

Energy Blast

FORT WORTH MUSEUM OF SCIENCE AND HISTORY

Your students will journey through time as they begin to understand the large gas reserve under North Texas known as the Barnett Shale. Begin the journey on the ocean floor and watch as micro-organisms rain down, settling on the bottom of the ocean. Enjoy the 4D theater then visit the gas field and participate in hands-on activities that will help build background knowledge for your students. End your experience in the Alternative Energy Hall where your students can experience using alternative power sources. As you leave this space you will find information about leaders in the energy field.

Pre-visit activities

Explore the formation of sedimentary rocks.

This website features an activity that models the formation of sedimentary rocks.

http://www.windows.ucar.edu/tour/link=/teacher_resources/teach_makerock.html

Divide your class into small groups. Assign each group a different energy source: natural gas, oil, geothermal, hydroelectric, nuclear energy, solar energy or wind energy. Each group is responsible for researching information and investigating their energy source during their visit to the Museum and Energy Blast.

Post-visit activities

Each group will create a presentation for the class about their assigned energy source. The presentation should include research information, information found at the Museum, and a poster about the energy source. The pros and cons of the energy source should also be included in the presentation.



Websites to visit:

Rock Cycle: Understanding the Earth's Crust

This site looks at chemistry, minerals, rocks and past life in relationship to the Earth's crust.

<http://www.ms-nucleus.org/membership/html/k-6/rc/index.html>

U.S. Department of Energy

Fossil energy study guides, activities and energy lessons

http://fossil.energy.gov/education/energylessons/Study_Guides_and_Activities.html

<http://fossil.energy.gov/education/energylessons/index.html>

Energy Quest for Kids

Interactive website from the California Energy Department

<http://www.energyquest.ca.gov/>

U.S. Energy Information Administration

Information, games and activities for children about energy

<http://www.energyquest.ca.gov/>

Alternative Energy for Kids

Information about the benefits of recycling and the advantages and disadvantages of alternative energy

<http://www.benefits-of-recycling.com/alternativeenergyforkids.html>

Texas Connection

The Barnett Shale is a geological formation located in the Bend Arch-Fort Worth Basin. It consists of sedimentary rocks of Mississippian age (354–323 million years ago) in Texas. The formation underlies the city of Fort Worth and underlies 5,000 square miles (13,000 km²) and at least 17 counties.

Map of the Barnett Shale

<http://blumtexas.blogspot.com/>

TEKS:

3rd: 3A,B,C, 6A, 7C

7th: 2E, 3A,C,D

4th: 3A,B,C, 6A, 7C

8th: 3A,B,C,D

5th: 1A, 3A,B,C, 6A, 7A

IPC: 3C,D, 5H,I

6th: 3A,B,D



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