

# Wise Up and Power Down

## Light Up Your Life — For Less

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### What's the deal about light bulbs?

The traditional light bulb (the one that Thomas Edison invented) converts only 10 percent of the energy it uses to produce light. That means 90 percent of the energy cost is used to produce heat, making it extremely inefficient.

To address this issue, the Energy Independence and Security Act of 2007 was enacted in 2012. One requirement of this law is that all light bulbs must be labeled to better inform consumers. The new label allows you to make the best selection to get the perfect light for the lowest cost.

**Brightness** — The amount of light given off by the bulb, measured in **lumens**.

**Estimated Cost Savings** — An estimate of the energy cost savings as compared to a traditional incandescent bulb (does not include additional savings due to the bulb lasting longer).

**Light Appearance** — Light ranges in color from a cool bluish tone to a warm reddish tone (most people prefer cool lighting in work areas and warm lighting in living areas).

**Energy Used** — Wattage is the measure of how much energy is used by the light bulb.

Lighting Facts		Per Bulb
<b>Brightness</b>		870 lumens
<b>Estimated Yearly Energy Cost</b>	<b>\$1.57</b>	
<small>Based on 3 hrs/day, 11¢/kWh Cost depends on rates and use</small>		
<b>Life</b>		5.5 years
<small>Based on 3 hrs/day</small>		
<b>Light Appearance</b>		
<b>Energy Used</b>		13 watts

### Light Bulb Choices\*

#### Energy Efficient Incandescent

- 25 percent more energy savings.
- Lasts three times longer.
- Wide variety and dimmable.
- Cost: \$

#### CFL (Compact Fluorescent Lamp)

- 75 percent more energy savings.
- Lasts 10 times longer.
- Dimmable bulbs available.
- Cost: \$\$

#### LED (Light Emitting Diodes)

- 75-80 percent more energy savings.
- Lasts 25 times longer.
- Cost: \$\$\$

\*As compared to traditional incandescent bulbs.



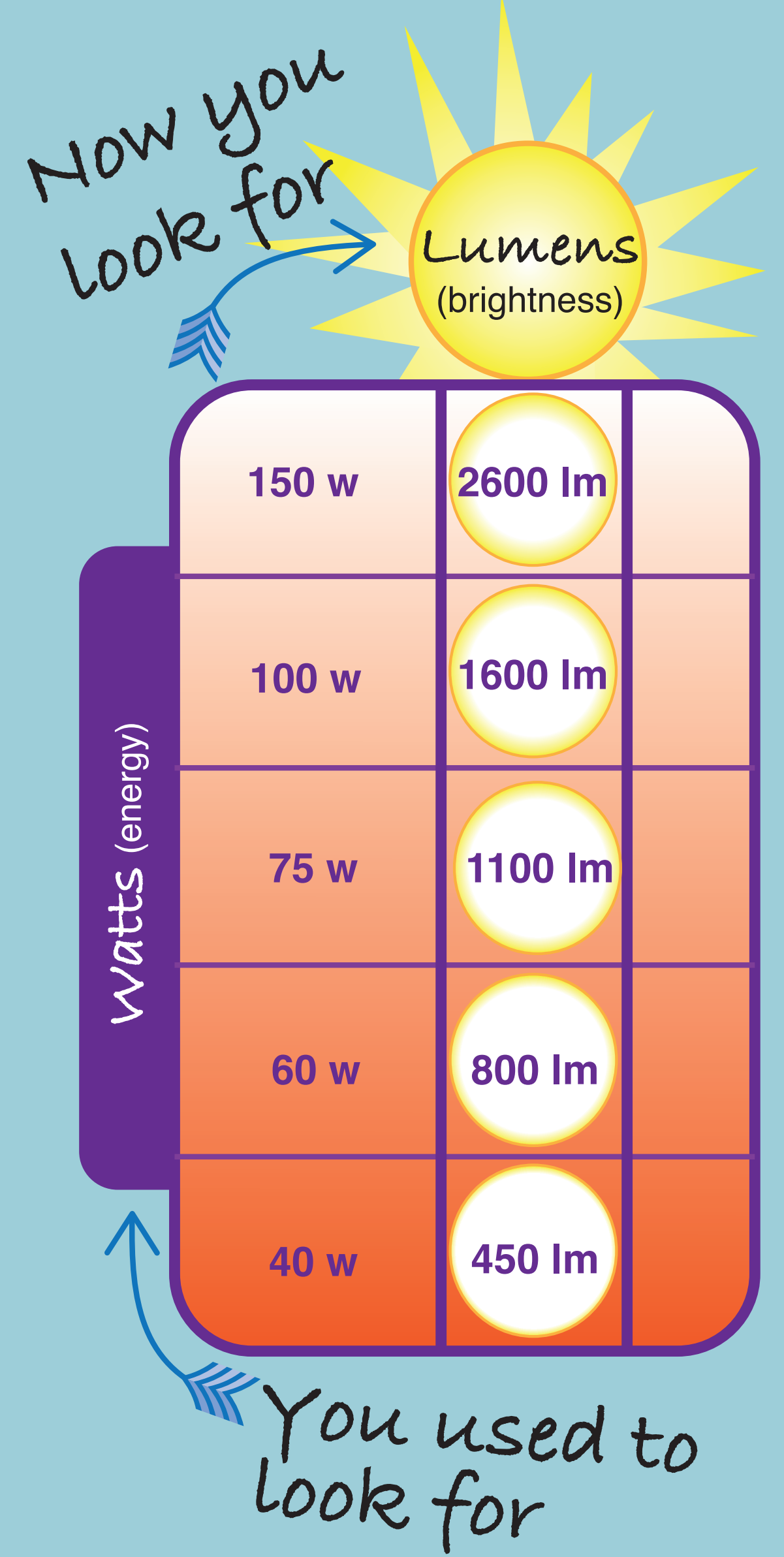
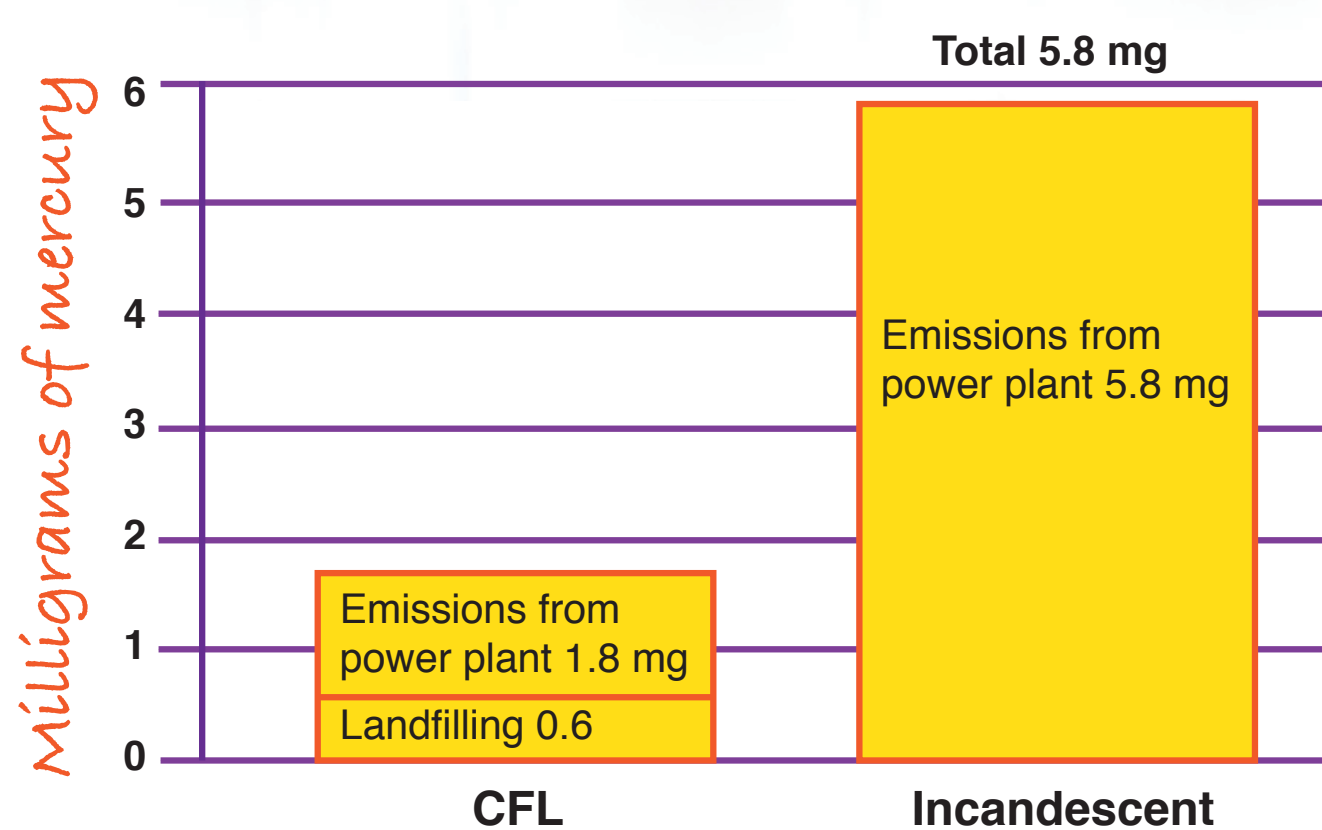
### Quick Facts

- The Energy Independence and Security Act of 2007 includes lighting standards implemented from 2012 to 2014.
- Incandescent bulbs are available; they are just more energy efficient.
- Check to make sure bulbs can be used with a dimmable switch.
- Upgrading 15 inefficient incandescent bulbs in a house can save about \$50 per year.
- Longer lasting bulbs mean additional savings.

### Mercury Concerns

While CFL bulbs do contain a small amount of mercury, with proper disposal, the mercury will not enter the environment. The amount of mercury in a CFL bulb is less than burning a traditional incandescent bulb that uses electricity generated from a coal-powered plant.

Mercury Emissions by Light Source  
evaluated over 8,000 hours of use



Choose bulbs with the Energy Star label.

### Buy Lumens, Not Watts

Lumen is the measure of light given off by a light bulb. A higher number of lumens indicates a brighter light. So, it makes sense to choose a bulb based on the amount of light needed rather than the amount of electricity it uses. The chart above compares the number of lumens to the traditional bulb's wattage used for the old incandescent bulbs.

### Proper Disposal of CFL Bulbs

- The U.S. Environmental Protection Agency recommends recycling of CFLs and all fluorescent bulbs.
  - By recycling, the mercury is contained and does not enter the environment.
  - The glass, metals and other materials can be reused.
- Follow proper procedures for cleaning up a broken CFL bulb at [www.epa.gov/cfl/cflcleanup.html](http://www.epa.gov/cfl/cflcleanup.html).



### The ABCs of Efficient Lighting for the Home

- Appearance
- Brightness
- Cost



### Where to Recycle

- Waste collection sites.
- Local retailers.
- Mail-back services.

To find recycling locations in your area, go to <http://Earth911.com>.