think it’s much shorter and cuter than that!

I use my snout for almost everything. It’s great for grabbing glistening, green plants and tasty twigs from nearby trees – yum! I used to munch on loads of luscious leaves, juicy fruit and blossoming buds and berries but it’s getting harder and harder to find those now.

I love to swim (I’ve already got my 500m swimming badge!) so you can usually find me in the river. I like to sit in the water and watch how the forest changes each day. I remember when it was full of colour and life but now there are huge gaps between the tall trees. A little birdie told me that the trees are being cut down for timber and roads.

It can get pretty lonely here now. So if you’re ever in the rainforest, come and say hi – and please don’t forget about me and my home.

Tapir