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Volume 2, Issue 4



Recycling Tidbits

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Stump the Grump

Mercury Mouth Math

1. The standard fever thermometer contains ____ grams of mercury.
2. This is enough mercury to pollute a ____ acre lake.
3. The average American mouth has ____ grams of mercury in the form of mercury amalgam fillings.

Answers on page 3.



Light Bulbs

The purpose of the 2007 Energy Independence and Security Act was to cease production of many types of traditional incandescent bulbs and usher in other bulb options. These options are at least 25% more energy efficient and use at least 30% less electricity than traditional bulbs. Today, in the Act's final stage, many individuals who clung to incandescent bulbs are being forced to look at new options, such as compact fluorescent lights (CFLs) and light emitting-diodes (LEDs).

CFLs

CFLs use up to 75% less energy than incandescent bulbs and can last up to 6 times longer. The average yearly energy cost of a CFL is \$1.57, an incandescent will cost \$7.32.

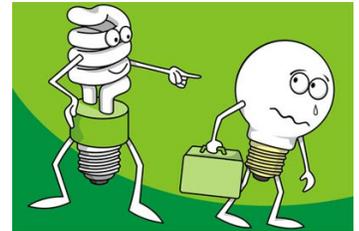
"CFLs require a bit more energy when they are first turned on, but once the electricity starts moving, are far more efficient than their incandescent counterparts. A CFL's ballast helps "kick start" the bulb and regulates the current once the electricity starts flowing. This process typically takes 30 seconds to three minutes to complete,

which is why CFLs take longer than other lights to become fully lit." (Earth911)

CFLs need around 4 milligrams of mercury to work. Keep in mind this is less than 1% of the amount of mercury found in thermometers of years past. If a bulb were to break in your home, remove animals and children, open a window or door, turn off forced heating or air. Let the room air out for 5 - 10 minutes. Thoroughly scoop up glass fragments and powder using stiff paper or cardboard. Use sticky tape, such as duct tape, to pick up any remaining small glass fragments and powder. Do not use a vacuum as this will only spread vapors or powder. Place the broken components into a container and store in the garage or safe place until it can be recycled. If you're worried about the mercury consider buying a shatter-resistant bulb.

LEDs

LEDs use up to 80% less energy than incandescent bulbs and can last up to 25% longer. They are estimated to cost \$1.50 per year to light. These energy-saving bulbs emit light in a specific



direction, whereas an incandescent or fluorescent bulb emits light and heat in all directions. So, for direct lighting applications LED lighting uses both light and energy more efficiently.

Keep in mind that dimmable LEDs may not be compatible with all dimmer controls designed for incandescent lamps. It may be necessary to replace existing dimmer switches with ones that are compatible with the LED bulb of your choice.

Christmas and holiday lights are slowly switching over to LEDs as well. The electricity bill for lighting a tree for 12 hours a day for 40 days using incandescent lights is \$25.13. By switching to LEDs you'll spend a meek \$0.56.

Because LEDs are pricey, to get a speedy pay back use LEDs in locations that the lights are left on the longest like the kitchen or living room.

Continued on page 2.

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To unsubscribe from this newsletter please e-mail ahaffele@co.dunn.wi.us.

Light Bulbs Continued

Purchasing Guide

Keep in mind not all bulbs are made equal. When purchasing a bulb try buying one that has the Energy Star certification. These bulbs go through 10 tests before they can earn this certification therefore making them reliable.

New bulbs are being measured in lumens instead of watts. A 40 - watt bulb equals 450 lumens, 60W - 800 lumens, 75W - 1100 lumens and a 100W -1600 lumens. Too hard to remember? The labels on the packing will break it down for you. These new labels resemble the labels on food products. Instead of calories and fat content, light labels include brightness, estimated yearly energy costs, life,



light appearance (warmth), energy used and additional information like whether or not a bulb contains mercury.

Disposal Options

When these lights finally reach the end of their life span they should be recycled. Dunn County Solid Waste accepts CFLs for free at all Area Collection Stations and the Transfer and Recycling Center. Fluorescent tubes are accepted as well for a nominal fee. Every component of the CFL and fluorescent tube gets recycled and reused, including the mercury. LEDs can be recycled with e-waste at our sites as many of the components of these bulbs are electronic in nature. These, too, are free to recycle.



This is also a great tool to find recycling places for other materials in your area as well.

Non Dunn County Residents

If you don't live in Dunn County then search Earth911's database, search.earth911.com, to find a recycling center near you.

In the green search engine type in CFLs and your zip code. Click search and poof... recycling options appear below.

Got something to recycle? Search for a recycling solution below:

Search for: Near:

Quick Search:

- automotive
- batteries
- construction
- electronics
- garden
- glass
- hazardous
- household
- metal
- paint
- paper
- plastic

IT'S ONLY A WASTE IF YOU THROW IT AWAY

Quest RESOURCE MANAGEMENT GROUP

Recycling centers for "CFLs" near "53050" Within 25 miles

Related Articles

- Earth911.com articles about CFLs
- New Pouch Prevents CFL Mercury Shipping Spills

Compact florescent light bulbs use 75 percent less energy than traditional incandescent bulbs and last about ...

Published in Hazardous
Published in Household
- GE's Hybrid CFL Saves Energy, Turns on Instantly

Hybrid cars aren't the only eco-friendly

Dodge County Clean Sweep Household Hazardous Waste Program

Municipal Program
(920) 386-3790
Theresa, WI 53091

Materials accepted: CFLs Acids Adhesives Aerosol Cans - Empty
Aerosol Cans - Full Antifreeze Brake Fluid +41 more

For residents of Dodge County only.

Luedtke True Value Lumber

8.2 mi. Location
(920) 269-1212

Lighting Options

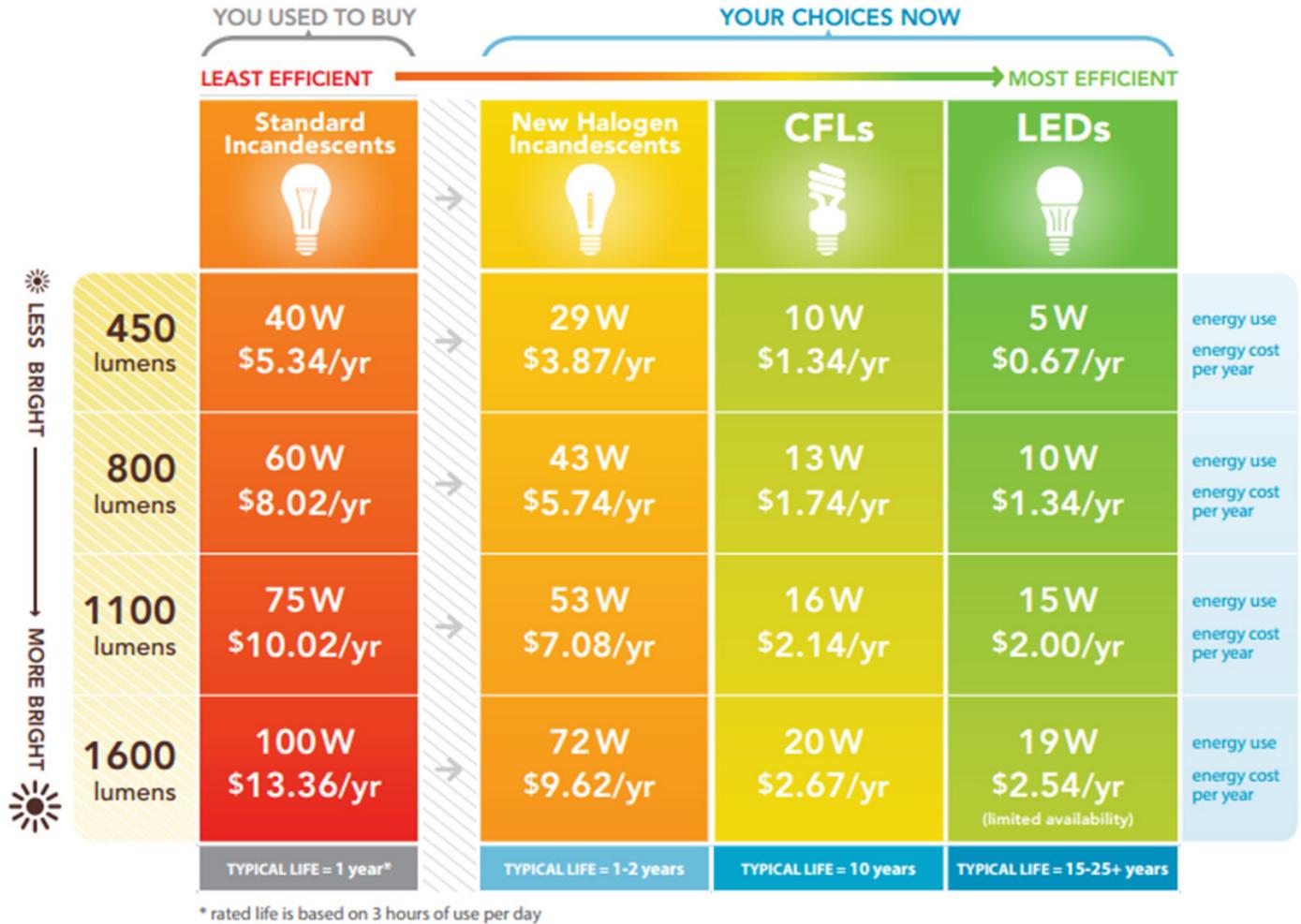
The National Resource Defense Council has a great guide to help you choose which bulb(s) will work best for you and your home.

The chart below compares the new bulbs to the old incandescents.

Focus on Energy has a great website to help you decide what warmth

lighting is best for you; warm, neutral, cool or dimmer. Check it out:

www.drmediaserver.com/CFLGuide/index.html



Mercury Mouth Math

1. The standard fever thermometer contains .7 grams of mercury.
2. This is enough mercury to pollute a 20-acre lake.
3. The average American mouth has 5.5 grams of mercury in the form of mercury amalgam fillings.

This means that the average American has enough mercury in his/her mouth to pollute 157 acres of water. Lake Winnebago is 212 acres, therefore the average mouth would contaminate approximately 3/4 of this lake!

Recent air emission tests in Madison, WI documented that in Dane County, crematories release more mercury into the air than any other source except a coal fired energy plant.

