

INTERMEDIATE ACTIVITY: Energy Source Web Quest

Introduction

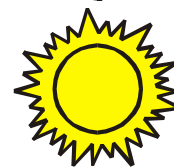
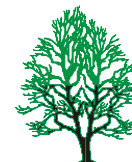
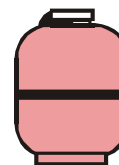
There are ten major energy sources used in the United States today. Energy is a part of every aspect of our lives. It is important to learn about energy and its impact on our society.

Objective

Students will learn about energy sources using web-based resources and create Powerpoint presentations to teach other students.

Procedure

1. Students in groups of two will be assigned an energy source.
2. Student groups will use the computer lab to research information about their energy source, using at least three of the web resources listed.
3. Student groups will use the computer lab to create Powerpoint presentations on their energy source. The presentations will include:
 - Title slide
 - Eight-to-ten slides that provide the following information about the energy source:
 - description of the energy source, including renewable or nonrenewable
 - history of the energy source
 - where the energy source is found and how it is recovered
 - how energy is stored in the source and how the energy is released
 - how the energy source is used today
 - advantages and disadvantages of the energy source
 - economic impacts of the energy source
 - environmental impacts of the energy source
 - future of the energy source
 - other interesting facts about the energy source
 - Resource listing slide
4. Student groups will present their projects to the class.



Resources

www.need.org/infobooks.htm: NEED's energy sources fact sheets
www.eia.doe.gov/kids: Energy Information Administration's Kid's Page
www.energy.gov/kidz/kidzone.html: Department of Energy's Kids Zone
www.awea.org: American Wind Energy Association
www.acf-coal.org: American Coal Foundation
www.nei.org: Nuclear Energy Institute
www.hydro.org: National Hydropower Association
www.ases.org: American Solar Energy Society
www.propanecouncil.org: Propane Education and Research Council
www.biomass.org: American Bioenergy Association
www.geotherm.org: Geothermal Energy Association
www.api.org: American Petroleum Institute
www.ngsa.org: Natural Gas Supply Association

Evaluation

Students will evaluate each group using a 1-to-5 rubric which includes knowledge of the energy source, content of the presentation, level of participation in the research and presentation, and design and creativity of the presentation.

Conclusion

Class discussion emphasizing the fact that every energy source has advantages and disadvantages and that it is important to use many energy sources to provide the energy needed in the U.S.

Extension

Use this format to study emerging energy technologies such as hydrogen fuel cells, fusion, wave energy, and more.

This activity was developed by Doris Tomas, NEED Lead Teacher, Jackson Elementary School, Rosenberg, TX.