



Light Bulb Investigation 2

★ Objective

Students will be able to compare the wattage of incandescent, compact fluorescent, and light emitting diode bulbs.

📄 Materials

- 3 Lamps
- 1 Incandescent light bulb
- 1 Compact fluorescent light bulb (CFL)
- 1 Light emitting diode bulb (LED)
- 1 Kill A Watt™ monitor

❓ Question

How does the wattage vary for different types of bulbs?

☀ Hypothesis

✓ Procedure

1. Place the incandescent bulb in one lamp the CFL in another lamp, and the LED bulb in the third lamp. (If you do not have three lamps, conduct three trials, one for each bulb.)
2. Place the lamps on a table.
3. Plug the Kill A Watt™ monitor into an outlet and plug the lamp with the incandescent bulb into the monitor.
4. Turn on the lamp. Record the wattage using the Kill A Watt™ monitor. Turn off the lamp and unplug it from the monitor.
5. Plug the lamp with the compact fluorescent bulb into the monitor. Turn on the lamp and record the wattage. Turn off the lamp.
6. Plug the lamp with the LED bulb into the monitor. Turn the lamp on and record the wattage. Turn off the lamp.
7. Compare the wattage measured by the monitor to the stated wattage of the bulbs found on their packaging, or printed on the bulbs themselves.

📊 Data

BULBS	WATTAGE FROM MONITOR	STATED WATTAGE
Incandescent		
CFL		
LED		

** Conclusion

What did you learn about the wattage used by the three bulbs? Use data to support your answer.