

Improving Efficiency – A Cost Analysis

Name: _____ Date: _____

Purpose:

In this activity you will investigate the cost/energy savings of replacing all of the incandescent light bulbs in a home, with more efficient options.

What is needed?

Data from the infographic below, and an electronic device to research costs. **You will assume that each bulb is used for 4 hours each day, and that electricity costs \$0.11 per kWh.**

The following infographic illustrates the power (in Watts), and lifespan of 5 different light bulbs that all produce the same amount of light (approx. 800 Lumens).

60w Lumen Comparison

A side-by-side comparison of a 60-watt incandescent bulb and its replacements shows that you can save energy and money with nearly the same light output.

	standard incandescent	GE energy-efficient soft white	GE energy-efficient crystal clear	GE energy smart® CFL	GE energy smart® LED
					
Watts >>	60	43	43	13	13
Lumens >>	840	750	750	825	800
Life (years) * >>	0.9	0.9	0.9	9.1	22.8