



Curriculum Units by Fellows of the Yale-New Haven Teachers Institute
1993 Volume V: Environmental Science

Our Mission: Save Planet Earth

Guide for Curriculum Unit 93.05.03
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The purpose of this environmental unit is for students at the 4th-6th grade levels, working in cooperative groups, to research several key environmental problems and brainstorm possible solutions after intense investigation.

My students' "mission" will begin in the Amazon Basin of South America. Here the "scientists" will research the devastating effects that deforestation and global warming have on the rain forest's ecosystem. After analyzing data and developing theories for preserving the rain forests, our "scientists" will travel to Valdez, Alaska, to evaluate clean-up techniques after the March 1989 Exxon spill that poured eleven million gallons of toxic, crude oil into Prince William Sound. After experimenting with various clean-up techniques, our research group will reach its final destination the Antarctic Ocean to determine the effects that chlorofluorocarbons (CFCs) and halons have on our depleting ozone layer. Noticed back in 1969, the ozone hole is now approximately nine million square miles large. These harmful rays cause skin cancer, destroy crops, stunt the growth of plankton, and create many other health problems. After completing this "leg" of their journey, our group travels back home where they will organize all of their data into an extensive report which they will present to fellow "scientists."

Each student (aka-scientist) will be assigned an area of specialty to focus on during the expedition. One student, for example, will serve as the group's leader and oversee the entire research process. Another student will be the group's geologist focusing on the geological aspects of the issues involved. The meteorologist will study the effects that weather has on the environment. A fourth student, acting as the group's biologist, will work closely with the last student who is an environmentalist. All students must gather data from their respective fields and then report back to the group on a regular basis.

The intended length of this unit is approximately three months. One month will be spent studying each environmental issue. It is expected that students will use multimedia resources such as books, videos, cassettes, encyclopedias, magazines, and other periodicals in addition to science texts. Some initial lessons will be taught by the teacher in a whole group atmosphere. However, the majority of the work will be completed by the separate research groups. Therefore, it is anticipated that no two groups will study the same information or produce the same results.

Our mission to save planet Earth is about to begin. Get your passports, your scientific journals, and we're ready to go!!! Our Mission: Save Planet Earth

(Recommended for Environmental Science, Rain Forest Destruction, Ozone Depletion, Ocean, Pollution, Grades 4-6)

Key Words

Oceanography Oil Spills Radiography Rain Forests

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