



Grade Level: Elementary and middle school

Subject Correlation: Science

Objectives: Students will be able to:

1. Identify the positive and negative ways in which humans affect the environment within their community.
2. Describe the difference between renewable and non-renewable resources.
3. Understand the difference between natural and man-made materials.

Length: 30-60 minutes

Teacher Preparation: cardboard, paint, and scissors to create stencils; art supplies to make signs; consider appropriate spots for the “Waste Walk” either on the school grounds or in the community.

Outline (with times)

Introduction

In the *Ecological Footprint Curriculum*, students have learned about various aspects of the environment – particularly, about sustainable living and how the decisions we make on a daily basis affect the size of our “*ecological footprint*.” In this lesson, the class will explore things they can do on a personal and a societal level to affect the size of their footprint by living in a manner that is rewarding and also environmentally friendly!

My Footprint – 10 minutes

Individually or as a class, think of ten things you can do on a daily basis to keep your footprint as small as possible. Make sure to include both things you should do and things to avoid. Here are some helpful hints to keep in mind:

- Remember the decisions you made for [Bobbie Bigfoot](#) which caused his feet to grow bigger and smaller. These decisions increased **Bobbie’s** Ecological Footprint.
- What are some actions you should take? (recycle, turn off lights and water when you aren’t using them, use energy efficient appliances, plant a vegetable garden)
- What should you avoid doing? (throwing your trash on the ground, throwing away food, wasting electricity and water)
- How does what you and your family buy affect how producers make their products? How does what you and your family buy affect what is available in stores?

Waste Walk – 20-30 minutes

Students can do this project by walking around the school or the school neighborhood either using their imagination or actually going for a walk. Ask students to look for “*environmental hot spots*.” These are areas that may accumulate garbage and may need sorting into recycling piles; areas of environmental concerns such as gas stations, garages, or restaurant kitchens; places that might waste excessive amounts of energy; or places that use a lot of energy and may not use energy saving devices and technology like Laundromats, car sales lots, or grocery stores. You may not need to travel any farther than the school cafeteria, parking lot, and garbage area!

“*Environmental hot spots*” can also include areas that are beneficial to the environment like recycling centers and bins, businesses that use environmentally friendly appliances, or even bus stops where busses use natural gas or hybrid technology. If you are not sure which category a business may fall in, create a questionnaire or a checklist to gather the information. Students can draw maps or create signs to post around the school, houses, and community. Some classes may even want to create [storm drain stencils](#).

Pledge to Mother Earth – 10 minutes

In the Waste Walk exercise, students studied their school neighborhoods to find “environmental hot spots.” Students may have chosen to create storm drain stencils or colorful signs to hang in their schools and communities informing others about how these hot spots affect the environment. These activities are great ways to inform your neighbors and friends, but what is next? What else can you do to promote awareness of environmental issues? Most importantly, how can you change behaviors and attitudes so that others make environmentally friendly decisions in their daily lives?

Give the students a few minutes to think about the earlier exercises, *My Footprint* and *Waste Walk*. Ask them to write a one-paragraph to one page pledge to Mother Earth followed by a list of actions they will take on a daily basis to benefit the environment as well as promote awareness among friends and neighbors. This may include writing letters to the school or local newspaper, business owners, or politicians; a school-wide poster information campaign; or Earth Day activities in your school and community. Students may wish to keep a daily diary describing how they manage to fulfill their pledges.

Follow-up Exercise

- The class can go on a waste walk once a month to follow the progress of the “hot spots” they identified during this exercise. Students can keep a journal describing the progress.
- Teachers can create signs or stencils promoting awareness around identified hotspots. For more ideas on creating stencils see [Earthwater Stencils](#)’ Web site, www.earthwater-stencils.com.

