Buy, Use, Toss?
A Closer Look at the Things We Buy

An Interdisciplinary Curriculum Recommended for Grades 9–12

2-Week Curriculum Unit

Facing the Future™
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## Unit Overview

Suggested Scope and Sequence

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### Steps of Materials Economy (cont’d)

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<td><strong>THE STORY OF STUFF</strong></td>
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Students first analyze typical contents of a North American trash can in order to define “luxury” and “necessity” for themselves. They read a short article about trash typically found in a modern dump in North America. Using information from this reading, students will draw conclusions about how these artifacts reflect the lifestyle of those who used and disposed of the items.
Objectives
Students will:
• Engage in a critical analysis of consumption
• Examine trends of modern disposal of material goods in the United States
• Analyze ways in which consumption choices reflect people’s lifestyle and culture

Inquiry/Critical Thinking Questions
• How do material goods reflect our way of life?
• How do our individual consumption habits compare to those of an average American?

Subject Areas
• Social Studies (Global Studies, Contemporary World Problems, Geography, Economics, Sociology)
• Science (Environmental, Biology)

Time Required
45 minutes

Key Concepts
material consumption—the purchase and use of resources and products
waste disposal—the act of getting rid of unwanted materials
culture—the behavior, art, beliefs, and traditions of a group of people

National Standards Addressed
National Council for the Social Studies
I (Culture)
III (People, Places, and Environments)
VII (Production, Distribution, and Consumption)

National Science Education Standards
A (Science as Inquiry)
F (Science in Personal and Social Perspectives)

Additional Vocabulary
luxury—a material good or service that is not essential to a person’s life; an extravagance
necessity—a material good or service that is essential to a person’s life; something that is required
archaeology—the study of past human life and culture by an analysis of artifacts and material evidence
midden—a trash pile

Optional Background Reading
• Kathy Marks and Daniel Howden, “The world’s rubbish dump: a tip that stretches from Hawaii to Japan,” The Independent, February 5, 2008, www.independent.co.uk/environment/the-worlds-rubbish-dump-a-garbage-tip-that-stretches-from-hawaii-to-japan-778016.html—Marks and Howden examine the impacts of the Great Pacific Garbage Patch, a mass of plastic waste floating in the Pacific Ocean that is twice the size of the continental United States.

Materials/Preparation

Reused plastic or paper bags, each with a small assortment of “trash” materials, such as an empty beverage container, a magazine, a packaged food container, a household battery, and an intact piece of fruit—1 bag per group of 4 students (Note: All items should be clean. Also, each bag does not need to contain identical items.)

Handout: Buried Treasure, 1 per student or pair

(Optional) Computer access for showing Story of Stuff segment

Activity

Introduction

1. Divide students into groups of 4. Distribute one bag with assorted trash items to each group.
   • Alternative 1: Ask students to list all trash items they have discarded in the past 1–2 days.
   • Alternative 2: Save the contents of your classroom trashcan for a 24-hour period, and allow the class to view all trash contents spread across a large table covered in newspaper or plastic.

2. Ask students to consider as a group what all the items in the bag have in common. (Possible answers: They are all material items we use. They are all things we throw away. They are all things that could be reused. They are all nonliving objects.)

3. Now ask students to consider which, if any, of the materials in the bag are luxury items and which are essential items. Provide time for students to determine the difference between luxuries and necessities.

4. Ask each group to display to the class the contents of their bag, explaining which items are essential and which are luxuries. Have each group provide an explanation for how they determined which items are luxuries and which are essential. Allow no more than 1–2 minutes for each group to present.
Lesson 2

Mapping the Impact

Students create a web diagram to illustrate environmental, social, and economic impacts associated with everyday items. This activity expands the concept of “ecological footprint” to consider impacts of a given lifestyle on people and societies. Students develop ideas to reduce the ecological footprint and associated impacts related to an everyday item.
History Extension
Have students research how ecological footprint size has changed throughout history, either in the U.S. or in other countries, by finding evidence of past and present lifestyles and consumption patterns. How has humanity’s ecological footprint changed over time? What might be causing these changes?

Action Project
Have student groups research social, environmental, and economic impacts of the items from the What Does It Take to Make? cards (or other products they are interested in learning more about). Each group can write an engaging article about all the impacts associated with the item and ways that people can use the product or an alternative in a way that results in more positive impacts. Compile the articles into a 'zine that can be shared with other students through the school’s newspaper or website. Students might even ask a local newspaper to publish one or more of their articles in order to educate community members about the hidden impacts of what we buy.

Resources for research:
- Good Stuff?: A Behind-the-Scenes Guide to the Things We Buy (www.worldwatch.org/taxonomy/term/44)
- EPA poster: The Life Cycle of a CD or DVD (www.epa.gov/waste/education/pdfs/finalposter.pdf)
- EPA poster: The Life Cycle of a Cell Phone (www.epa.gov/osw/education/pdfs/life-cell.pdf)
- Global Exchange website, Fair Trade Coffee (www.globalexchange.org/campaigns/fairtrade/coffee/)
- Stuff: The Secret Lives of Everyday Things by John C. Ryan and Alan Thein Durning (Sightline Institute, 1997)
- “The Secret Life” film series, paper and cell phones (www.secret-life.org)
- Water Footprint Network (www.waterfootprint.org)

Additional Resources
- Website: www.myfootprint.org
  Students can calculate their own ecological footprint and compare it to average footprints from around the world.
- Website: www.goodguide.com
  The Good Guide provides information about the health, social, and environmental impacts of products. Students can click on “Browse Product Ratings” to learn more about specific impacts of everyday items.

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Objectives
Students will:
• Define sustainability and its three key components: the economy, the environment, and society
• Identify methods by which natural resources are extracted and the ways in which these methods affect people and places
• Determine the sustainability of natural resource extraction
• Make connections between resource extraction and consumer demand

Inquiry/Critical Thinking Questions
• What does “sustainability” mean and how does it apply to human activity?
• What are impacts of natural resource extraction on societies, environments, and economies?
• How do our consumption habits contribute to resource extraction?
• How can an activity be made more sustainable?

Subject Areas
• Social Studies (Global Studies, Contemporary World Problems, Geography, Economics, Civics)
• Science (Physical, Earth, Biology, Environmental)

Time Required
60 minutes

Key Concepts
sustainability—meeting our own needs now without limiting the ability of future generations to meet their needs
tree components of sustainability—economy, environment, and society
natural resource extraction—the process of removing materials from the earth for use by humans

National Standards Addressed
National Council for the Social Studies
I (Culture)
III (People, Places, and Environments)
V (Individuals, Groups, and Institutions)
VI (Power, Authority, and Governance)
VII (Production, Distribution, and Consumption)
VIII (Science, Technology, and Society)
IX (Global Connections)
X (Civic Ideals and Practices)

National Science Education Standards
B (Physical Science)
C (Life Science)
D (Earth and Space Science)
E (Science and Technology)
F (Science in Personal and Social Perspectives)