



# Deforestation

Students learn about the effects of deforestation.

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<b>Grade Level</b>	6-8
<b>Duration</b>	1-3 class periods

## National Geography Standards

### ELEMENT THREE: PHYSICAL SYSTEMS

8. The characteristics and spatial distribution of ecosystems on earth's surface.

### ELEMENT FIVE: ENVIRONMENT AND SOCIETY

14. How human actions modify the physical environment.

## Arizona Geography Strand

### Concept 1 The World in Spatial Terms

#### Grade 6, 7, and 8

PO 1 Construct maps, charts, and graphs to display geographic information.

#### Grade 7

PO 4 Locate physical and cultural features (e.g., continents, cities, countries, significant waterways, mountain ranges, climate zones, major water bodies, landforms) throughout the world.

#### Grade 8

PO 4 Locate physical and cultural features (e.g., continents, cities, countries, bodies of water, landforms, mountain ranges, climate zones) throughout the world.

### Concept 5 Environment and Society

#### Grade 6

PO 2 Describe the intended and unintended consequences of human modification (e.g., irrigation, aqueducts, canals) on the environment.

PO 3 Explain how changes in the natural environment (e.g., flooding of the Nile) can increase or diminish its

## Other Arizona Standards

### Strand 2 World History

#### Concept 9 Contemporary World

#### Grades 7 and 8

PO 3. Analyze how world events of the late 20<sup>th</sup> century and early 21<sup>st</sup> century (e.g., terrorism, globalization, conflicts, interdependence, natural disasters, advancements in science and technology, environmental issues) affected, and continue to affect, the social, political, geographic, and economic climate of the world.

### Strand 5 Economics

#### Concept 1 Foundations of Economics

#### Grade 6

PO 1. Identify how limited resources and unlimited human wants cause people to choose some things and give up others.

PO 2. Determine how scarcity, opportunity costs, and trade-offs influence decision-making.

#### Grades 7 and 8

PO 1. Explain how limited resources and unlimited human wants cause people to choose some things and give up others.

PO 2. Analyze how scarcity, opportunity costs, and trade-offs influence decision-making.

#### Grade 8

PO 3. Analyze how individuals, governments and businesses make choices based on the availability of resources.

### Reading Standards for 6-8 for Literacy in History/Social Studies

#### Key Ideas and Details

6-8.RH.1 Cite specific textual evidence to support analysis of primary and secondary sources.

#### Integration of Knowledge and Ideas

6-8.RH.7 Integrate visual information (e.g., in

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capacity to support human activities.

### Grade 7

PO 3 Describe how humans modify environments (e.g., conservation, deforestation, dams) and adapt to the environment.

PO 7 Compare different points of view and research on environmental issues (e.g., land use natural resources, wildlife, biomes).

### Grade 8

PO 1 Describe how humans modify ecosystems (e.g., deforestation and desertification).

PO 2 Describe why humans modify ecosystems (e.g., resources, economic livelihood).

PO 4 Explain how technology affects the environment (e.g. the effects of chemical wastes on ecosystems; effects of modern waste disposal methods on ecosystems).

### Concept 6: Geographic Applications

#### Grades 6, 7, and 8

**PO 3.** Use geographic knowledge and skills (e.g., recognizing patterns, mapping, graphing) when discussing current events.

charts, graphs, photographs, videos, or maps) with other information in print and digital texts.

### Range of Reading and Level of Text Complexity

**6-8.RH.10** By the end of grade 8, read and comprehend history/social studies texts in the grades 6–8 text complexity band independently and proficiently.

### Writing Standards for 6-8 for Literacy in History/Social Studies, Science, and Technical Subjects

Text Types and Purposes

**6-8.WHST.1** Write arguments focused on *discipline-specific content*.

a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.

b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.

c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.

d. Establish and maintain a formal style.

e. Provide a concluding statement or section that follows from and supports the argument presented.

### Production and Distribution of Writing

**6-8.WHST.4** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

a. Produce clear and coherent functional writing (e.g., formal letters, envelopes, procedures, labels, timelines, graphs/tables, experiments, maps, captions, charts, diagrams) in which the development, organization, and style are appropriate to task, purpose, and audience.

### Research to Build and Present Knowledge

**6-8.WHST.8** Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.

**6-8.WHST.9** Draw evidence from informational texts to support analysis reflection, and research.

## Overview

Everything humans do, both intentional and unintentional, affects the natural systems in which

we live. We frequently try to modify our environment in an attempt to improve our lives in various ways. While the modifications may benefit some, rarely do they benefit all. This most often

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results in a debate as to how beneficial or detrimental the modifications are.

### Purpose

In this lesson, students will learn about rainforests as well as the process and effects of deforestation.

### Materials

- Tropical Deforestation article
- Student Worksheet for Tropical Deforestation and Answer Key
- Colored pencils/crayons
- World map
- Memo writing guide
- Deforestation Final Assessment
- Tropical Rain Forests Information

### Objectives

The student will be able to:

- identify the layers of a rainforest.
- locate tropical rainforests on a world map.
- list reasons for and describe methods of deforestation.
- Identify how resources economically benefit people and countries.

### Procedures

#### SESSION ONE

1. Read and discuss the Tropical Rain Forests Information article. Have the students use colored pencils to complete the layers of the rain forest drawing activity at the end of the reading.

2. Distribute a World map. Assist students in locating tropical rainforest regions of the world. Be sure students create a legend on their maps. Have the students list 3 or 4 characteristics of tropical rain forests on the back of their maps.

#### SESSION TWO

3. Read and discuss the Tropical Deforestation information article. Give the students time to complete the worksheet testing their reading and writing skills.

4. Divide students into partners. Pass out the Deforestation Final Assessment. Explain how Memos are written. Have the partners decide if they will write a memo for Option A, B, or C.

#### SESSION THREE (can be homework)

5. Students should create their Memo. If time is available, some of the groups can share their work with the class.

### Assessment

Geography content will be assessed through content of memo, the World map assignment, the student worksheet on deforestation, and the drawing of the rain forest correctly labeled. Mastery will be considered 80% or higher.

Reading skills can be assessed through the student worksheet on deforestation and the labeling of the rainforest layers as well as the 3 or 4 characteristics of rainforests written on the back of the map.

The memo will be assessed for writing skills of Ideas and Organization on the 6-trait rubric. Students should score 4 or higher on the rubric.

### Extensions

Students can research one life form found in the rainforest or one product derived from the rainforest environment. After researching this topic, the students can make decisions about the importance of this life form or product to the world. On a scale of 1 to 10 (ten being the highest), this life form is how important to protect at all costs.

On a scale of 1 to 10 (ten being the highest), this product is important to humans and should be provided at the cost of cutting down the rainforest.