

LIGHTS FOR LEARNING™ Watts Going Down

February 15, 2011

Lights for Learning in Chicago: A First Hand Look into a Kick-off Presentation:

Education Presenter, John Koslowski, thoroughly explains the Lights for Learning kick-off presentation given at Inter-American School students on January 28, 2011: "I gave 1 LFL presentation to 62 fifth grade students. I explained how electricity is made in a power plant by heating water in a huge boiler, turning it to steam. The water is heated by burning some type of fuel (oil, natural gas, coal or a nuclear reaction). This steam is directed under pressure to make a turbine wheel spin within a generator. The spinning turbine rotates a big magnet around a length of wire, creating a magnetic field that electrifies the wire. The electric current flows through the wire and is pushed out by high-voltage transformers.

I informed them that the non-renewable fossil fuel that is used to make most electricity in Illinois is coal. They knew what the term non-renewable meant, but didn't realize that coal was used to generate most of the electricity where they lived. I listed the pollutants that result from burning coal.

The students and I discussed the many ways we waste energy on a daily basis, pointing out vampire loads and how to avoid wasting energy. We looked at how much energy is used in our homes and where it is used most. Then I pointed out the many easy ways to save energy in each of the categories. I challenged the students to try to save energy in a couple of ways and spread the word to friends, family and neighbors. I also pointed out how wasteful it is to use bottled water.

I let 14 students ride the Energy Bike and help demonstrate how much more electricity is needed to light incandescent bulbs in comparison to CFL's."



To schedule your **free** kickoff presentation, visit Lights4Learning.org for a sign up sheet!

Easy Steps to Cut Your Energy Bill in Half

1. Plug Air Leaks (12%)

If replacing windows is not an option, sealing air leaks around windows and doors with caulk or weather-stripping is a great alternative. Also consider putting up insulating curtains to save heat in the winter.

2. Programmable Thermostat (10%)

Half of the US homes already have a programmable thermostat. This is the easiest energy saving tip of them all! You never have to remember to turn the heat down when you're not home, or sleeping, again!

3. Upgrade Appliances (12+%)

20% of your household's energy cost is used by appliances. Update to new ENERGY STAR® appliances and you can reduce your energy bills while protecting the environment.

4. Take Care of Your Fridge (4%)

If your refrigerator was made before 1993, it is taking up a whole lot of energy. If you're not in the market for a new one, at least clean the coils every 6 months to keep it running as efficiently as possible. Fill unused space with water jugs to retain cool air. If a second refrigerator is unnecessary, recycle it.

5. Wrap Your Water Heater (3%)

Insulating your water heater will reduce heat loss by 25-45%.

6. Install a Ceiling Fan (19%)

By installing an ENERGY STAR ceiling fan in the summer, it can reduce the usage of your AC by keeping a nice breeze flowing. In the winter, switch them to turn clockwise to return the rising warm air back down into the room.

7. Turn Off the Lights (2%)

Be cautious of turning off the lights when you leave a room. If you have a forgetful family member, stick a post-it note next to the switch!

8. Wash in Cold Water (9%)

Your clothes will get just as clean in cold water and it will cut your washers energy use in half.

9. Unplug Electronics (5%)

Electronics use energy even when not in use. Use a Smart Strip and turn them all off in one step.

10. Air Dry Dishes (3%)

Skip the drying cycle and let the dishes air dry. This will save energy and money.

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This year, the "Wild About Poetry" Contest will test the creativity of students by challenging them to write just a **seven** word poem about conservation.

The Say it in 7 challenge, initiated by Chris Howes, and the seven-word-verse, created by poets K.R. Copeland and Casey Schulke, were conjoined in support of the Brookfield Zoo's mission to engage people in literacy and nature through poetry. The parameters require poetry of seven words—no more, no less—and must be about nature and the environment. The seven-word-verse and Say it in 7 are unique to the Chicago area. Winning verses will be on display at Great Bear Wilderness in the Brookfield Zoo.

Lights for Learning has been receiving entries on a daily bases. Make sure you get yours in before February 25th!

Contest Specifications:
Demonstrate your knowledge and spirit of environmental conservation through poetry in just **7 words!** Celebrate the natural world with your creativity and imagination while making others aware of the impact humans have on their surroundings.

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1ST PRIZE
NOOKcolor eBook Reader & BROOKFIELD ZOO 1 Year Family Plus Pass including Penguin Adventure
2ND PRIZE
NOOK eBook Reader & BROOKFIELD ZOO 1 Year Family Plus Pass

WOL by K.R. Copeland
Nature stirs and grows with howling woodlands.

EARTH by J. Perrin
Green trees, clear blue skies, peaceful planet.

BALD EAGLE by C. Schulke
Trout scales to talon, fish into sky.

Email submissions to: jackiep@appliedproactive.com

WILD ABOUT POETRY & Say It In 7 are inspired by The Language of Conservation

ASK ABOUT ENERGY STAR

BROOKFIELD ZOO
Chicago Zoological Society

Earth by J. Perrin
Green trees,
clear blue skies,
peaceful planet.

Thank you
to our Program Sponsor!

Bald Eagle by C. Schulke
Trout scales to talon-
Fish into sky.

Lights for Learning is
administered by:

Winter by K. Burek
Short cool days,
cold crisp nights,
snow.

Lights for Learning
c/o APT
1242 Main St
Springfield, MA 01103
www.lights4learning.org
877.693.7827

LEARN MORE AT energystar.gov

Look for Jackie Perrin and Lights for Learning in the January-April 2011 issue of Rockford Public Library's *The Explorer!*

When it comes to saving both money and energy, it isn't as difficult as many people think. Small changes around your home can result in big changes in your energy costs. From changing your light bulbs to implementing power strips, these easy, practical applications can result in measurable dollar savings.

Did you know that Compact Fluorescent Light bulbs (CFLs) last up to 10 times longer than traditional incandescent light bulbs? Changing one incandescent 60 Watt bulb to a more energy efficient 23-Watt CFL can result in annual savings of approximately \$7.24 (based on average of 4 hrs. per day at kWh rate of \$0.11) and savings of more than \$70.00 over the lifetime of the CFL.

Tying power strips to reduce energy costs related to running home electronics. A Department of Energy study showed that 15% of the energy used in an average house is from electronics in standby or sleep mode. Better yet, unplugging your toaster, heater, oven, phone charger and coffee maker when not in use can result in substantial energy and monetary savings over the course of a year.

When it comes to nightlights, replace old, outdated incandescent nightlights with LED nightlights. Many LED nightlights have automatic sensors coming on at dusk and shutting off at dawn. A 2007 ENERGY STAR LED nightlight can help reduce energy costs (average costs are only 30 cents per year) while illuminating dark hallways and children's rooms.

Take advantage of the warming power of natural sunlight throughout the winter. Not only does the sun provide natural light and vitamin D (essential for our well-being) but can also assist in heating the home during the day. Be sure to draw the drapes just as the sun begins to set, trapping in the natural heat and blackening the cold winter night winds. During the summer, keep the drapes or curtains drawn during the day and open them in the evening to allow the cooler night breeze to reduce indoor temperatures naturally.

When it comes to irrigation, use what Mother Nature has provided. Consider a rain collection barrel or even a simple bucket under a downspout. Collected water can be used to water flowering plants and vegetables saving both money and several resources. When looking at landscaping options, remember that not only do plants and shrubbery help reduce soil erosion, but they act as an insulator against cold winds around the footprint of the home. A wind break created by bushes and trees can help reduce household drafts as well. Be sure to replace weather stripping around windows and doors as needed to ensure a tight, draft-free seal, too.

Be sure that your furnace and water heater are in good working order. Regularly clean your furnace filter as directed by the manufacturer (typically once a year) and double check that your water heater is adjusted to the proper setting. The American Council for an Energy Efficient Economy (ACEEE) recommends that household water heaters be set at 120° for optimum efficiency. Following these simple steps and making small changes can lead to even long energy savings and cost reductions. Remember...start small, think big. Change can be easy!

RPL handles CFLs
Compact fluorescent light bulbs (CFLs) contain a very small amount of mercury mixed within the glass tubing - an average of 5 milligrams (roughly equivalent to the tip of a ballpoint pen), so you should not throw them away in your household garbage. Bring your used CFLs to any RPL location and we will properly dispose of them for you! RPL can also properly dispose of your used AAA, AA, C, D, and 9-volt batteries.

Jackie Perrin is the Principal Educator for Lights for Learning, an educational outreach and fundraising program designed to develop children awareness of energy efficiency and its vast resources. For more information, visit www.lights4learning.org or e-mail jackiep@appliedproactive.com.