

Exercise 3A



SEEING THE BIG PICTURE

This exercise lets students examine our tendency for short-term versus long-term thinking and how it affects the environment. The exercise highlights how short-term thinking has resulted in actions that have contributed to air pollution. It stresses that individuals, by focusing more on the future, can help reduce air pollution.

CRITICAL OBJECTIVES

-  Recognize the tendency for people to focus on the short-term
-  Appreciate the impact that short-term thinking has had on the problem of air pollution
-  Understand that every individual can have an impact on air pollution
-  Identify ways to reduce air pollution

SKILLS

-  Organizing data
-  Considering alternatives

Target Grade Level

4th-5th

Duration

45 minutes (with possible extensions)

Vocabulary

Consumption
Pollution
Standard of living

Materials

- Sheets of letter-size
- paper
- Pencils
- Chalk
- Chalkboard

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Drawing conclusions

GUEST PRESENTERS

Guest presenters could include conservationists, environmental scientists, or EPA environmental protection specialists.

BACKGROUND

The expression “can’t see the forest for the trees” means that most people focus on the short-term. They get so overwhelmed by the little things of daily life—all the “trees” around them—that the bigger, more long-term picture, like the “forest,” gets lost. For example, as population grew and our standard of living rose, consumption of natural resources increased. We needed to burn coal, oil, wood, and other fuels to run factories, cars, and the power plants that generate energy to heat and light our homes. The focus was on supporting immediate needs rather than the long-term environmental impact of these actions.

But burning more fuels and increasing industrial activity helped to pollute the air. Every individual has the ability to help protect the environment. If we all would set our thermostats to a lower temperature in winter and a higher temperature in summer, walk or bike instead of always using our cars, and turn off lights when we leave a room, we would cut down the amount of energy used and the amount of pollution released into the atmosphere. The cumulative effect of many individual actions can preserve the environment for future generations. Often, however, we do not understand or appreciate the value of their individual actions. While it can be hard to always keep the big picture in mind, it is important. And with practice, everyone can contribute to cleaner air. (See reading materials on “Air Pollution,” “Automobiles and Air Pollution,” and “Clean Fuels.”)

WHAT TO DO

I. Before telling students anything about the activity, have them write down

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ten things they need to do or want to do. They can be anything at all. Beside each, have them write down when they think they should do it. Don't give any other instructions or information.

2. Once everyone has made a list, draw a big rectangle on the chalkboard. Make five rows and five columns in the rectangle. Each of the columns has to do with time. Label the columns "tomorrow," "next week," "sometime this year," "sometime in my life," and "sometime in my children's lives." Each of the rows has to do with people. Label the rows "family," "friends/

	Tomorrow	Next week	Sometime this year	Sometime in my life	Sometime in my children's lives
Family					
Friends and Neighbors					
City or Region					
Country or ethnic group					
World					

neighbors," "city/region," "country/ethnic group," and "world." (See sample.)


3. Have each student, in turn, put dots in the boxes where the items on his or her list belong. For example, if someone listed going to the shopping mall with friends tomorrow, a dot belongs in the box where the "friends/neighbors" row meets the "tomorrow" column. If someone listed joining the park clean-up campaign next week, a dot belongs in the box where the

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“friends/neighbors” row meets the “next week” column.

4. When everyone has filled in their dots, step back and look at the big picture. Have the students discuss why most of the dots cluster in the rows representing people they know and columns representing the short-term (if they do). Have students speculate about how the results of this exercise would apply to reducing air pollution.

SUGGESTED EXTENSIONS (OPTIONAL)

 Ask students to keep a diary of all the things they do to reduce air pollution. Periodically, discuss these efforts and their impact on future pollution.

 Have an EPA representative visit the class to discuss efforts EPA is taking to address air pollution.

SUGGESTED READING

Baines, John. *Exploring: Humans and the Environment*. Austin, TX: Steck-Vaughn Company (1993).

Elkington, John, et al. *Going Green: A Kid's Handbook to Saving the Planet*. New York: Puffin Books (1990).

Greene, Carol. *Caring for Our Air*. Hillside, NJ: Enslow Publishers (1991).

Gutnik, Martin J. *The Challenge of Clean Air*. Hillside, NJ: Enslow Company (1990).

Langone, John. *Our Endangered Earth: The Fragile Environment and What We Can Do To Save It*. Boston: Little, Brown (1992).

Leggett, Jeremy K. *Air Scare*. New York, NY: Marshall Cavendish Corp. (1991).

Stille, Darlene. *Air Pollution*. Chicago, IL: Children's Press (1990).

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