

Grades 6-8

REDUCING WASTE EXPLORING WAYS TO HELP THE ENVIRONMENT

TEACHER INSTRUCTIONS

Overview

In this activity, students will explore efforts people are making to conserve energy, be more energy efficient, reduce waste, and reduce their impact on the environment.

Objectives

- · Explore ways of living green
- Challenge students to conduct research on energy conservation and waste reduction

Skills Supporting New York State P-12 Common Core Learning Standards for English Language Arts and Literacy*

- Participate in group discussions
- Cite textual evidence to support analysis
- · Conduct short research projects
- Gather relevant information from multiple sources
- Write arguments to support claims
- Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately
- Use technology, including the Internet, to produce and publish writing

Materials Needed: Copies of the "Reducing Waste" activity sheet for students

Time: 30 minutes, plus research time

Getting Started

To begin this activity, engage students in a discussion about energy consumption and trash generation to get them thinking about their own habits, as well as how these issues impact the nation and the world. Ask students:

- How do you use energy on a daily basis?
 (Answers may include for lighting, using appliances and electronics, heating, airconditioning, cooking, and heating water.

 Encourage students to also consider energy needed to create items they use each day.)
- What kinds of things do you throw in the trash daily?
- What items can be recycled or composted?

- How do energy consumption and trash impact the environment?
- What can you do to reduce the amount of energy you use or trash you produce?

Using the Student Activity Sheet

- 1. Distribute the student activity sheet.
- 2. Review the sheet with students and discuss Lauren Singer's zero-waste goal. Ask students:
- What do you think it takes to accomplish this type of goal? (Answers may include planning ahead, strategizing, determination, etc.)
- What challenges do you think Lauren faces in striving to live waste-free?
- Do you think you could take on this kind of challenge or lifestyle?
- What steps can you take to reduce your waste or strive for a waste-free life?
- For the second part of the activity, students will research other individuals or groups striving to reduce their impact on the environment. Students might also explore sustainable buildings that are being developed. Discuss potential options as a class.
- Provide students with guidelines for their research, such as presentation format, length, deadline, etc. Students might work individually or in teams on the research project.
- 5. Invite students to present their research to the class. As a group, discuss the presentations using the questions from the worksheet:
- What is the individual or group doing to help the environment?
- What is their goal?
- What have they done successfully?
- · What challenges have they faced?
- What can others learn from this person's or group's efforts? What can they apply to their own lives?

For more information on Lauren Singer, visit:

 tedxtalks.ted.com/video/Why-I-Live-A-Zero -Waste-Life-La

* Source: engageny.org/resource/new-york-state-p-12-common-core-learning-standards-for-english-language-arts-and-literacy





Name:

REDUCING WASTE

Did you know that the average American produces 4.4 pounds of trash each day? In 2013, Americans generated about 254 million tons (508 billion pounds) of trash and recycled or composted about 87 million tons of that trash!* That leaves a lot of trash going to landfills and affecting the environment.

Meet Lauren Singer from New York City. In 2012, 21-year-old Lauren set out on a mission to live a zero-waste life and reduce her contribution to these statistics. She wears secondhand clothes, buys package-free foods and items made from recycled and biodegradable materials (such as toilet paper), composts food

scraps, brings her own bags when shopping, and makes her own toothpaste and deodorant. The trash she has generated over the past 3 years fits inside a 16-ounce (1 pound) mason jar. What's in the jar? Things she can't recycle, such as an expired credit card, a plastic bandage, produce stickers, food wrappers, straws, peel-off bottle tops, and clothing tags. To help others live waste-free, Lauren has started The Simply Co., which makes laundry detergent that comes in recyclable packaging.

Check out Lauren's presentation at **tedxtalks.ted.com/video/Why-I-Live-A-Zero-Waste -Life-La** to learn more about her efforts to reduce her imprint on the environment.

WHAT ARE OTHERS DOING?

Many people are making an effort to conserve energy and reduce their impact on the environment. Research an example of what another person or group is doing and summarize your findings. Consider the following:

- What is the individual or group doing to help the environment?
- What is their goal?
- What have they done successfully?
- What challenges have they faced?
- What can others learn from this person's or group's efforts? What can they apply to their own lives?





YOUR OWN CHALLENGE

Think of five things you can do to reduce the amount of trash you generate. Maybe you'll be able to fit a year's worth of trash into a jar!