

WIEC NEWS

P.O. Box 338 ■ Carthage, Illinois 62321 ■ www.wiec.net ■ 800/576-3125

A Touchstone Energy® Cooperative 

Each year at the Hancock County 4-H Fair, WIEC sponsors the “Best Electricity Project.” This year’s award went to Jake Garnett of the Burnside Rising Suns. Jake, the son of Rick and Karen Garnett, Carthage, participated in the WIEC electricity school last June. Here is the paper he wrote concerning his project. *Congratulations, Jake!*

Electricity II Project Burglar Alarm

By Jake Garnett

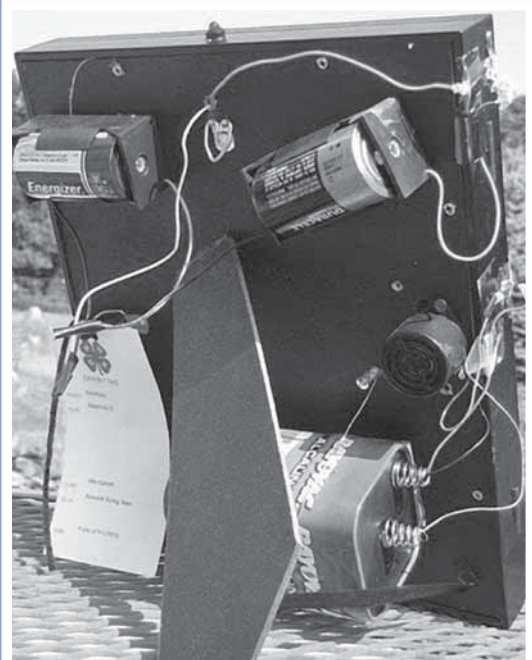
I made a burglar alarm because it was interesting and I hoped to attach it to my door to sound an alarm when my sister entered.

The first thing was to think of a design. I looked on the Internet to find an alarm I liked. After finding a design, I first built it with a cardboard box and put a strip of tin foil on it from the front to back on the side that hinged. Then I put battery packs on the back and taped an alarm to the side. I made it so when you opened it, it touched the tinfoil to close the circuit and went to the battery pack and then to the alarm.

Once I knew the alarm worked, I improved it by using a hinged picture frame instead of a cardboard box and by adding a red light on top for extra effect. The light uses the same mechanics as the alarm. I also attached the battery holders with screws and nails.

I encountered a couple problems. One is that when I nailed and screwed the battery packs to the back of the frame, the nails and screws came through the frame and you could see them. I fixed that by adding a piece of foam core inside the frame. Then I thought it would be fun to add a picture of the Mona Lisa – providing something people would want to “steal” from the frame. Problem two was that the battery holders kept falling off at first, so that’s what led to nailing and screwing on the battery holders. (I tried holding them with tape at first.)

I liked doing this electricity project because I was able to make an alarm sound and a light come on simply by wiring the parts together. It was really cool.





Western Illinois
ELECTRICAL COOP.
A Touchstone Energy Cooperative

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OFFICE HOURS
8:00 a.m. - 5:00 p.m.
Monday - Friday
DURING OFFICE HOURS,
OR AFTER HOURS
TO REPORT OUTAGE

217-357-3125
800-576-3125

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MAP LOCATION CONTEST

Every month we are printing four member's map location numbers in the newsletter. If you find your map location number call the WIEC office by the 25th of the following month, tell us where it is and we will give you a \$10.00 bill credit. Keep on reading the WIEC News.

New light bulb labeling

With new and more efficient lighting products available for the home or business, consumers can no longer select a light bulb just by its wattage. Understanding the term “lumens” is now the challenge, to help consumers select a lamp replacement that will provide the same (6728-41) illumination level with much lower energy use.

To help in the process, the Federal Trade Commission has ordered manufacturers to include specific data on the lamp's packaging (see sample).

Based on similar labels found on refrigerators and other appliances, this standard listing allows an apples-to-apples comparison between two products. So if a consumer wants to try out a new LED lamp to replace a 60-watt incandescent, they will be able to com-

pare labels and see if the LED delivers close to 820 lumens to match that of the incandescent.

The required labeling must appear on products no later than **January 1, 2012**.

Lighting Facts Per Bulb	
Brightness	820 lumens
Estimated Yearly Energy Cost \$7.23	
Based on 3 hrs/day, 11¢/kWh Cost depends on rates and use	
Life	
Based on 3 hrs/day	1.4 years
Light Appearance	
Energy Used	60 watts

Source: Current Marketing, Volume 26, No. 4



The WIEC office will be closed **Monday, September 5th** in observance of **Labor Day**. We will reopen (5816-39) Tuesday, September 6th. As always, in case of power emergencies, call 217-357-3125 or 1-800-576-3125.

Please wait and call for questions concerning billing, payment arrangements, capital credits or other non-emergency matters until normal business hours.



Energy Efficiency Tip of the Month

Is your washing machine more than 10 years old? According to the U.S. Department of Energy, families can cut related energy costs by more than a third — and water costs by more than half — by purchasing a clothes washer with an ENERGY STAR label. Choose a front-load or redesigned top-load model.

Source: U.S. Department of Energy

Shopping for lights? Look for lumens, not watts

When you're shopping for light bulbs, compare lumens to be sure you're getting the amount of light, or level of brightness, you want. A new Lighting Facts Label will make it easy to compare bulb brightness, color, life, and estimated annual operating cost.

Buy Lumens, Not Watts

We typically buy things based on how much of it we get, right? When buying milk, we buy it by volume (gallons).

So why should lighting be any different? But for decades, we have been buying light bulbs based on how much energy they consume (watts), not how much light they give us (lumens). With the arrival of new, more efficient light bulbs, it's time for that to change.

What's a Lumen?

Lumens measure how much light you are getting from a bulb. More lumens means a brighter light; fewer lumens a dimmer light.

Lumens are to light what pounds are to bananas or gallons are to milk — they let you buy the amount of light you want. So when buying new bulbs, think lumens, not watts.

The brightness, or lumen levels, of lights in your home may vary widely, so here's a **rule of thumb**:

- To replace a 100-W traditional incandescent bulb, look for a bulb that gives you about 1,600 lumens. If you want something dimmer, go for less lumens; if you pre-

fer brighter light, look for more lumens. **(662-39)**

- Replace a 75-W bulb with an energy-saving bulb that gives you about 1,100 lumens
- Replace a 60-W bulb with an energy-saving bulb that gives you about 800 lumens
- Replace a 40-W bulb with an energy-saving bulb that gives you about 450 lumens.

To learn more about lighting options and other ways to save energy at home, visit [www.energysavers.gov or TogetherWeSave.com].

Source: *Energy Savers*, U.S. Department of Energy

When the light goes out

How to dispose of CFLs

Compact Fluorescent Light Bulbs contain mercury, a hazardous chemical, so it's important that they are disposed of properly. Follow these steps.

Step One

Recycle. Check if there is a local organization or government agency that takes CFL light bulbs. Contact your local waste management agency to see if they will accept the broken or burned out bulbs. Home Depot also accepts intact or burnt light CFLs for recycling. Just place any unbroken CFL in a plastic bag and deposit them in the bright orange collection containers in your local Home Depot store

Waste Management has a website (<http://www.thinkgreenfrom-home.com>) to order kits to mail the unwanted bulbs to their recycling facility where the recyclable materials and the mercury are separated for reuse.

Step Two

Bag it. If there is no place to recycle your CFL light bulb, seal in a plastic bag and put it in the trash. Do not try to burn a CFL bulb, or anything that contains mercury.

Step Three

Pay to get rid of it. Some companies will dispose of CFL light bulbs for a fee, usually somewhere between a quarter and 75 **(5515-2)** cents per bulb.

Heintz Electric in Quincy and Keokuk will take used CFLs and dispose of them for a small fee. Look in the Yellow Pages to find another disposal company.

Step Four

If a CFL light bulb breaks, sweep, don't vacuum. Experts say there isn't much danger from the mercury, so

just be careful not to cut yourself. Use rubber gloves to collect the shards on stiff paper or cardboard, and put the shards in a sealed plastic bag. You can use sticky tape or damp towels to collect the smaller fragments, then put the towel or tape into the sealed bag. Let the room air out for 15 minutes to remove any lingering mercury vapors. If there isn't a nearby window, use a fan to blow air out of the room.



Source: http://www.ehow.com/how_2049265_dispose-cfl-bulb.html



What Are My Lighting Options?

Starting in 2012, lightbulbs must be more energy efficient.

The three most common bulb options consumers will find on store shelves are:



Halogen incandescents

Energy Savings:* 25 percent

Lifespan:* Three times longer

Annual Energy Cost: \$3.50



Compact Fluorescent Lamps (CFLs)

Energy Savings:* 75 percent

Lifespan:* 10 times longer

Annual Energy Cost: \$1.20



Light-emitting diodes (LEDs)

Energy Savings:* 75-80 percent

Lifespan:* 25 times longer

Annual Energy Cost: \$1

* As compared to traditional incandescent bulbs

Learn more at
energysavers.gov/lighting

Keeping your household pets safe from the dangers of electricity

Puppies and kittens are cute and curious. The cute part can sometimes keep them from getting into trouble, like when they start chewing on a shoe. But cute won't help them if they begin to chew on or play with electrical equipment – doing that can put your pet in serious danger of injury or death and create a shock or fire hazard in the home. Spending a little time pet proofing your home will help you avoid a pet-related accident.



- Make sure all plugs are inserted completely into their wall sockets. Small paws, noses and tongues can easily find their way into the partially exposed prongs.
 - If your pet demonstrates an interest in electrical cords, check the cords frequently for signs of fraying and replace any damaged cords immediately. If you must leave your pet unsupervised, make sure any loose electrical cords are unplugged or tucked out of sight. If your pet continues to seek them out, coat the cords with bitter-tasting pet deterrent available at your local pet store. If that fails, you can wrap the cords in flexible cable, or encase them in PVC. Some stores also offer pet-proof cords that serve the same purpose.
 - Appliances near sinks and bathtubs should only be plugged into outlets equipped with ground fault interrupter (GFCI) protection in case an electrical appliance is knocked into the water. If your cat enjoys playing in the sink, make sure no electrical appliances (like radios or curling irons) are left unattended on the bathroom counter.
 - Lamps with exposed bulbs – especially halogens – can reach very high temperatures. Do not allow pets to play near lamps. If the lamp is knocked over, a fire could break out.
 - Some pets, especially cats, will often seek out warm, secluded spots in the home. Do not allow your pet to hide or sleep behind your computer, or TV equipment where numerous electrical connections are housed.
 - If you have an aquarium, make sure you create a drip loop on every electrical cord that enters the tank. This will prevent water from running down the cord and into the electrical outlet. To be sure the cord stays looped, stick a cord clip on the wall just below the outlet and thread the cord into the clip.
 - If you have a fenced, outdoor area for your dog, be mindful of any underground electrical or cable lines running through that area. Make sure the lines are buried at appropriate depths, especially if your dog likes to dig. In the event of an electrical storm, bring all pets indoors immediately.
 - Take special care during the holiday season. Pets may be tempted to chew on, or play with decorative light strands.
- If you think your pet may have suffered an electrical shock, approach it with caution to keep from being injured by the same electrical danger, and to keep from being bitten. Inspect the animal for injuries and get your pet to an animal care center as soon as possible.
- Heed the precautions to keep your playful pet and your home safe!

Source: *SafeElectricity.com*