

Lesson 2

Deforestation Research Assignment Introduction

LESSON OVERVIEW

This lesson will introduce students to the concept of deforestation, its effects on the environment, and how countries are working to save their forests. These concepts will be introduced through class discussion and independent research.

Grade Level & Subject: Grades 5 - 8: Environmental Science

Length: 60 minutes

Objectives:

After completing this lesson, students will be able to:

- Students will be able to define deforestation.
- Students will be able to understand the effects of deforestation on the environment.
- Students will be able to understand the effects of deforestation on specific people.

Next Generation Science Standards Addressed:

- **MS-PS1-3.** Gather and make sense of information to describe that synthetic materials come from natural resources and impact society.
- **MS-LS1-5.** Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.
- **MS-LS2-1.** Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.
- **MS-LS2-4.** Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.
- **MS-LS2-5.** Evaluate competing design solutions for maintaining biodiversity and ecosystem services.
- **MS-ESS3-1.** Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes.
- **MS-ESS3-3.** Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

Materials Needed:

- Pens/pencils
- Paper
- Computers with internet access
- Student atlases/class map set/ Large world map
- [Stem Sheet](#)
- Guided Reading Questions
- [Article](#)
- [Questionnaire](#)

Assessment:

- Stem sheet and class discussion
- Guided reading questions
- Research and completion of questionnaire
- Oral report on individual countries

LESSON BACKGROUND

Information: As we enter the 21st century, one of the most pressing environmental problems is deforestation. Many of the world’s forests are being burned or cut down in order to make way for grazing and farming lands or new buildings and paved roads. If the deforestation continues at this rapid rate, the world’s forests will vanish in less than 100 years. This lesson encourages students to understand deforestation and its effects on people throughout the world. This lesson also encourages students to develop ways to curb deforestation.

Resources:

- <http://www.conserve-energy-future.com/various-deforestation-facts.php>
- <http://www.earthday.org/earth-day/earth-day-theme/>
- http://wwf.panda.org/about_our_earth/deforestation/
- <http://environment.nationalgeographic.com/environment/global-warming/deforestation-overview/>

Preparation:

- Print stem sheet, article, guided reading questions, and questionnaire for each student.
- Prepare a way for them to access the internet.

LESSON STEPS

Activity One:

1. Students will begin by answering a [stem sheet](#).
2. The teacher will ask for student responses to the first stem. Students will share their thoughts, and the teacher will write student responses on the board. The class will then come up with a clear definition of the term “deforestation.”
3. The teacher will make a chart on the board (see below), and ask for student responses to the second and third stems. The teacher will record student answers on the chart, and discuss responses with the class.

Causes of Deforestation	Effects of Deforestation

4. The teacher will continue student discussion by asking for student responses to the fourth stem. (The areas of the world that are most affected by deforestation are. .) After brainstorming ideas and recording student responses on the board, the teacher will distribute student atlases and ask students to locate the countries and regions that currently contain heavily forested areas. (If a class set of student atlases are not available, the teacher can use an overhead transparency to illustrate this point.)
5. Students will share their responses to the last stem (Some ways I can help to stop deforestation are . . .) All responses should be recorded on the board. If the teacher would like to extend the lesson, they could devise a class plan to curb deforestation. The teacher could also have the students put this plan into action.)
6. The teacher will distribute an article from [The World Wildlife Fund](#) which describes tropical deforestation and why it happens. The students will read the article, and complete a series of guided reading questions, at the bottom of this lesson plan.

Activity 2:

1. The teacher will go over the guided reading questions from The World Wildlife Fund article.
2. The students will be broken up into pairs, and they will be asked to research one of the following areas of the world in the school library or computer lab. You could assign these topics or have students pick them out of a hat!

Brazil	Indonesia	Congo	Madagascar
Philippines	Central America	Bolivia	Ivory Coast
Mexico	Nigeria	Ecuador	Colombia

3. Students will be asked to fill out a [questionnaire](#) about his/her topic.
4. Once students have completed questionnaires and plans for curbing deforestation, they will be asked to present the information they've collected to the class.

Lesson Credits

[Mary Tricarico, Westfield High School](#)

Kevin Hauff, Earth Day Network

Name _____

Guided Reading Questions

1. What are some ways that forests impact your daily life?
2. How much of the world's original forest cover has been lost in the past 50 years?
3. Define deforestation in your own words.
4. Why does deforestation occur?
5. What are the top three sources of greenhouse gas emissions?
6. How do you think we can work to stop deforestation?
7. How does deforestation relate to biodiversity?
8. Did you have any issues understanding words in the article? If so list these words here, and define them using a dictionary, or the internet.