

Tropical Rainforests: Deforestation in the Amazon Rainforest

This week we're going to look at a specific case study the Amazon Rainforest. We're going to look at the human impact of deforestation.

Work through the PowerPoint as usual completing tasks as you go.

There are additional activities that you could complete as extension tasks at the end.



Key Words

deforestation Cutting down and clearing large areas of trees.

species A group of the same living things. For example, humans are a species; Bengal tigers are a species of tiger.

biodiversity The variety of plant and animal life in a place.

profit The amount of money earned from an activity.

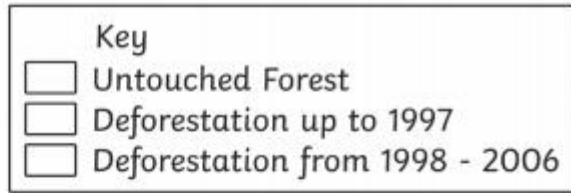
protected areas A designated area where no development or destruction is allowed.

settlement A place that is developed as a residential area for a community of people.

cattle ranching Farming cows.

hydroelectric Electricity produced by falling water.

Amazon Rainforest



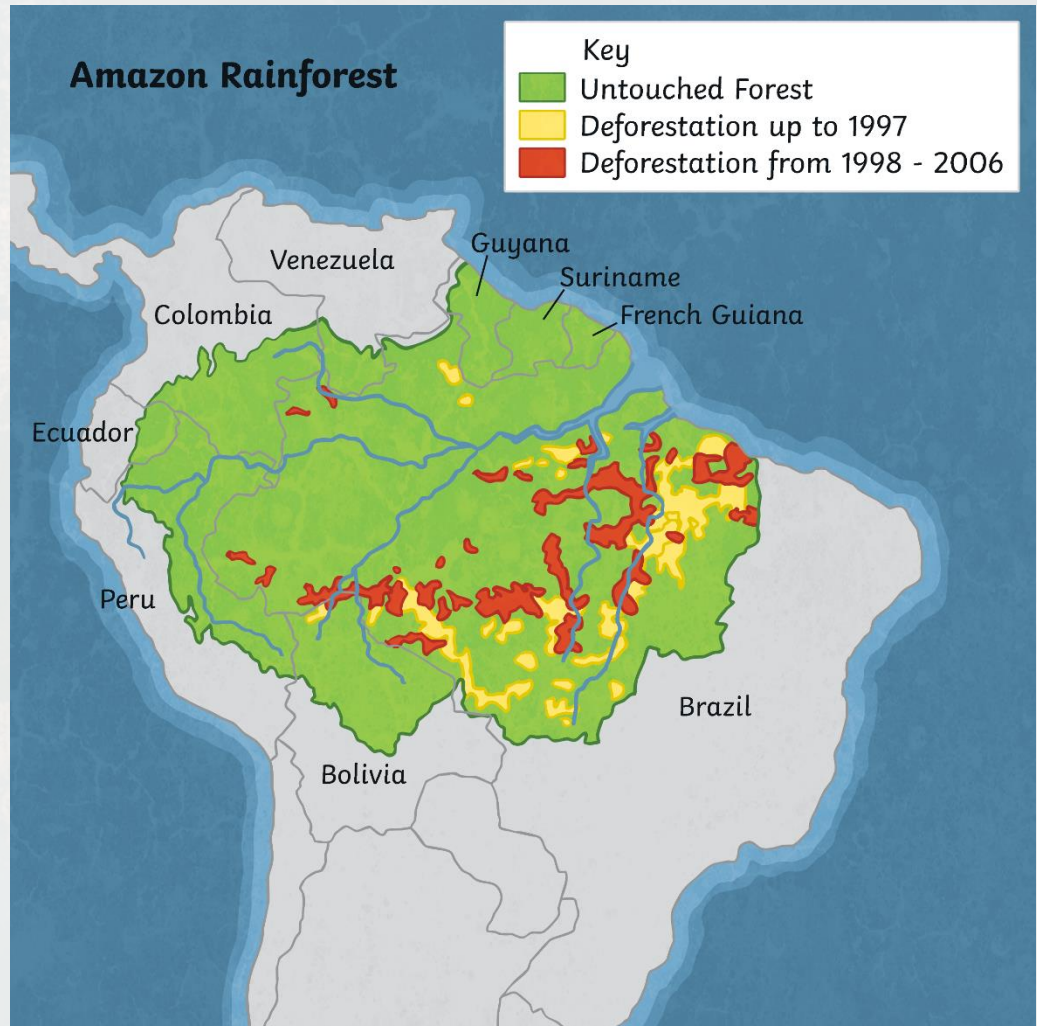
Draw or print a copy of this map and complete the activity on the next page.

Create Your Map

You will need three coloured pencils.

Look closely at the map opposite and shade the three different areas in different colours.

Don't forget to colour your key!



Information Gathering

On the following slides, there is a lot of information about deforestation in the Amazon. As we work through it, you should make notes pulling out key information.

We will look at:

You could organise your notes under each section heading.

What is the problem?

Causes of increasing deforestation

Why is the Amazon important?

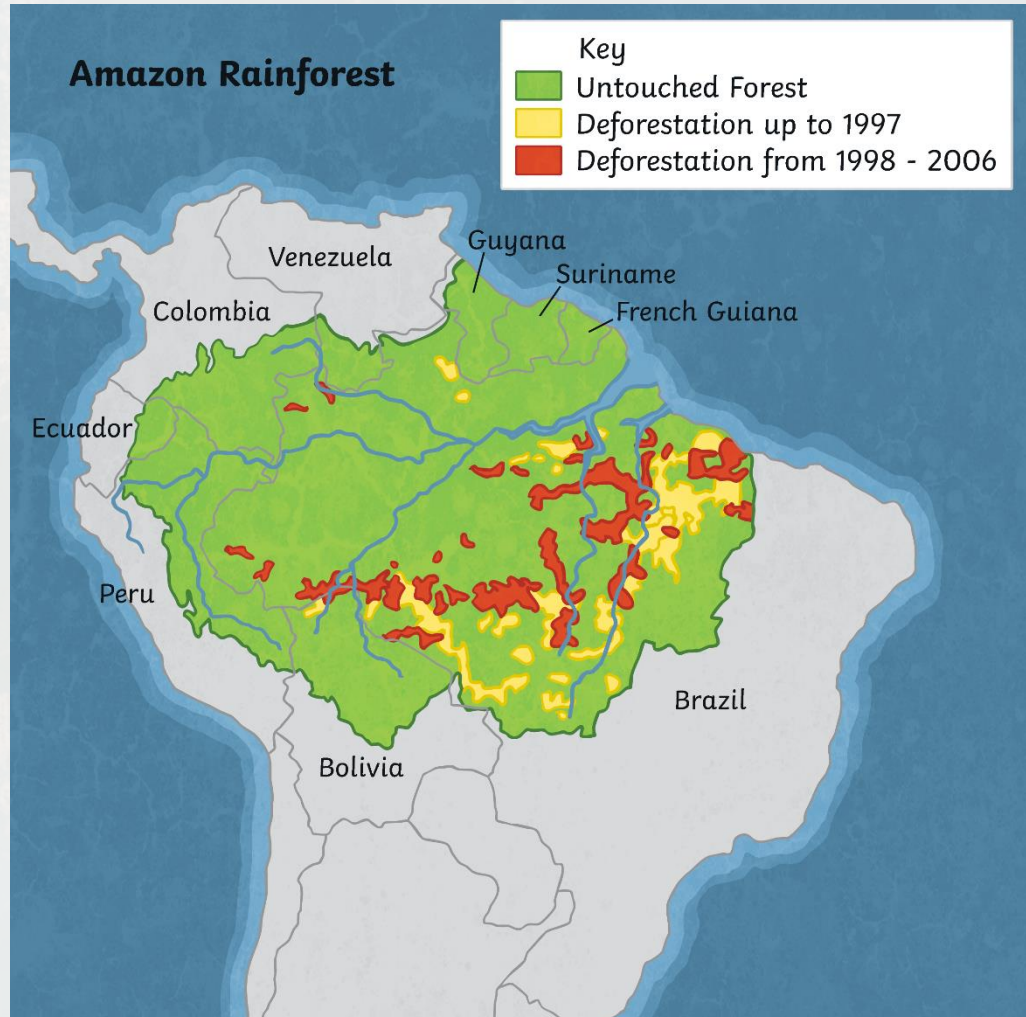
What should be done about it?



What Is the Problem?

The Amazon rainforest is rapidly decreasing.

In 2016, the rate of deforestation was 29% higher than in previous years. This problem is getting worse.



Causes of Increasing Deforestation

There are many reasons why the deforestation of the Amazon is increasing so rapidly:

The rising demand for and value of **soybeans**. This encourages more farmers to clear areas of forest to plant soy for profit.

Cattle ranchers cut down the trees to create farmland. Brazilian beef prices were at a high in 2016.

Many soy farmers are planting soybeans on savannas or old cattle ranches as these have easier access routes, forcing cattle ranchers deeper in to the forest where they clear new land.

Hydroelectric dams along the rivers in the Amazon require a lot of deforestation, both for the dam itself and the access routes and infrastructure.

Logging is big business in the Amazon.

Causes of Increasing Deforestation

There are many reasons why the deforestation of the Amazon is increasing so rapidly:

Gold mines are expanding, requiring more quarries and deforestation.

There continues to be a profitable illegal trade in **coca plants** for the production of cocaine. Coca farms take up a lot of space.

Brazil's Forest Code was changed in 2016, making it easier to obtain a licence for deforestation. This has attracted a surge of investment in the area.

An increase in **residential developments** and **roads** has required deforestation.

Why Is the Amazon Important?

The Amazon rainforest is an extremely important natural resource:

It is home to unequalled **biodiversity**, supporting thousands of bird, animal, insect, plant and tree species.

Many of these species are **unique** and not found anywhere else on the planet.

Trees produce **oxygen**. The Amazon rainforest is often referred to as 'the lungs of the Earth'.

Many of our **medicines** use ingredients found in the Amazon rainforest.

Worldwide, there are 3000 plants that have been found to be useful in **treating cancer**. 70% of them only grow in the rainforest.

We have only explored and studied **1%** of the Amazon rainforest. There are likely to be many more undiscovered species and potential cures yet to find.

What Should Be Done about It?

The Brazilian government really **need to establish protected areas** of the Amazon rainforest as a matter of urgency. This will **prevent further deforestation** and unlimited development within the rainforest.

However, deforestation and the various uses of the Amazon are **very profitable**. Protected areas are also very difficult and **expensive to police**. Therefore, the government is actually **downsizing protected areas**. They are also actively encouraging deforestation and human activity in the area by **easy, low-cost loans** for farmers and builders who want to work in the rainforest. This is leaving the Amazon in a **very vulnerable** position.



1. What is the problem?

a) What changes are occurring to the size of the Amazon Rainforest?

b) What has happened to the rate of deforestation in 2016?

2. Causes of increasing deforestation:

a) Why are there more and more soybean farmers in 2016?

b) What happened to the price of Brazilian Beef in 2016?

c) Why do cattle ranchers cut down trees?

d) Why do soy farmers like to use old cattle ranches to plant their crops?

e) Where are the cattle ranchers forced to move to?

f) What development requires a lot of deforestation along the river?

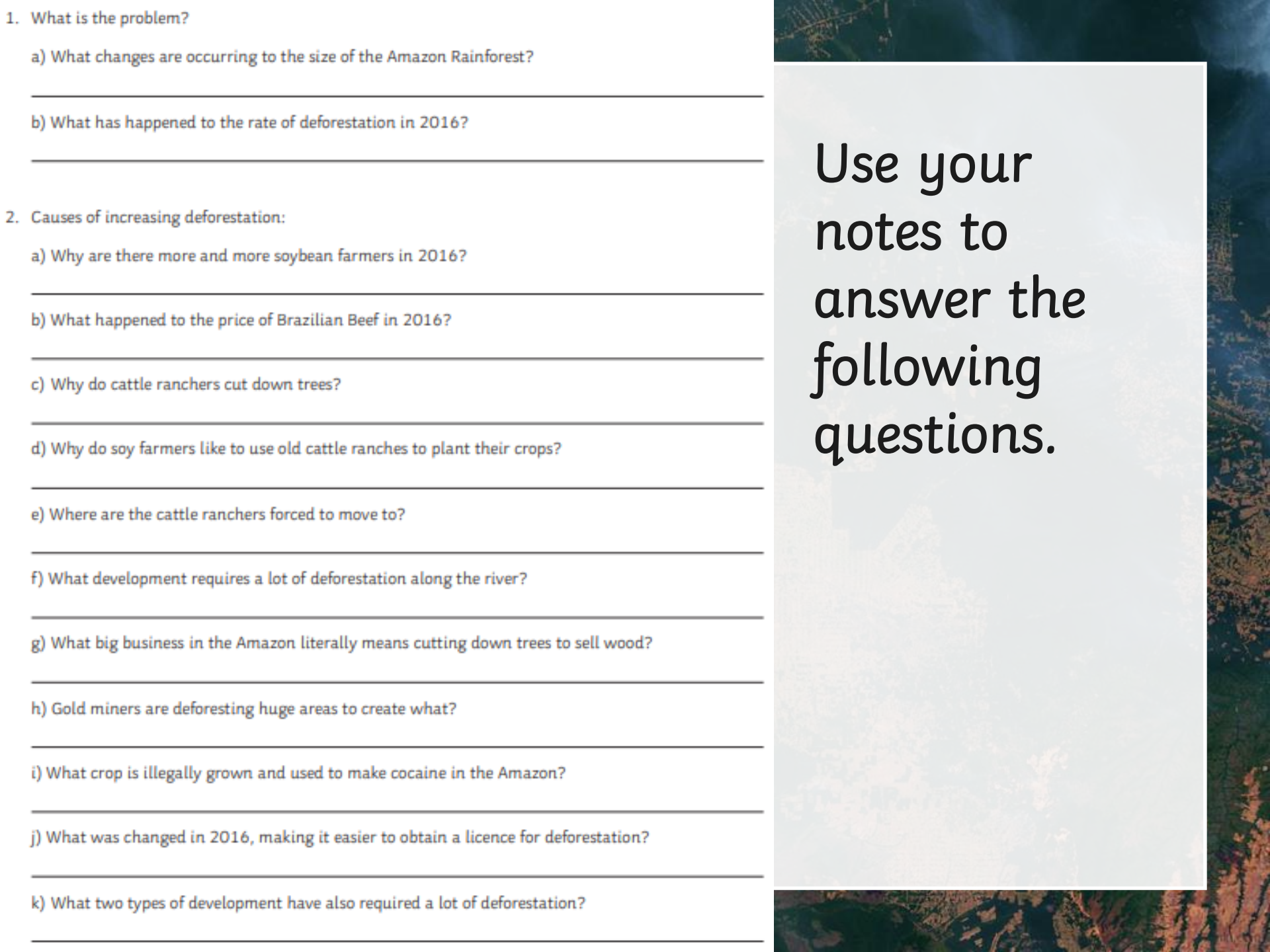
g) What big business in the Amazon literally means cutting down trees to sell wood?

h) Gold miners are deforesting huge areas to create what?

i) What crop is illegally grown and used to make cocaine in the Amazon?

j) What was changed in 2016, making it easier to obtain a licence for deforestation?

k) What two types of development have also required a lot of deforestation?



Use your
notes to
answer the
following
questions.

3. Why is the Amazon important?

Use these key words to answer this question:

- biodiversity
- unique
- oxygen
- medicine
- 70%
- 1%

4. What should be done about it?

a) What will prevent unlimited development within the Amazon?

b) Name two ways in which the Brazilian Government is actually encouraging deforestation in the Amazon.

Extension Tasks (Optional!)

Choose one task from below:

Put It in Writing

Using your map and the information you have gathered, you will be writing a letter to the Brazilian government, explaining what is happening in the Amazon and appealing to them to do something about it.

You should include information on all of the sections you have looked at:

- What is the problem?
- What is causing the problem?
- Why does the amazon rainforest matter?
- What should the Brazilian government do about it?

Report It!

Imagine you are a television news reporter and you are interviewing the Brazilian President. What would you ask him?

You should list at least eight questions you would ask and write the answer you think he would give underneath each one. Try not to ask yes/no questions.

Debate It!

Extension Tasks

Choose one task from below:

In the other half, you should write a response to this statement that begins '**I disagree with this statement, because...**'

You could imagine you are a very wealthy businessman in Brazil. You invest in a lot of small businesses that operate within the Amazon rainforest. You earn money from these businesses, including three large cattle ranches, a gold mine and a soybean plantation. All of your businesses require large areas of deforestation and, if restrictions are imposed, they will become less profitable. You could always ignore the laws and clear forest illegally, but you risk huge fines and maybe even imprisonment if you get caught.

Write this quote at the top of your page:

Not one more tree should be cut down in the Amazon.

Underneath your quote, draw a line down the middle of your page, dividing it in half. In one half, you should write a response to this statement that begins '**I agree with this statement, because...**'

You could imagine you work for Greenpeace. You are a passionate campaigner for the environment and strongly believe that the Amazon is important, irreplaceable and should be left alone immediately. You believe all human activity should cease in the rainforest and work should be funded to re-plant and restore the damaged areas.

Plenary: Opinion Lines

To what extent do you agree with the following statements?

The Amazon rainforest is a natural resource and everyone has a right to use it as they choose.

The Amazon rainforest should be protected in its original, natural state.

The only people who have the right to cut down trees in the Amazon are the indigenous local tribes.

Deforestation should be permitted but strictly limited by the government.

Scientists should be allowed to explore the Amazon for medical benefits before any further deforestation is allowed.

