



# ENERGY DAY

THERE'S A BETTER WAY TO SAVE!

## Energy Day Fair Families Have Fun Saving Energy

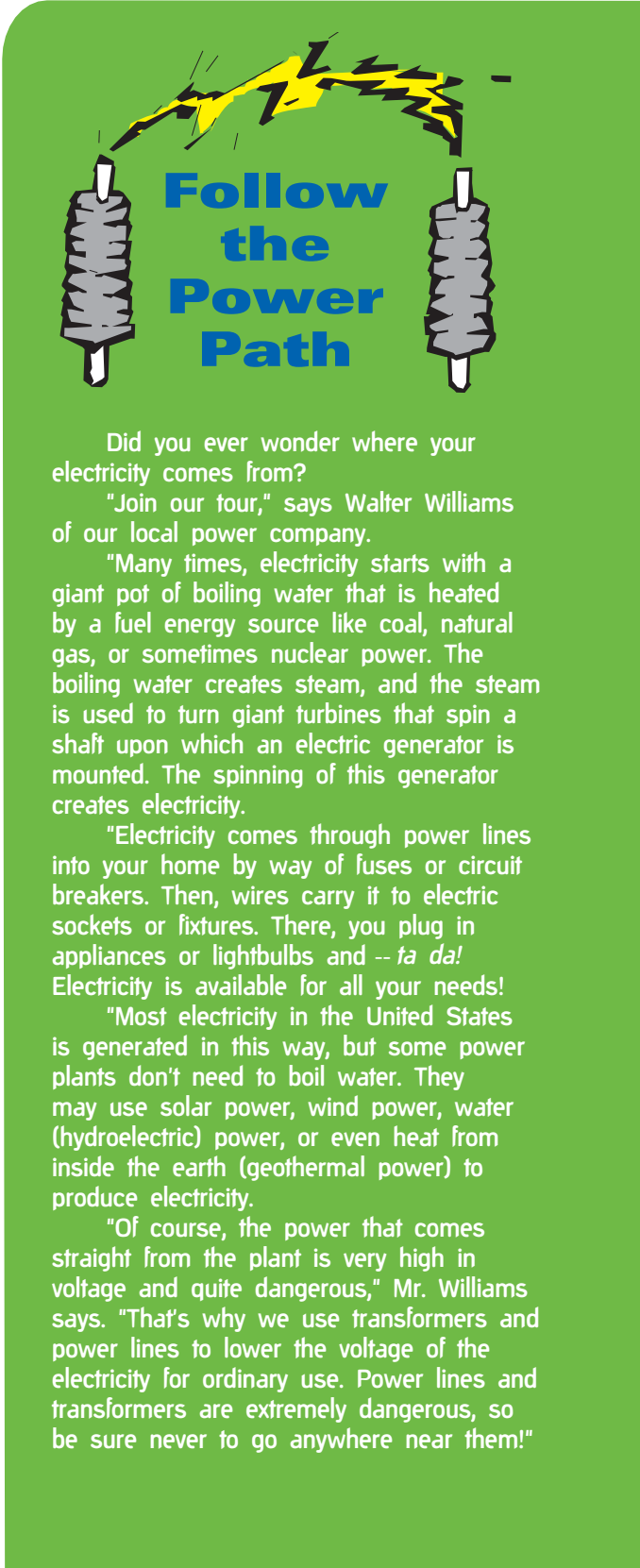
"There's a better way to save energy," said fifth-grader Brian Seymour, "and our job is to help people learn how!" Brian and his classmates did their job well at their school's first annual Energy Day Fair.

Students and their families explored many demonstrations, including one that showed how special compact fluorescent lightbulbs, called CFLs, can help save energy. "Ordinary lightbulbs use energy to produce light, but they also produce a lot of heat," explained student Sara Juarez. "Only 10 percent of an incandescent lightbulb's energy is used to create light. About 90 percent of its energy is wasted generating heat. CFLs, on the other hand, use most of their energy creating light. Because of this, much less energy is wasted, resulting in a cooler, more efficient lightbulb. So when you use CFLs, you're using about 75 percent less energy to create the same amount of light as that created by a traditional lightbulb."

Families also learned that the U.S. Department of Energy and the U.S. Environmental Protection Agency have developed a way to help people quickly and easily identify the most energy-efficient products available in the marketplace: the ENERGY STAR® label. This special label can be found on everything from home entertainment electronics to household appliances and will help people to be energy efficient in their everyday lives.

*Are you interested in learning how to save energy and money, help conserve our natural resources, protect air quality, and protect the environment, all without losing out on fun and comfort? Visit these Web sites:*

[www.myenergystar.com](http://www.myenergystar.com) or [www.energystar.gov](http://www.energystar.gov).



**Follow the Power Path**

Did you ever wonder where your electricity comes from?

"Join our tour," says Walter Williams of our local power company.

"Many times, electricity starts with a giant pot of boiling water that is heated by a fuel energy source like coal, natural gas, or sometimes nuclear power. The boiling water creates steam, and the steam is used to turn giant turbines that spin a shaft upon which an electric generator is mounted. The spinning of this generator creates electricity.

"Electricity comes through power lines into your home by way of fuses or circuit breakers. Then, wires carry it to electric sockets or fixtures. There, you plug in appliances or lightbulbs and -- *ta da!* Electricity is available for all your needs!

"Most electricity in the United States is generated in this way, but some power plants don't need to boil water. They may use solar power, wind power, water (hydroelectric) power, or even heat from inside the earth (geothermal power) to produce electricity.

"Of course, the power that comes straight from the plant is very high in voltage and quite dangerous," Mr. Williams says. "That's why we use transformers and power lines to lower the voltage of the electricity for ordinary use. Power lines and transformers are extremely dangerous, so be sure never to go anywhere near them!"



CHANGE FOR  
THE BETTER WITH  
ENERGY STAR

## Fuel Efficiency



Replacing an ordinary incandescent lightbulb with a compact fluorescent lightbulb is like replacing a car that gets 25 miles per gallon with one that gets 100 miles per gallon.

## Bright Ideas



Joseph Swan built the world's first electric lightbulb in 1860. Thomas Edison patented the electric lightbulb in 1879.

## Renewable Energy

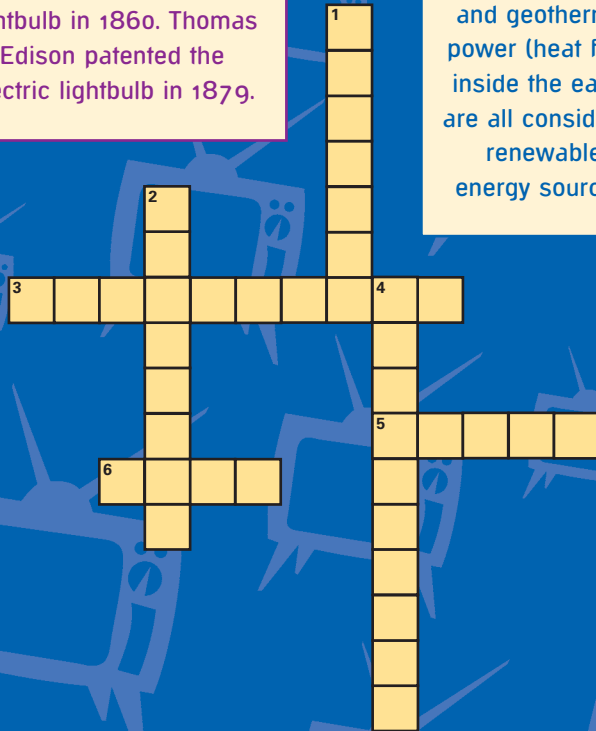


Wind, water, sun, and geothermal power (heat from inside the earth) are all considered renewable energy sources.

## Crossword Puzzle

Today's theme is...ENERGY!  
Can you solve the puzzle?

- Clue 1: \_\_\_\_\_ fluorescent lightbulbs use much less energy than ordinary incandescent lightbulbs.
- Clue 2: These turn to produce electricity.
- Clue 3: This special label is awarded to products that are energy efficient.
- Clue 4: When you plug these into electrical sockets, they use energy to make your life easier or more fun.
- Clue 5: To save energy, turn this off when you leave a room.
- Clue 6: Ordinary lightbulbs produce both light and \_\_\_\_\_.



## Did You Catch That?

Find out how well you understood the articles you just read by playing this trivia game!

**1** A compact fluorescent lightbulb, or CFL, uses how much less energy to create light than an ordinary incandescent bulb uses?

- a. 35 percent      c. 75 percent  
b. 90 percent     d. 10 percent

**2** Which of these energy sources are used to boil water to make steam to create electricity? (There might be more than one correct answer.)

- a. fossil fuels (gas, oil, coal)  
b. wind power  
c. water power (hydroelectric)  
d. sun power (solar)  
e. subatomic particles (nuclear)  
f. gamma rays  
g. laser beams

**3** How does electricity get from the power plant to your house?

- a. through the air  
b. through light beams  
c. through power lines  
d. by satellite

**4** What tells you that an appliance or electronic device is energy efficient?

- a. Star of Power      c. Efficiency Star  
b. ENERGY STAR®      d. Energy Best

**5** Why does a compact fluorescent lightbulb use less energy than an ordinary bulb?

- a. it gives off less heat  
b. it gives off more heat  
c. it's turned on for a shorter period of time  
d. it's made out of a different kind of glass

**Answer the following question in two or three sentences.**

What are some "better ways to save" energy without giving up comfort or fun?

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