

Name: \_\_\_\_\_

## Energy Efficiency Lab Investigation Sheet

### Light Bulb Activity Data Collection

Light bulb Type	Before	1 sec.	30 sec.	1 min.	1.5 min.	2 min.	30 sec. Off	1 min. Off	1.5 min. Off	Observations	HEAT OUTPUT (Highest temp - Before temp)
Incandescent 60 Watts Life = 1000 hrs. Cost = \$.50											
Appliance Bulb 40 Watts Life = 1000 hrs. Cost = \$1.50											
Compact Florescent Light Bulb (CFL) 13 Watts Life = 10,000 hrs. Cost = \$2.50											
LED bulb 1.5 Watts Life = 25,000 hrs. Cost = \$7.00											
Alternate Bulb ___ Watts Life = __ hours Cost = \$											

**Light Bulb Lab Analysis**

1. List the light bulbs from highest to lowest **heat output**.  
(Heat output = Highest Recorded Temperature – Before Temperature)
2. Which light bulb reached its highest temperature the fastest?
3. Which light bulb reached its highest temperature the slowest?
4. What other **observations** did you notice?
5. What is the **relationship** between the heat output and the wattage used by the light bulbs?  
Use your data to support your conclusion.
6. List at least 2 **advantages** of using more energy efficient light bulbs?
7. List at least 2 **disadvantages** of using more energy efficient light bulbs?