



Air Cleaning Department

Lesson 4 - Where Have All the Trees Gone?

Essential Questions:

What are some gifts trees give us?

Why is protecting the rainforest important?

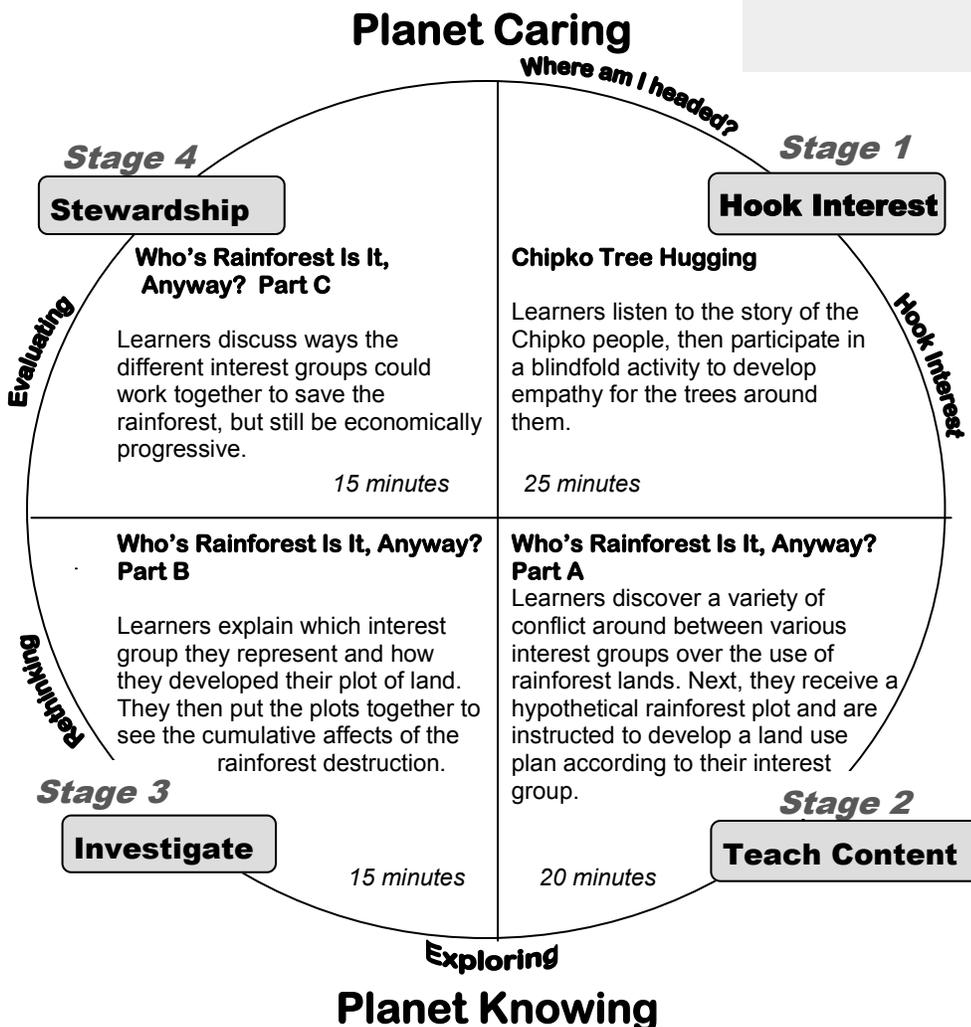
Who are the stakeholders in harvesting and protecting the rainforest? Why may it be difficult for them to work together?

At a Glance:

Learners start the lesson by listening to the story of the Chipko people in India who fought to protect their forests from being destroyed. They then get to know the trees on their club site through a blindfold activity. For remainder of the lesson, learners role play a variety of different rainforest interest groups and develop a land use plan for a plot of rainforest. They discuss conflicting values and human needs and how the collective effects of all the interest groups impacts the rainforest and its people.

Concepts:

- Trees provide many things for humans and other organisms.
- The Air Department can rid the air of many pollutants but an increase in pollutants and deforestation make it difficult for this Department to accomplish its work.
- Rainforest destruction has global impacts, however is difficult to prevent due to various stakeholders in protecting and cutting these lands.



Objectives

Learners ...

- 1) describe the Chipko Movement of India.
- 2) express concern about deforestation of Earth's forest.
- 3) state two ways they can help Earth's forests.
- 4) name 5 reasons the rainforest is important.
- 5) explain the difficulty of rainforest protection with many different interest groups.

PROCEDURES IN BRIEF: Lesson 4—Where Have All the Trees Gone?

Stage 1. Chipko Tree Hugging

Procedure:

- Using the information above, discuss the Chipko Movement with learners. (Optional: read the story, [The People who Hugged the Trees](#))
- State, *"There are many ways to know trees. In this activity we will gain a sense of the reverence that the Chipko people hold for trees."*
- Ask learners to choose a partner.
- Explain, *"Blindfold your partner and guide him or her to a tree. The safety of your partner is in your hands, so guide them slowly and carefully. If there is a log or other object in his or her path, warn them about it. When you arrive at your selected tree, let your partner spend some time getting to know their tree by hugging it as the Chipko people do."*
- Give learners further instructions, *"Get to know your tree anyway you can. How big around is it? Does it have any branches? What does its bark feel like? What does it smell like? When you feel like you know your tree, tell your partner, and they will safely guide you back to your starting position."*
- When the learners return, tell them to take off their blindfolds and try to point out their trees.

Supplies

- one blindfold for every two learners
- optional: [The People Who Hugged the Trees](#)

Stage 2. Who's Rainforest Is It, Anyway? Part A

Procedure:

- Provide learners with background on tropical rainforests and the rate at which deforestation is occurring. Mention some of the rainforest interest groups, for both cutting and preservation.
- Tell learners that they will be working in pairs/groups to develop a land use plan for a plot of rainforest according to their interest.
- Each group will have a 4 acre plot to develop. To illustrate the size of the plot, tell learners that a full American football field, including end zones, equals 1.32 acres.
- The activity is written for a group of 30 learners to work in pairs, divide your group accordingly.
- Give each group a large piece of paper, 11"x13", or larger. Tell them that this is their plot of land to develop. Some of the plots will have a river running through them.
- Distribute a Rainforest Interest Group card to each group and have them read it to themselves. Learners are to draw and develop their plot of rainforest according to the interest group they belong to. (i.e. if the group are shade-grown coffee farmers, they will draw a coffee plantation with large overstory trees throughout.)
- Give the groups 10-15 minutes to develop their plot.

Supplies

- Rainforest Interest Group cards
- large paper squares (11"x13" or larger)
- crayons, colored pencils, or markers

Stage 3. Who's Rainforest Is It, Anyway? Part B

Procedure:

- Allow each group to present their rainforest land use plan. They are to tell everyone which interest group they represent and how they developed their plot of land.
- After all the groups have presented their plans, ask them to bring their rainforest plots to a central location. Place all of the plots together to make one large rainforest area. Make sure that the plots are put together so that the river is intact. If possible, try to place the plots where destructive interest groups are next to conservation groups.
- Ask learners what type of impacts the different developments might have on the environment or people who live in the rainforest villages (pesticides and fertilizers from monoculture farming, feces from ranching, erosion from clear-cutting, moving people off their ancestral lands for development).
- Tell the learners to look at how the plots are put together. How might some of the negative impacts mentioned effect the other plots and interest groups? (pollutants and erosion leaching into protected areas and going downstream in the river – impacting local villagers' water supply, plants and animal species; habitat fragmentation impacts birds and other species that need larger plots of forested land for survival).

Stage 4. Who's Rainforest Is It, Anyway? Part C

Procedure:

- Now that the learners have seen the impact of various land uses and how it effects conservation, discuss the necessity for economic stability and growth. It is easy for us, in a developed country, to tell them not to allow any development or industry. However, these countries want progress too and natural resources are often used up in the name of progress. But isn't there a way for conservation and progress to combine?
- Open up a discussion with the learners about how these two interests can work together. Some ways that people are working towards environmentally and economically sustainable ventures are eco-tourism, wild-harvesting of fruits, nuts, and other forest products, shade-grown coffee and chocolate, and fair trade traditional crafts.
- Allow learners to present some ideas and have an open dialogue presenting both sides. Write ideas on the board or record them on a large piece of paper.
- See the Rainforest Relief, 'Do I Dare Eat That Banana' list of products to avoid to help aid in rainforest preservation. There are many other rainforest help groups that present good information and ways to help. See the Air Cleaning Department take-home packet for my websites.

Supplies

- Chalkboard/whiteboard (optional)