### UNIT 4

### ENGLISH: REFORESTING AND MAKING THE PLANET GREEN

# LESSON DESCRIPTION

This lesson plan will allow students to learn about the importance of reforestation. During the lesson, students will have the opportunity to apply their reading comprehension skills, as well as answering the five W's questions while they keep in mind the importance of green life.



# APPLICATION OF THE LESSON PLAN

This lesson plan corresponds to the Unit 2.4 of English. The plan can be used after the discussion about the importance of reforestation 6CQKtncgpaVeDGuCNXUGxOUXA and the impacts of deforestation.

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### STANDARDS AND INDICATORS

- Listening: Listen and respond to simple 5W Questions. (2.L.1g)
- Language: Demonstrate command of the conventions of English capitalization, punctuation, and spelling when writing. (2.LA.2)

# LEARNING OBJECTIVES

- Answer questions like (what, when, where, why, and who) based on a short story.
- Practice English grammar rules.
- Remembering the importance of green life and reforestation.
- Understand the negative impact deforestation has on our planet.

# **TEMPORALITY**

Beginning (30 minutes)	<b>Developement</b> (50 minutes)	Closure (40 minutes)
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### **MATERIALS**

• Photocopies of worksheets (one per student)

### **VOCABULARY**

<u>Deforestation:</u> the permanent destruction of forests in order to make the land available for other uses.

- <u>Reforestation</u>: Planting new trees in areas where they have been removed by cutting or destroyed by fire or disease.
- <u>Trees</u>: plants of woody trunks, elevated, and ramified at a certain height off the floor.

# **CLASS GUIDE**

# **BEGINNING**

Listening: 20 minutes

- The teacher will begin the lesson by discussing the vocabulary words with the students.
- After discussing the vocabulary words, the teacher will help the students read a short story about the importance of reforestation. (attachment #1)

# **DEVELOPMENT**

### **Instructional Activities**

Language: 20 minutes

- The teacher will now hand out a worksheet to the students.
- The teacher will give the students the instructions about the worksheet.
- In this worksheet the students will answer the 5Ws questions (what, why, when, where, and who) about reforestation based on the selection they read. (attachment #2)

# **CLOSING**

Class discussion: 20 minutes

- The teacher will draw a <u>compare and contrast</u> chart on the board about the two new concepts the students learned in class today. (reforestation, deforestation)
- The students will say the differences and similarities about both terms while the teacher writes them down.
- It is now the time for the students to ask about any doubts or questions they might have and for the teacher to clarify them.

# **ATTACHMENTS**

# Attachment 1. Short story about reforestation

Once upon a time, planet Earth was created. At first there was just the sky, then nature was created. There was a variety of plants, trees and flowers. It was all green and beautiful. Then came the animals, and some of them got their food and energy from eating plants. The last thing that was created were the humans. At first humans were very satisfied and at peace in the lovely and green nature. They could eat fruits from the trees, they could hide from the sun underneath their shadows as well and they could rest and admire Mother Nature all day long.

Unfortunately, one day the humans got bored of how pretty and calm nature was. This is when they decided that they wanted to modify it and make it their property. So, all the humans got together for a meeting and they talked and talked for hours. They were tired of sleeping on the ground, they didn't like the cold of the wind anymore; they wanted to eat other things rather than healthy fruits and vegetables and they wanted a different kind of entertainment. Suddenly, one of the humans said: "Hey, I have a great idea, we have way too many trees around, and they are on the way, we should cut some of them, so we can have more space". They all agreed to it, so they started cutting down the trees.

After they cut down almost half of the trees that were there they started building concrete houses, shopping malls, schools, museums, neighborhoods and more shopping malls. This was okay, at first, but then every time they wanted to build something new they would cut down another tree. The humans were having the time of their lives, they weren't bored anymore, and they had a lot of space to their activities and games. One day, they noticed that the animals were not coming around as often as they used to come. Then, they started noticing that they didn't have fruits or vegetables to eat because they cut down the trees that gave them food. So, they called everyone for another meeting.

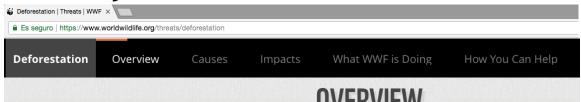
"It is very hot outside", said one of the humans. "The wind doesn't blow anymore", said another one. "We don't have anything to eat" said the rest. "We have to do something, we can't tolerate this anymore", they agreed. So, they spent hours thinking about a solution to their problems. Until one of them said, "None of this was happening when we were surrounded by all those beautiful trees we chopped down, so maybe the solution is to replant them all". They were all shocked, the solution was right in front of their eyes. So, the next day they woke up early in the morning and began to plant the trees they had cut down. They called this day Reforestation Day. After a couple of weeks, when the trees were starting to grow, they were not feeling the heat of the sun anymore, the wind was blowing, and the leaves brought wind and fresh air to them, and last but not least, they had delicious fruits for them and the animals to enjoy.

# Attachment #2. Worksheet

# The 5 W's Question Map

Name:	Date:
	the following questions about reforestation in complete sentences using capitalized and correct punctuation marks.
What?	
Where?	
When?	
14/16 a 5	
Who?	
Why?	

# Attachment #3. Additional Educational resources for the teacher



Forests cover 31% of the land area on our planet. They produce vital oxygen and provide homes for people and wildlife. Many of the world's most threatened and endangered animals live in forests, and 1.6 billion people rely on benefits forests offer, including food, fresh water, clothing, traditional medicine and shelter.

But forests around the world are under threat from deforestation, jeopardizing these benefits. Deforestation comes in many forms, including fires, clear-cutting for agriculture, ranching and development, unsustainable logging for timber, and degradation due to climate change. This impacts people's livelihoods and threatens a wide range of plant and animal species. We're losing 18.7 million acres of forests annually, equivalent to 27 soccer fields every minute.

Forests play a critical role in mitigating climate change because they act as a carbon sink—soaking up carbon dioxide that would otherwise be free in the atmosphere and contribute to ongoing changes in climate patterns. Deforestation undermines this important carbon sink function. It is estimated that 15% of all greenhouse gas emissions are the result of deforestation.

# OVERVIEW



© Nigel Dickinson / WWF-Canon In the Amazon, around 17% of the forest has been lost in the last 50 years, mostly due to forest conversion for cattle ranching.

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Deforestation is a particular concern in tropical rainforests because these forests are home to much of the world's biodiversity. For

example, in the Amazon around 17% of the forest has been lost in the last 50 years, mostly due to forest conversion for cattle ranching. Deforestation in this region is particularly rampant near more populated areas, roads and rivers, but even remote areas have been encroached upon when valuable mahogany, gold and oil are discovered.

WWF has been working to protect forests for more than 50 years. With a focus on protected areas management and sustainable forestry, WWF works with governments, companies, communities and other stakeholders to promote certification for responsible forest management practices, combat illegal logging, reform trade policies and protect forested areas.

 Deforestation
 Overview
 Causes
 Impacts
 What WWF is Doing
 How You Can Help



Deforestation can happen quickly, such as when a fire sweeps through the landscape or the forest is clear-cut to make way for an oil palm plantation. It can also happen gradually as a result of ongoing forest degradation as temperatures rise due to climate change caused by human activity. While deforestation appears to be on the decline in some countries, it remains disturbingly high in others— including Brazil and Indonesia—and a grave threat to our world's most valuable forests still remains.



### **ILLEGAL LOGGING**

National laws regulate the production and trade of timber products at all stages, from harvesting to processing to sales. These laws can be violated in any number of ways, such as taking wood from protected areas, harvesting more than is permitted and harvesting protected species. Illegal logging occurs around the world, and in some places, illegal logging is more common than the legal variety. This destruction threatens some of the world's most famous and valuable forests, including rainforests in the Amazon, Congo Basin, Indonesia and the forests of the Russian Far East. Illegal logging also depresses the price of timber worldwide, disadvantaging law-abiding companies, and depriving governments of revenues normally generated by duties and taxes. Poor communities near forests are often vulnerable when outsiders try to gain control over the timber nearby, which can lead to repression and human rights violations.

### FIRES

Fires are a natural and beneficial element of many forest landscapes, but they are problematic when they occur in the wrong place, at the wrong frequency or at the wrong severity. Each year, millions of acres of forest around the world are destroyed or degraded by fire. The same amount is lost to logging and agriculture combined. Fire is often used as a way to clear land for other uses such as planting crops.



# CONVERSION TO AGRICULTURE

As the human population continues to grow, there is an obvious need for more food. In addition, agricultural products, such as soy and palm oil, are used in an ever-increasing list of products, from animal feed to lipstick and biofuels. Rising demand has created incentives to convert forests to farmland and pasture land. Once a forest is lost to agriculture, it is usually gone forever—along with many of the plants and animals that once lived there.

These fires not only alter the structure and composition of forests, but they can open up forests to invasive species, threaten biological diversity, alter water cycles and soil fertility, and destroy the livelihoods of the people who live in and around the forests.

### **FUELWOOD HARVESTING**

Wood is still a popular fuel choice for cooking and heating around the world, and about half of the illegal removal of timber from forests is thought to be for use as fuelwood.



Forests are more than just a collection of trees—they are integrated ecosystems and home to some of the most diverse life on Earth. They are also major players in the carbon and water cycles that make life possible. When forests are lost or degraded, their destruction sets off a series of changes that affect life both locally and around the world.

### Deforestation | Threats | WWF ×

■ Es seguro | https://www.worldwildlife.org/threats/deforestation

### INCREASED GREENHOUSE GAS EMISSIONS

Forests help to mitigate carbon dioxide and other greenhouse gas emissions, but they become carbon sources when they are cut, burned or otherwise removed. Tropical forests hold more than 210 gigatons of carbon, and deforestation represents around 15% of greenhouse gas emissions. These greenhouse gas emissions contribute to rising temperatures, changes in patterns of weather and water and an increased frequency of extreme weather events. For example, in Sumatra, rainforests on deep peatlands are being cleared, drained and converted to pulp plantations, contributing to Indonesia's high greenhouse gas emissions. Changes in climate can affect forest-dwelling creatures by altering their habitats and decreasing availability of food and water. Some will be able to adapt by moving to higher elevations or latitudes, but species losses may occur.

#### **DISRUPTION OF WATER CYCLES**

Trees play a key role in the local water cycle by helping to keep a balance between the water on land and water in the atmosphere. But when deforestation or degradation occurs, that balance can be thrown off, resulting in changes in precipitation and river flow.

#### INCREASED SOIL EROSION

Without trees to anchor fertile soil, erosion can occur and sweep the land into rivers. The agricultural plants that often replace the trees cannot hold onto the soil. Many of these plants.—such as coffee, cotton, palm oil, soybean and wheat—can actually exacerbate soil erosion. Scientists have estimated that a third of the world's arable land has been lost through soil erosion and other types of degradation since 1960. And as fertile soil washes away, agricultural producers move on, clearing more forest and continuing the cycle of soil loss.

### DISRUPTED LIVELIHOODS

Millions of people around the world depend on forests for hunting, gathering and medicine, forest products such as rubber and rattan, and small-scale agriculture. But deforestation disrupts the lives of these people, sometimes with devastating consequences. In the Greater



Soil erosion in Africa.

Mekong in Southeast Asia, where land tenure systems are weak, deforestation has contributed to social conflict and migration. In Brazil, poor people have been lured from their villages to remote soy plantations where they may be abused and forced, at gunpoint, to work under inhumane conditions.

Fuente: https://www.worldwildlife.org/threats/deforestation

### REDUCED BIODIVERSITY

About 80% of the world's documented species can be found in tropical rainforests-some of the forests most vulnerable to deforestation. When species lose their forest homes, they are often unable to subsist in the small fragments of forested land left behind. They become more accessible to hunters and poachers, their numbers begin to dwindle and some eventually go extinct. Even localized deforestation can result in extinctions as many unique species exist in small isolated geographic locations in the world.

# **REFERENCES**

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