Sources of Energy Coloring Book

Point of Wonder

Have you ever wondered how many sources of energy there are?

Standard I.2



Energy Sources There are many terrestrial energy sources.

Objective

The students will identify and describe our most common sources of energy.

Instructional Information and Connections

Time: Nine 30-minute periods

Curriculum Focus:

language arts, science, art, math

Skills/Processes:

classify, draw, identify, listen, read

Key Vocabulary:

coal, electricity, energy, food, fuel cells, geothermal features, natural gas, nonrenewable, oil, photo voltaic cells, renewable, source, sun, uranium, water, wind, wood



Background

Energy is essential in our daily lives. It takes energy to breathe, grow, and think. We are even using energy at night while sleeping.

We depend on energy for heat, air conditioning, lights, clothing, food, transportation, and communication.

Where does this seemingly endless supply of energy come from?

There are many sources from which we get our energy. Some are renewable, such as the energy we get from the sun, wind, and water, and also wood and other plants that provide our food. Other sources are more limited or nonrenewable, such as fossil fuels—coal, oil, and natural gas. Some energy sources are only available in certain areas, such as geothermal features or uranium. Some sources are readily available, but difficult to harness, such as ocean tides; some are expensive to extract or might present environmental concerns.

Many sources of energy have been used for hundreds, even thou-sands of years. Through research we are finding new ways to use available energy, such as hydrogen-powered fuel cells and solar-powered photovoltaic cells. Scientists are constantly searching for additional energy sources and more efficient ways to use them to keep up with our ever increasing energy demands.

Materials / Preparation

- Copy of coloring book on pages 9 through 18 for each student
- Crayons

Learning Activity

- 1. Each day introduce a new source of energy from the coloring book. Read the captions.
- Introduce the source; tell how it is used and how it is formed in addition to discussing what the captions say. For younger students, some coloring pages have a dot-to-dot component, others have a counting activity. Have students complete those activities and color the picture.

Connections(cont.)

World of Work:

- coal miner
- lumberjack
- farmer
- wind turbine engineer
- natural gas vehicle operator
- solar energy developer
- hydroelectric engineer
- refinery manager

Character Connections:

appreciative, energy-conscious, happy

Correlation Connections:

As you prepare and implement this activity, record any state or national standards that may apply:

Check for Understanding

Have the students identify and draw two of their favorite, or most often used, energy sources.

To Know and Do More

As a class, discuss each of the energy sources. As each source is discussed, ask a few students to describe an event where they used that particular source. For example, a student who has been on a sailboat has used energy from the wind, a student who has roasted marshmallows over a campfire has used energy from wood.

Career Awareness Activity

Invite a school or community sports coach to visit your class and explain what foods he advises his team members to eat right before a game, what food items he might advise his team to never eat, and what foods he recommends for building strength and endurance. Allow students to ask him or her questions about their position as a coach and why energy is important to their profession.













ENERGY FUN









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