

BRIGHT IDEAS



How Light Bulbs Can Save Energy

We sometimes use the terms “energy efficiency” and “energy conservation” to mean the same thing. They both result in energy savings, but do so in different ways.

ENERGY CONSERVATION relates to habit changes, such as turning off lights when you leave a room. **ENERGY EFFICIENCY** relates to technology changes, such as using efficient appliances or energy-saving light bulbs. Energy-efficient technologies allow consumers to do the same amount of work while consuming less energy.



Mr. Lightbulb
Says
Lights
Out!

Lighting accounts for nearly 20 percent of the average home’s electric bill. You can practice energy conservation by turning off the lights when you

Megan Emerson, Kindergarten, St. Martha School, Enfield, CT
You can use energy-efficient technologies by purchasing energy-saving compact fluorescent lights (CFLs) or light emitting diodes (LEDs).

Compared to traditional incandescent bulbs, ENERGY STAR® certified CFLs and LEDs use 75 percent to 80 percent less energy, last at least 6 years longer, and produce less heat, making them safer to operate while cutting energy costs associated with home cooling.

leave a room.

If every home in America replaced just one incandescent light bulb with an ENERGY STAR certified bulb, in one year we would save enough energy to light more than 3 million homes and prevent greenhouse gas emissions equivalent to those of more than 800,000 cars.

Reduce THE LIGHTS!

If you look up and see the sun,
Turn off the lights when you’re done.
If it is bright,
You don’t need the light,
And soon you’ll be number one!

Karina McMahon, Grade 3
Burr Elementary School
Fairfield, CT



WHAT'S AN ENERGY STAR?

Earning the ENERGY STAR® means lighting and appliances have met strict energy efficiency guidelines set by the US Environmental Protection Agency (EPA). Lighting products that have earned the ENERGY STAR deliver exceptional features, while using less energy.

The ENERGY STAR label tells consumers that appliances and electronics meet strict efficiency standards. The EPA started the ENERGY STAR program in 1992 to help consumers make energy-efficient choices. Today, it has been expanded to include hundreds of products and has been extended to new homes and buildings. *Only appliances with high efficiency ratings have ENERGY STAR labels.*



FIND THE ENERGY-SAVING LIGHT BULBS!

Look around your house for bulbs you can see easily, like those in lamps or open fixtures. Tally the number of each type of bulb in the space below.



Compact Fluorescent Light (CFL)

Total Number

Incandescent Bulbs

Total Number

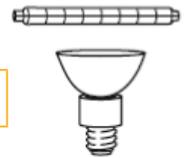


Fluorescent Tubes

Total Number

Other (such as LEDs or Halogen)

Total Number



5

Energy-Saving Actions



1

TURN OFF THE LIGHTS WHEN YOU LEAVE A ROOM.

TAKE ADVANTAGE OF NATURAL LIGHT WHENEVER POSSIBLE.

2

3

WHEN TURNING OFF LIGHTS WITH A DIMMER SWITCH, MAKE SURE IT IS IN THE OFF POSITION—NOT JUST TURNED DOWN.

USE LED HOLIDAY LIGHTING.

4

5

WHEN YOU ARE AWAY FROM HOME, USE A TIMER TO TURN LIGHTS OFF AND ON AUTOMATICALLY.



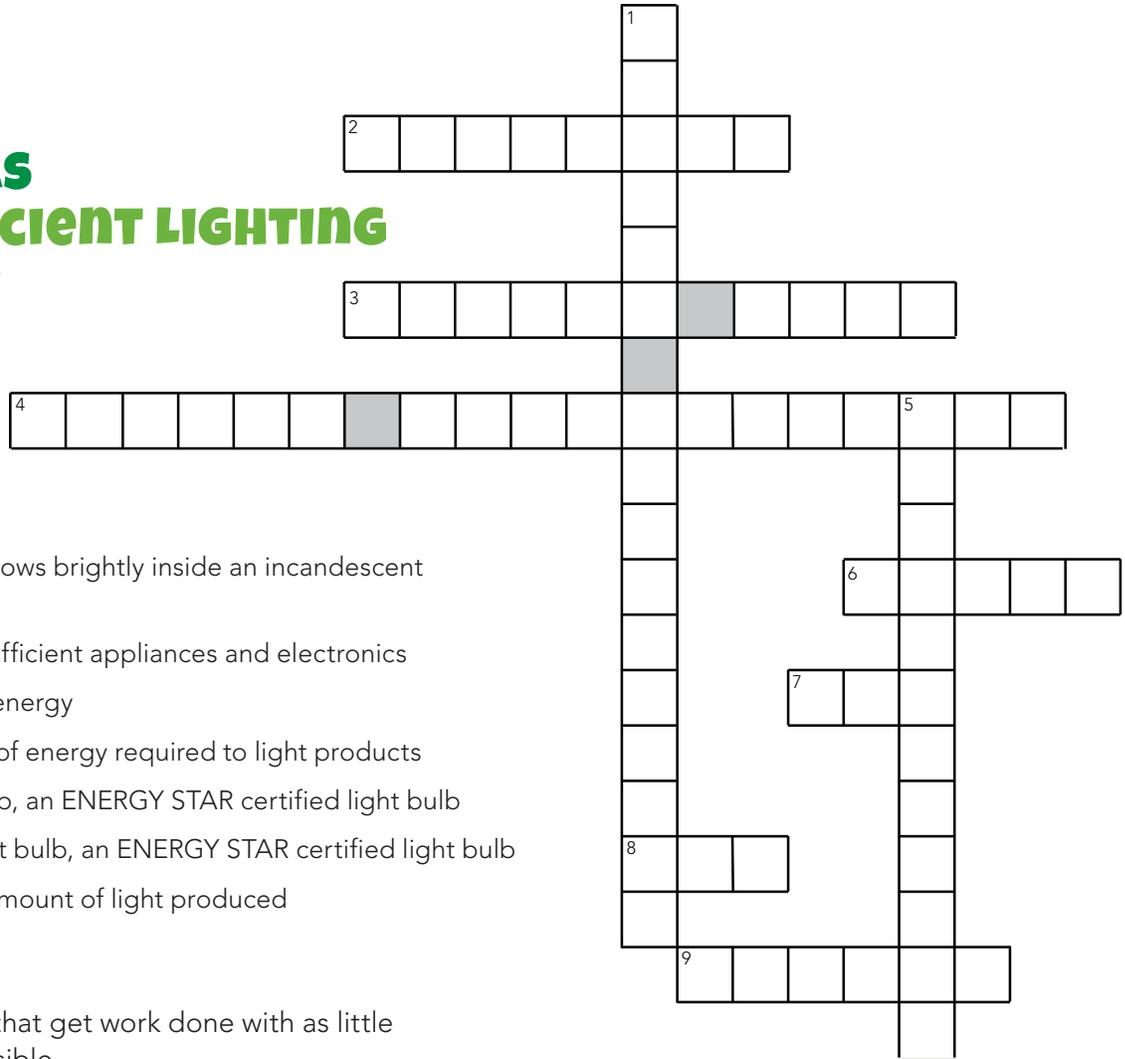
Take advantage of Energize Connecticut's rebates for energy-saving lighting. When you see the Energize Connecticut logo, you are purchasing discounted CFLs or LEDs. Bringing the price down, makes energy-saving lighting products more affordable for everyone!

To learn more about CFLs and LEDs, visit EnergizeCT.com with a parent.



BRIGHT IDEAS ENERGY EFFICIENT LIGHTING

Complete the crossword



ACROSS

2. a thin metal strip that glows brightly inside an incandescent light bulb
3. rating given to energy efficient appliances and electronics
4. a habit change to save energy
6. represents the amount of energy required to light products
7. light emitting diode bulb, an ENERGY STAR certified light bulb
8. compact florescent light bulb, an ENERGY STAR certified light bulb
9. a measurement of the amount of light produced

DOWN

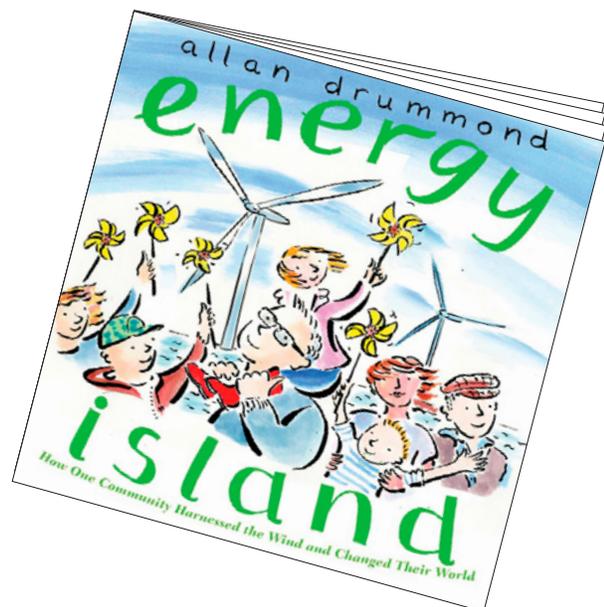
1. a technology change that get work done with as little wasted energy as possible
5. an older, less efficient light bulb

Q: WHAT DID THE ENERGY-SAVING LIGHT BULB SAY TO THE INCANDESCENT BULB?

A: WATT'S UP?

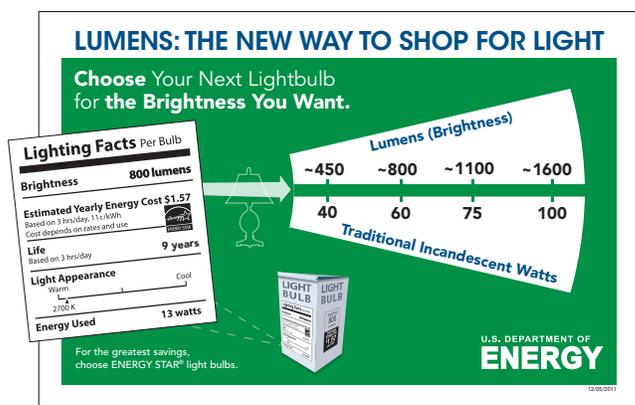
Literature Connection

Do you ever wish you could make a difference in your community? With the help of motivated citizens, excited students and a fateful storm, a Danish teacher did just that! **Energy Island** by Allan Drummond tells the inspiring true story about Søren Hermansen and the people of Samsø Island in Denmark who worked together to achieve energy independence. The community used the island's most abundant natural resource – wind – and other renewable energy sources to reduce their carbon emissions by 140 percent in just ten years. This creatively illustrated and thought-provoking book is the first in a series of picture books by Allan Drummond about green projects around the world.



TECHNOLOGY CORNER

Shopping by lumens is more important than shopping by watts when choosing which energy-efficient bulb to purchase. **Watts** represent the amount of energy required to light products, whereas **lumens** are



a measurement of the amount of light produced. The more lumens in a bulb, the brighter the light.

To help consumers better understand why lumens are more important than watts, the Federal Trade Commission requires that all light bulbs have a Lighting Facts label. This helps you buy a light bulb

to suit your needs. Just like the nutrition label on food products, the Lighting Facts label helps consumers understand what they are really purchasing. The label clearly provides the brightness (**lumens**), color of the light (**Kelvins**), and how much it will cost to power the light bulb over its lifetime (**operating cost**).



eesmarts is an energy efficiency and clean, renewable energy learning initiative funded through Energize Connecticut. The vision of eesmarts is to facilitate students' understanding of the science, math and technology related to clean, renewable energy and electricity in order to create an energy-efficient ethic among all school-age students in Connecticut.

Visit www.energizect.com/eesmarts to find out more ways you can save energy!

TECHNOLOGY CORNER



The U.S. Energy Information Administration's website, Energy Kids (<http://www.eia.gov/kids>) features pages of fun, educational content for kids, parents, and teachers. Kids learn about energy and challenge their brains with energy Sudoku, puzzles, and games.

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Energize Connecticut – programs funded by a charge on customer energy bills.