

Going Green: Choices & Change

Overview:

2008 has been a year of momentous change in America. One of the most critical issues we face is caring for the environment. Raising people's awareness of the importance of making environmentally conscious decisions is essential. In this lesson students will learn about Nobel Peace Prize winner Wangari Maathi and investigate local environmental efforts. They will research environmentally-friendly cars, energy sources, food, lifestyles, and architecture and develop a mock advertising campaign to convince consumers of the benefits of "going green."

Grade Level: 6-12

Subject:

Language Arts, Civics

Learning Objectives:

Students will do the following:

- respond to journal prompts
- summarize and synthesize information
- engage in small-group and whole-group discussion
- conduct interviews
- conduct Internet research
- create an advertising campaign

Learning Activities

Building Background

Activity One: Examining Perspectives on Energy & the Environment

The purpose of this activity is to activate students' background knowledge on energy and the environment.

1. Ask your students to respond in writing journals to the following prompt:

- What do you think is the most important environmental issue we face today?

Invite students to share their responses. As a homework assignment, ask each student to find an article about energy and the environment. Provide time for students to share what they find with their classmates.

2. As a class, read about President-elect Obama's plan to address energy and the environment in 2009 at

http://change.gov/agenda/energy_and_environment_agenda/.

Lead a class discussion using the following questions as guidelines:

- How did your ideas about what was important compare to the issues featured in Obama's plan?
- What were the similarities and differences in the articles you collected?
- How easy was it to find articles on energy and the environment?
- What are some of the local environmental issues in your community?
- Do you think the current economic crisis will shift people's focus from the environment? Why or why not?
- Do you think that caring for the environment is a priority for young people in America?
- What can people do to create change in the world?
- How can people participate in politics as a way to enact environmental change?

Steps for Learning

Activity One: Green Grocery Shopping

The purpose of this activity is to provide students with an opportunity to examine what they know green shopping by taking an interactive quiz.

Teacher Note: If you have access to multiple computers, divide the class into small groups and have each group take the interactive shopping quiz. If you have only one computer, complete the quiz as a class.

1. Visit National Geographic's Strange Days on Planet Earth website at <http://www.pbs.org/strangedays/interactivemarket/index.html> and take the interactive quiz on green shopping.
2. When the students are finished, ask them what surprised them the most about what they learned, and how they might use what they learn the next time they are shopping.
3. Have the students create a brochure highlighting what they learned about green shopping, and share their work with others in the school and the community. You may wish to use online brochure software or word processing software to help create students' brochures.

Activity Two: The Power to Change the World

The purpose of this activity is to help students connect global and local environmental efforts.

1. Share with your class the story of Wangari Maathai, winner of the Nobel Peace Prize, who is internationally recognized for her persistent struggle for democracy, human rights and environmental conservation. She is the founder of the Green Belt Movement in Africa and has assisted women in planting more than 20 million trees on their farms and on schools and church compounds. Her story can be heard on the National Public Radio podcast at <http://www.npr.org/templates/story/story.php?storyId=6381422>. You may also choose to have the class watch the film "Taking Root" which is the story of her life. This can be found at <http://www.takingrootfilm.com/>.
2. Divide the class into small groups. Ask each group to conduct an interview with a local environmentalist. You may also choose to invite guest speakers and have the students conduct their interviews in the classroom.

When you are finished, lead a class discussion comparing Wangari Maathai's story with those of local environmental activists. Ask the students to discuss the impact that one person can have on enacting change on both a global and local level.

Activity Three: Collaborative Research

The purpose of this activity is to provide students with an opportunity to conduct research on diverse aspects of energy and the environment.

1. Divide the class into small groups. Give each group a copy of the “Go Green Advertising Campaign Planner” handout.

Teacher Note: You may also wish to give students the option of researching an area they might be interested in that is not included in the handout.

The handout contains a list of areas for each group to research, and some suggested websites to begin their research. The information on the handout is also listed below.

Group One: Automobiles

- Hybridcenter.org
<http://www.hybridcenter.org/hybrid-center-how-hybrid-cars-work-under-the-hood.html>
- Yahoo Auto “Upcoming Green Technology”
http://autos.yahoo.com/green_center-tech-fuel_upcoming/
- New York Times “Green Tech News”
http://topics.nytimes.com/top/classifieds/autos/topics/green_tech/index.html
- Green Car “Green Technology & Alternative Fuels”
<http://www.greencar.com/alternative-fuels-green-technology.php>

Group Two: Energy Sources

- American Wind Energy Association
<http://www.awea.org/>
- Energy Information Administration “Solar Energy”
<http://www.eia.doe.gov/kids/energyfacts/sources/renewable/solar.html>
- Exxon/Mobil “Energy & the Environment”
http://www.exxonmobil.com/Corporate/energy_climate_actions.aspx
- Alliant Energy Kids “Solar Power”
http://www.powerhousekids.com/stellent2/groups/public/documents/pub/phk_ee_re_001505.hcsp

Group Three: Food

- National Public Radio “Restaurants Set Sites on Going Green”
<http://www.npr.org/templates/story/story.php?storyId=7872679>
- The Daily Green “5 Easy First Steps to Going Green”
<http://www.thedailygreen.com/going-green/latest/going-green-5-first-steps>
- Organic Farming Research Foundation
<http://ofrf.org/resources/organicfaqs.html>
- Duke University Nicholas School of the Environment “DIY Sustainable Food Shopping Tips”
<http://www.nicholas.duke.edu/nicholas/insider/thegreengrok/foodshopping>

Group Four: Lifestyles

- PlasticsInfo.org “Where Does Your Recycled Bottle Go?”
http://www.plasticsinfo.org/s_plasticsinfo/sec_level4_alt.asp?CID=551&DID=3407
- National Geographic “How Green Are Bamboo Clothes?”
<http://www.thegreenguide.com/doc/ask/bamboo>
- Organic Consumers Association “Organic Lifestyle Expands Into Home Furnishings”
http://www.organicconsumers.org/articles/article_5682.cfm
- StopGlobalWarming.org “The Promise of Green Paint”
http://www.stopglobalwarming.org/sgw_read.asp?id=1039575152008

Group Five: Architecture

- PBS Nightly Business Report “Building Green”
http://www.pbs.org/nbr/site/research/learnmore/080703_green_options_building_green/
- National Public Radio “Group Pushes for Rooftop Gardens”
<http://www.npr.org/templates/story/story.php?storyId=1810947>.
- Ecopedia “Green Building”

<http://www.thedailygreen.com/living-green/definitions/green-building>

- Cooper Hewitt National Design Museum “Design for the Other 90%: Shelter”
<http://other90.cooperhewitt.org/design/?c=shelter>
- Stop Global Warming.org “The Promise of Green Paint”
http://www.stopglobalwarming.org/sgw_read.asp?id=1039575152008

2. Provide time for students to share their advertising campaigns with others in the school and community. If possible, videotape their work and post on a class website.

3. Lead a critique of the positive and negative aspects of the campaigns, and discuss what students thought was most effective in conveying messages about environmentally conscious decision making.

Extension Activities

Activity One: The Green Economy

Extension Activity

1. As a class, listen to a National Public Radio podcast on the green economy at <http://www.onpointradio.org/shows/2008/11/obama-and-the-green-economy/>. Invite students to share what they learned with their classmates.

Activity Two: The History of Environmental Law

1. Have your students research the history of environmental laws. A good website to begin researching can be found at the EPA website at <http://www.epa.gov/history/topics/regulate/01.htm>

National Education Standards

www.mcrel.org

READING

Standard 7. Uses reading skills and strategies to understand and interpret a variety of informational texts

"<http://www.mcrel.org/compendium/standardDetails.asp?subjectID=7&standardID=7>"

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Level III (Grades 6–8)

1. Uses reading skills and strategies to understand a variety of informational texts (e.g., electronic texts; textbooks; biographical sketches; directions; essays; primary source historical documents, including letters and diaries; print media, including editorials, news stories, periodicals, and magazines; consumer, workplace, and public documents, including catalogs, technical directions, procedures, and bus routes)

3. Summarizes and paraphrases information in texts (e.g., arranges information in chronological, logical, or sequential order; conveys main ideas, critical details, and underlying meaning; uses own words or quoted materials; preserves author’s perspective and voice)

Level IV (Grades 9–12)

1. Uses reading skills and strategies to understand a variety of informational texts (e.g., textbooks, biographical sketches, letters, diaries, directions, procedures, magazines, essays, primary source historical documents, editorials, news stories, periodicals, catalogs, job-related materials, schedules, speeches, memoranda, public documents, maps)

WRITING

Standard 4.

Gathers and uses information for research purposes

<http://www.mcrel.org/compendium/standardDetails.asp?subjectID=7&standardID=4>

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Level III (Grades 6–8)

3. Uses a variety of resource materials to gather information for research topics (e.g., magazines, newspapers, dictionaries, schedules, journals, phone directories, globes, atlases, almanacs, technological sources)

Level IV (Grades 9–12)

2. Uses a variety of print and electronic sources to gather information for research topics (e.g., news sources such as magazines, radio, television,

newspapers; government publications; microfiche; telephone information services; databases; field studies; speeches; technical documents; periodicals; Internet)

SCIENCE

Standard 13.

Understands the scientific enterprise

<http://www.mcrel.org/compendium/standardDetails.asp?subjectID=2&standardID=13>

Level III (Grades 6–8)

6. Knows ways in which science and society influence one another (e.g., scientific knowledge and the procedures used by scientists influence the way many individuals think about themselves, others, and the environment; societal challenges often inspire questions for scientific research; social and economic forces strongly influence which science research programs are pursued and funded)

CIVICS

Standard 28.

Understands how participation in civic and political life can help citizens attain individual and public goals

<http://www.mcrel.org/compendium/standardDetails.asp?subjectID=14&standardID=28>

Level III (Grades 6–8)

1. Understands how participation in civic and political life can help bring about the attainment of individual and public goals (e.g., personal goals such as living in a safe and orderly neighborhood, obtaining a good education, living in a healthy environment; public goals such as increasing the safety of the community, improving local transportation facilities, providing opportunities for education and recreation)

2. Understands the importance of both political and social participation and what distinguishes one from the other (e.g., participating in a campaign to change laws regulating the care of children as opposed to volunteering to care for children), and knows opportunities for both political and social participation in the local community

Level IV (Grades 9–12)

2. Understands what distinguishes participation in government and political life from nonpolitical participation in civil society and private life (e.g., participating in a campaign to change laws regulating nursing homes as opposed to volunteering to work in a nursing home), and understands the importance of both forms of participation to American constitutional democracy

3. Knows the many ways citizens can participate in the political process at local, state, and national levels, and understands the usefulness of other forms of political participation in influencing public policy (e.g., attending political and governmental meetings, demonstrating, contacting public officials, writing letters, boycotting, community organizing, petitioning, picketing)

WORKING WITH OTHERS

Standard 1.

Contributes to the overall effort of a group

<http://www.mcrel.org/compendium/Benchmark.asp?SubjectID=22&StandardID=1> \t "_new"

<http://www.mcrel.org/compendium/Benchmark.asp?SubjectID=22&StandardID=1>

Level IV (Grade K–12)