

**I NEED HELP
PAYING MY GAS/
ELECTRIC BILLS.**



**THE LOW INCOME HOME
ENERGY ASSISTANCE
PROGRAM CAN HELP!
(LIHEAP)**



**The Low Income Home Energy Assistance Program
(LIHEAP)**

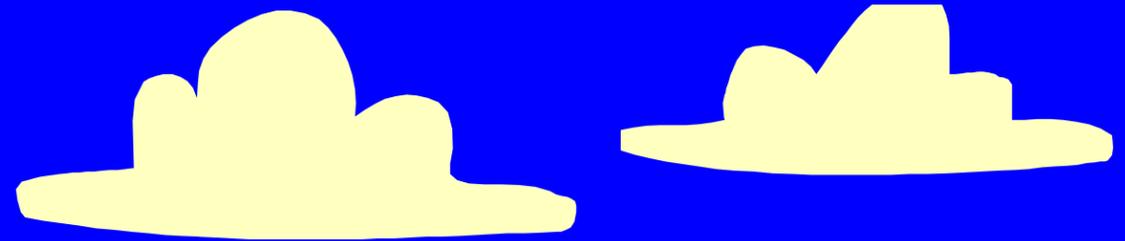
helps eligible households pay for winter energy services. You may be eligible to receive a payment on your gas, heating oil, and/or electric bill(s), and you can apply each year.

Call:

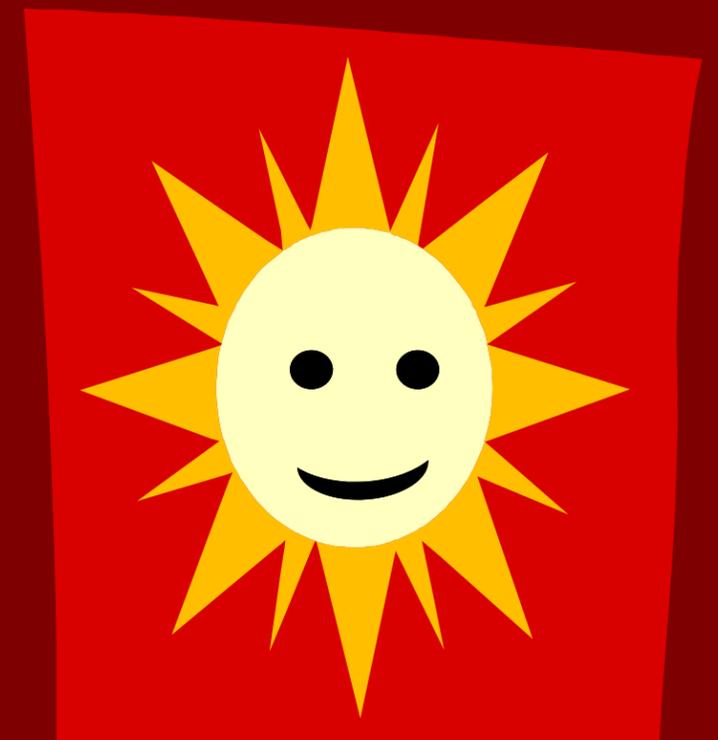
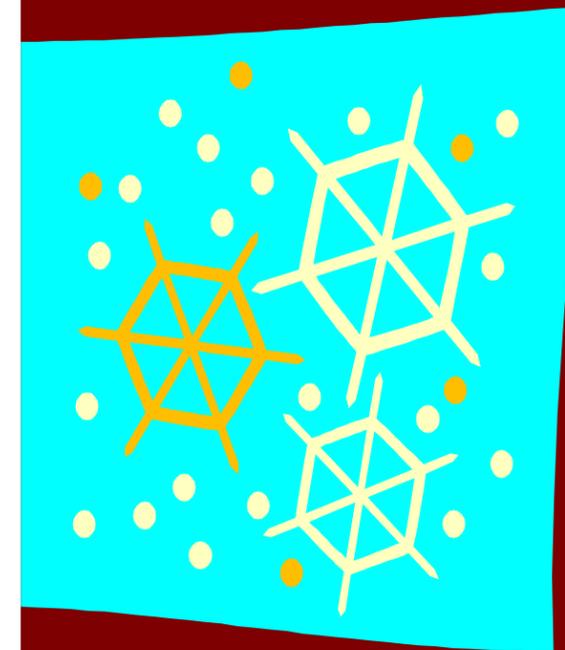
LIHEAP
1-866-674-6327 or,
www.energyassistance@ncat.org or,
Contact your State's LIHEAP office.

LIHEAP

LOW INCOME HOME ENERGY ASSISTANCE PROGRAM



COLORING AND ACTIVITY BOOK FOR KIDS TO SHARE WITH THEIR PARENTS



BE AN ENERGY SAVER - LEARN HOW TO SAVE ENERGY AND MONEY AT HOME

Draw Your Own Energy Saving Room

The LIHEAP Coloring and Activity Book for kids and their parents was created by:

DuPage County Human Services
421 N. County Farm Road
Wheaton, IL 60187,
(630) 407-6500, 1-800-942-9412 (Toll-Free),
www.dupageco.org

Energy tips courtesy of: U. S. Department of Energy
Energy Efficiency and Renewable Energy
"Energy Savers Tips on Saving Energy & Money at Home"

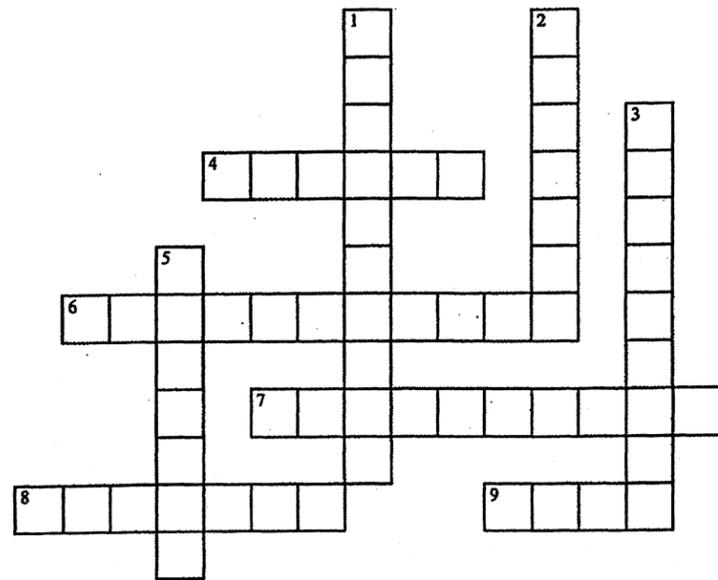
"Keep Warm Illinois"
www.keepwarm.Illinois.gov

ComEd CARE
www.ComEdCARE.com

California Energy Commission
www.ConsumerEnergyCenter.org

Alliance to Save Energy
www.EnergyHog.org

Energy Saving Crossword Puzzle

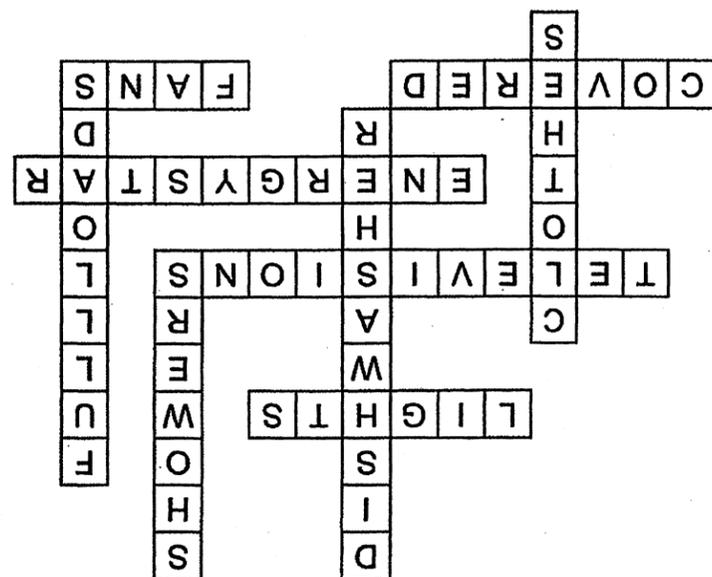


ACROSS

- 4 Turn these off in any room when not in use.
- 6 The average home has 2 of these.
- 7 Replace your 5 most used light bulbs with what type of CFLs?
- 8 Use a _____ kettle or pan to boil water.
- 9 What costs less to cool in summer than Air Conditioning?

DOWN

- 1 Most of the energy used by one of these is for water heating.
- 2 Take _____ instead of baths.
- 3 Wash only _____ of dishes.
- 5 Don't over-dry your _____.



Answers:

Did You Ever Wonder Where Energy Comes From?

We all use energy in our homes, but where does it come from? How is it created? You can find some energy underground and some is found above ground. There are two main sources of energy, renewable and nonrenewable.

Renewable Energy: Scientists have found ways to make energy from the sun (solar power), the wind (wind power), moving water (hydropower), and plants (biomass). It is called renewable energy because we will never run out of this kind of energy.



Sun
(Solar Power)

The sun is our main source of energy. The sun's energy arrives to earth as light with a range of wavelengths. Long wavelengths turn into heat when they touch the earth. We capture energy from the sun and turn it into electricity by using solar panels.



Wind
(Wind Power)

The heat from the sun causes air to rise, creating wind energy. Wind turbines capture the energy from the blowing wind.



Water
(Hydropower)

We use dams to get energy from moving water.



Plants
(Biomass)

Biomass, such as wood, creates heat energy when it is burned. These sources of energy are turned into electricity which travels through power lines underground or above ground.

Did You Ever Wonder Where Energy Comes From?

Nonrenewable Energy: Our underground sources of energy include coal, oil, and natural gas. All of these come from fossil fuels which are from dead plants and animals. These animals and plants lived a long time ago, before the time of the dinosaurs, and decayed deep inside the earth. After they turn to fossils millions of years later, we can dig them up, or put a long pipe into the ground to get them. Fossil fuels take millions of years to make. We are using up the fuels that were made more than 300 million years ago, so it's best not to waste fossil fuels. Use the tips in this book to save energy. Once this source of energy is gone, its gone forever.



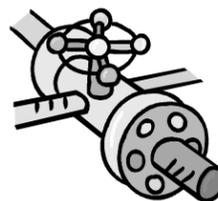
Coal

Coal is a hard, black colored rock-like substance. It is made up of carbon, hydrogen, oxygen, nitrogen and varying amounts of sulfur. Coal is found in many of the lower 48 states of U.S. and throughout the rest of the world. Coal is mined out of the ground, and is then shipped by train and boats and even in pipelines. In pipelines, the coal is ground up and mixed with water to make what's called a slurry. This is then pumped many miles through pipelines. At the other end, the coal is used to fuel power plants and other factories.



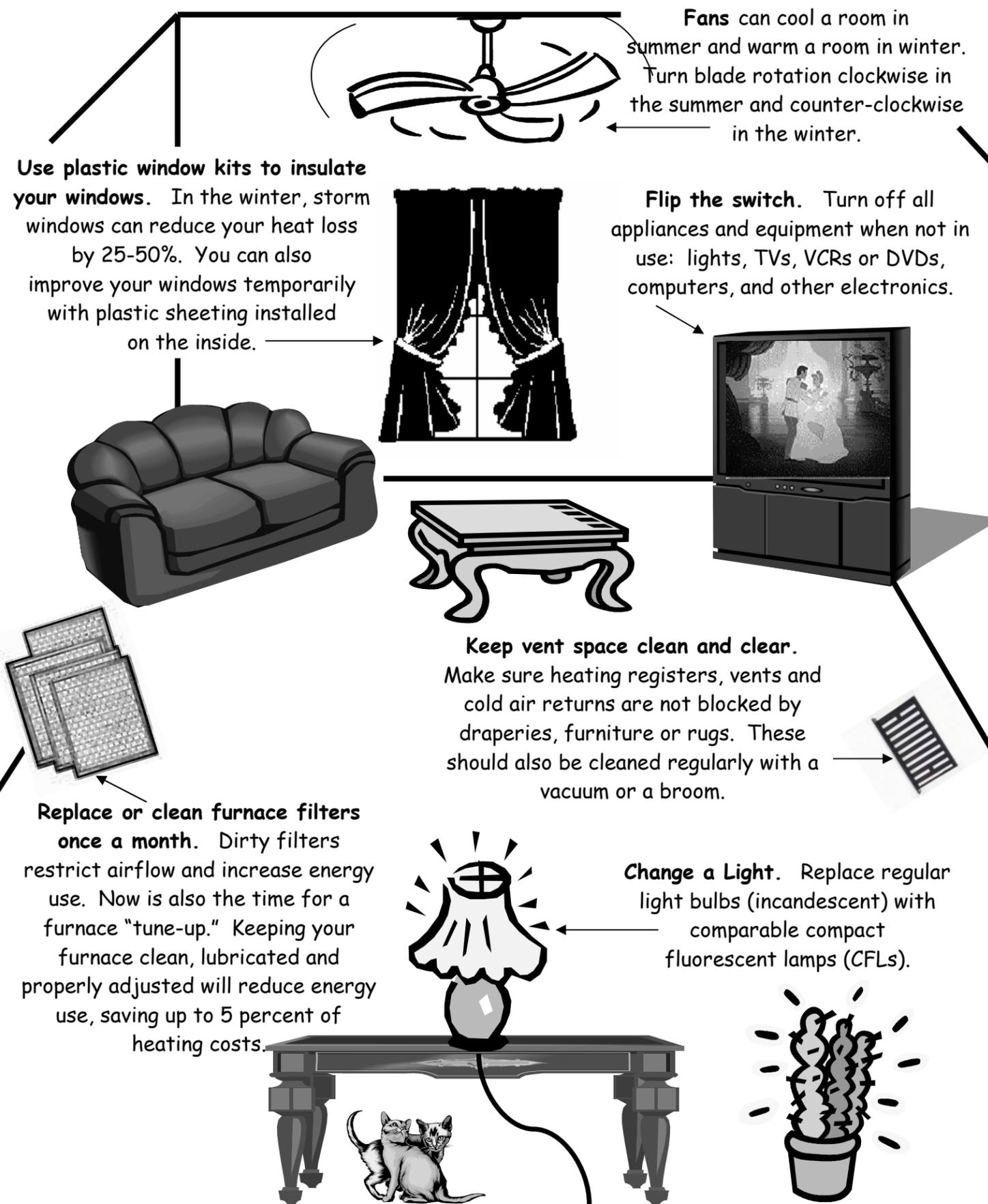
Oil

Oil is another fossil fuel. It was also formed more than 300 million years ago. Some scientists say that tiny diatoms are the source of oil. Diatoms are sea creatures the size of a pin head. They do one thing just like plants; they can convert sunlight directly into stored energy. Oil has been used for more than 5,000-6,000 years. On August 27, 1859 liquid oil was struck at a well near Titusville, Pennsylvania. Oil was found under ground and a way that could pump it to the surface. The oil is then pumped from below the ground by oil rigs (like in the picture). They then usually travel through pipelines or by ship. Oil is stored in large tanks until it is sent to various places to be used. Oil is made into many different products - fertilizers for farms, the clothes you wear, the toothbrush you use, the plastic bottle that holds your milk, the plastic pen that you write with. They all came from oil. Other products include gasoline, diesel fuel, aviation or jet fuel, home heating oil, oil for ships and oil to burn in power plants to make electricity.



Underground Gas Pipe

Natural gas is lighter than air, and is highly flammable. Natural gas is usually found near petroleum underground. It is pumped from below ground and travels in pipelines to storage areas. Natural gas usually has no odor and you can't see it. Before it is sent to the pipelines and storage tanks, it is mixed with a chemical that gives a strong odor. The odor smells almost like rotten eggs. The odor makes it easy to smell if there is a leak. If you smell that rotten egg smell in your house, tell your parents and get out of the house fast. Don't turn on any lights or other electrical devices. A spark from a light switch can ignite the gas very easily. Go to a neighbors house and call 911.



Circle the Ways You Can Save Energy



Full Washer



No Drips



Full Dishwasher



A Few Dishes



Computer Not In Use
Computer Off
Monitor Off



Computer Not In Use
Computer On
Monitor On

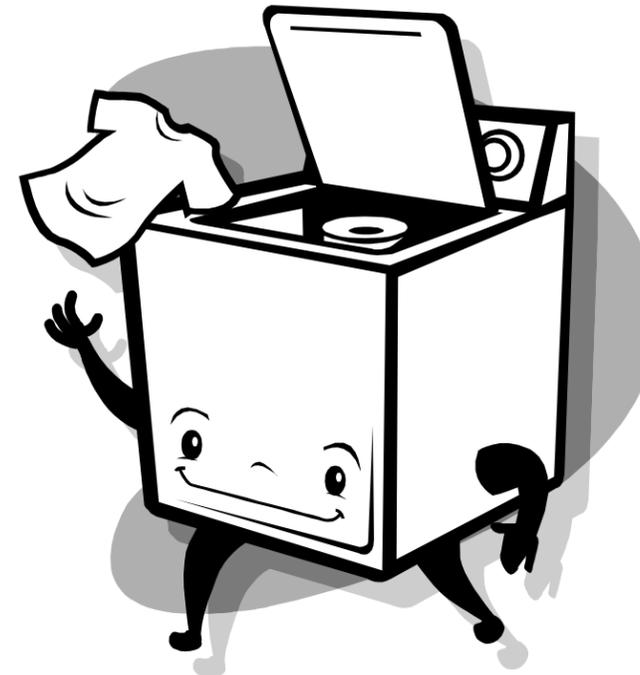


Dripping
Faucet



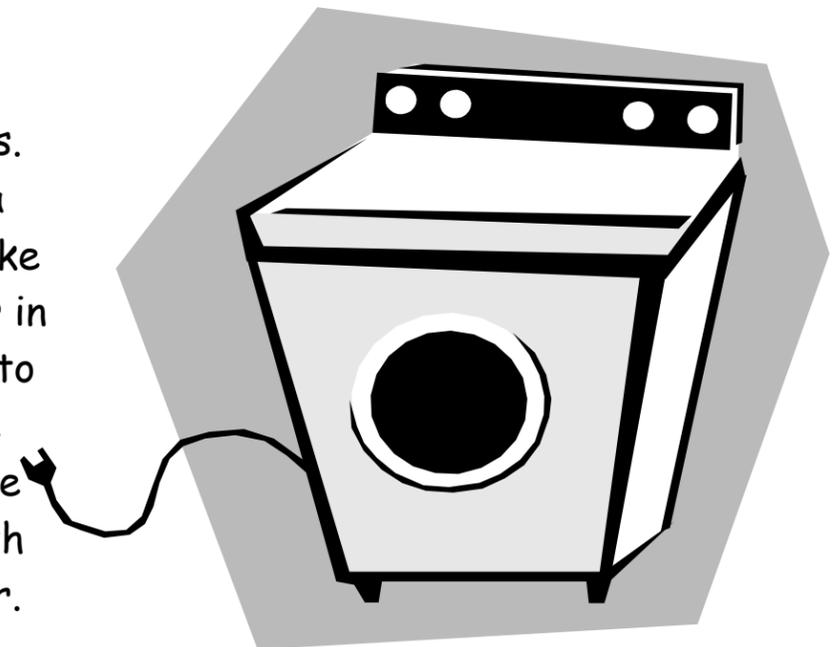
A Few Socks and
A T-Shirt

Energy Saving Tips



Wash your clothes in cold water using cold water detergents whenever possible. Try to wash full loads, but if you are washing a small load, use the appropriate water-level.

Don't over-dry your clothes. Most new machines have a moisture sensor, use it. Make sure you clean the lint filter in the dryer after every load to improve air flow. Use the cool-down cycle to allow the clothes to finish drying with heat remaining in the dryer.

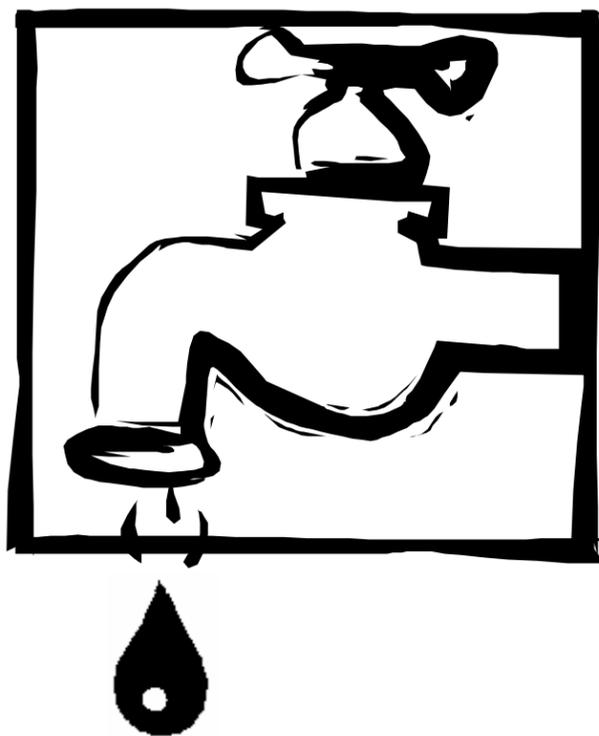


Energy Saving Tips

Wash only full loads of dishes, and air dry instead of using the drying cycle. Don't use the "rinse hold" on your machine for just a few soiled dishes. It uses 3 to 7 gallons of hot water each time you use it. Scrape, don't rinse, off large food pieces and bones. Soaking or pre-washing is generally only recommended in cases of burned-on or dried-on food.



Did you know that a dripping faucet wastes water? Don't watch your money go down the drain, have dripping faucets repaired as soon as possible. Also, by installing "flow restrictors" on you sink and shower faucets, you will use less water. Less water usage equals money saved.



Energy Saving Tips

Fill-in the blanks with the correct answer.

1. Wash your clothes in _____ water using cold water detergents. hot
2. Don't _____ your clothes. one
dry
3. _____ blinds on hot summer days, and open them on cold winter days to let the sun and the warmth in. escape
fly
over-dry
4. Turn the computer off completely if you're not using it for _____ hour or more. three
power
5. Leaving your refrigerator door open will allow all the cold air to _____. open
energy
get colder
cold
6. Plug home electronics (TVs, DVD players) into _____ strips. water
7. Dripping faucets waste _____. Close



**THE TYPICAL U.S. FAMILY
SPENDS MORE THAN
\$1,600 A YEAR ON HOME
ENERGY BILLS. UNFORTUNATELY,
A LARGE PORTION OF THAT
ENERGY IS WASTED.**



**There is a lot you can do to save energy and money at home.
Start making small changes today!**

1. During hot months, keep window covering closed on the south, east and west windows. In winter let the sun in.
2. In summer, use fans whenever possible instead of Air Conditioning (AC). Fans cost less to use than Air Conditioning.
3. Use a covered kettle or pan to boil water; it's faster and uses less energy.
4. Use small electric pans or toaster ovens for small meals rather than your large stove or oven. A toaster oven uses up to half as much energy as a full-sized oven.
5. Use pressure cookers and microwave ovens whenever it is convenient to do so. They will save energy by greatly reducing cooking time.
6. Plug home electronics (TV's, DVD players) into power strips; turn the power off when the equipment is not in use.
7. Lower the thermostat on your hot water heater to 120°F.
8. Take short showers instead of baths.

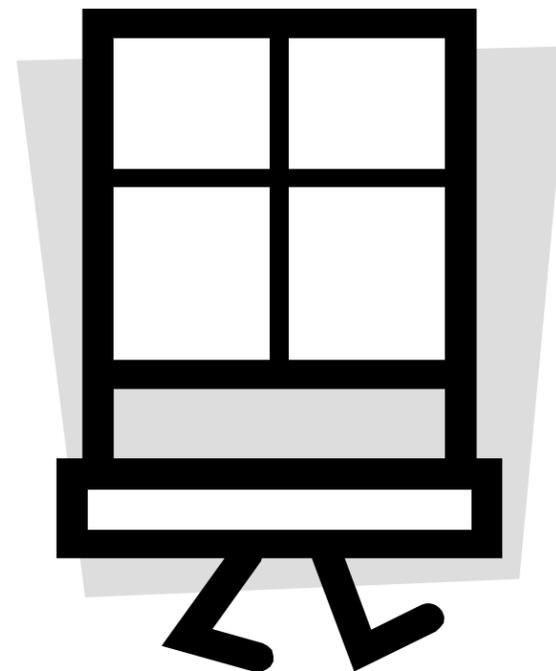
**ALWAYS LOOK FOR THE ENERGY STAR® LABEL ON
HOME APPLIANCES AND PRODUCTS.**

DID YOU KNOW?

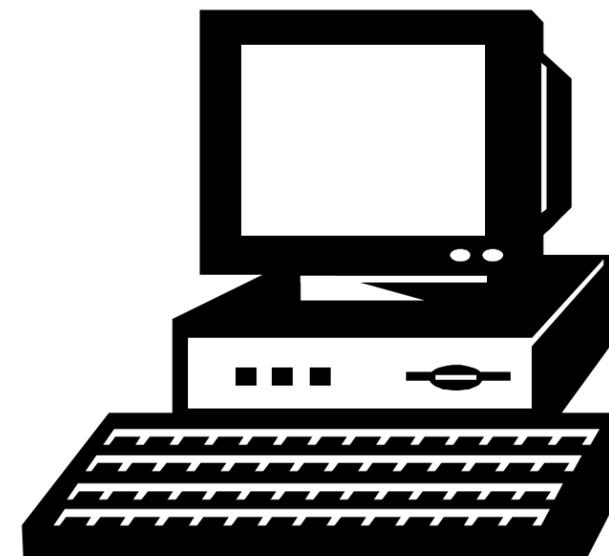
The average home has 2 televisions, a VCR, a DVD player and 3 telephones. If these items were replaced with ENERGY STAR® qualified models, it would save more than 25 billion pounds of greenhouse gas emissions, the equivalent of taking 3 million cars off the road for a year.

If every U.S. household replaced just one incandescent bulb with an ENERGY STAR qualified fluorescent bulb, it would save enough energy to light 7 million homes and save \$600 million in utility bills.

Energy Saving Tips



To keep warm air in, and cold air out, use storm windows on the outside of your home in the winter time. Seal leaks with weather-stripping between moving parts, and fill gaps between non-moving parts with caulk. You can also close blinds on hot summer days and open them on cold winter days to let the sun and the warmth in.



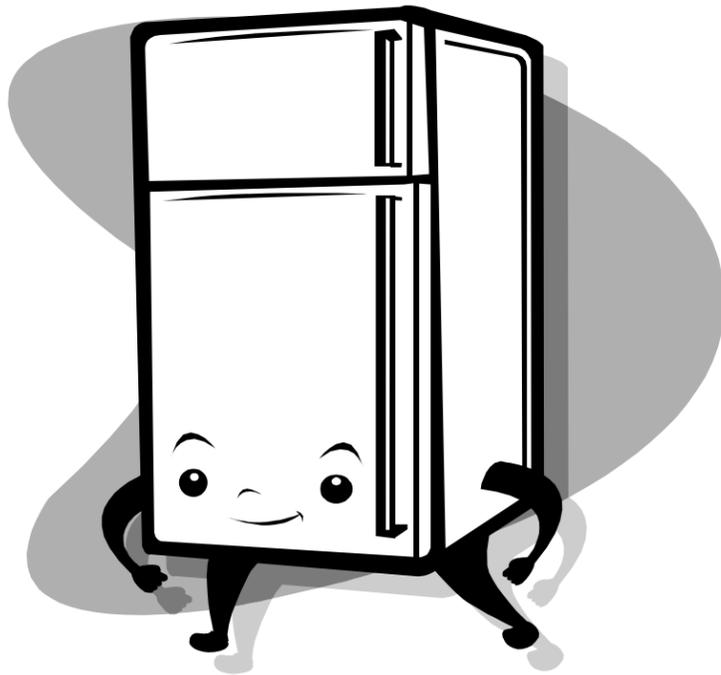
Hey guys, turn the computer off completely if you're not using it for an hour or more, and turn off the monitor if you're not using it for 10 minutes or more. You will save energy!

Energy Saving Tips



Do you ever adjust the thermostat without mom or dad knowing it? Well, if you keep your temperature set at around 73° or less in the winter, and 74° or higher in the summer, you can save energy. If you don't have one already, talk to your parents about getting a programmable thermostat that will automatically adjust to the temperature you set.

I know you're looking for something in there, but if you hold my door open too long, all the cold air will escape. If all my cold air escapes, I have to work harder to get cold again. When I work harder, I use more energy. So please, don't leave my door standing open.



Energy Saving Tips

You should always turn lights off when you leave a room. Your parents will be pleased that you did it!
Three-way lamps make it easier to keep lighting levels low when brighter light is not necessary.



Regular Light Bulb



CFL Bulb

Are all light bulbs the same? As you can see above, there are the regular old-fashioned light bulbs (incandescent), and the new compact fluorescent light bulbs (CFL). With the old bulbs, about 90% of the energy that goes into the light bulb is wasted as heat. If you've ever touched one, you know how hot they can get. Try the new, cool ones called CFLs. They last longer and save energy.