

LESSON PLAN: Exploring Alternative Energy Sources

Research Guide

- Your teacher has assigned you a research project based on alternative/renewable energy
- The first part of your project involves researching as much factual information as you can about your assigned topic. Be sure to collect facts along with charts and graphs that contain relevant data, photographs, diagrams, flowcharts, and any other interesting information you can gather about your topic.
- As part of your project and presentation, you will need to create a model, experiment, diagram, or some type of interactive or multimedia display that you will use to teach your classmates about the alternate energy form/renewable resource you have studied.
- Projects need to be high quality with attention to detail, accurate spelling, grammar, punctuation, etc. Accuracy counts, so be sure to thoroughly research the facts and practice what you will say in your presentation ahead of time.

Online Resources

“High Gas Prices Could Mean Cold Classrooms and Cancelled Trips”

http://www.pbs.org/newshour/extra/features/july-dec05/gascosts_11-21.html

“Can a New Light Bulb Save the Environment?”

http://www.pbs.org/newshour/extra/features/jan-june05/led_6-13.html

Power and Deregulation

<http://www.pbs.org/newshour/bb/infrastructure/power/#>

Blowin’ in the Wind: Wind Power

<http://www.pbs.org/newshour/bb/environment/jan-june01/blowing.html>

Light Bulb Technology

http://www.pbs.org/newshour/bb/science/july-dec05/bulb_11-10.html

The Future of Fuel

<http://www.pbs.org/newshour/science/hydrogen/index.html>

Eco-Friendly Buildings

http://www.pbs.org/newshour/bb/environment/jan-june05/building_4-15.html

The Earth Debate: Energy

<http://www.pbs.org/now/science/unenergy.html>

American Energy Sources

<http://www.pbs.org/newshour/bb/infrastructure/power/#>

U.S. Department of Energy

http://www.energy.gov/engine/content.do?BT_CODE=DOEHOME

Research Questions:

1. What can this type of energy/resource be used for?
2. How is this type of energy/resource easily renewed?
3. What is the cost of using this type of energy/resource?
4. What are the positive aspects of using this resource/type of energy?
5. What are the negative aspects of using this resource/type of energy?
6. What is the science behind this resource/type of energy?
How is the energy gathered and/or created?
How is the energy stored for later use?
What are the waste by-products of this form of resource/energy?
Currently, what is keeping this form of energy from widespread use?
7. When is the energy/resource expected to be easily accessible to the general public?
8. Collect photographs, diagrams, charts, graphs, flow charts, and stories of people who are working with this resource/form of power so you can integrate this into your presentation.