

## Instructions:

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1. **DO NOT TOUCH THE LIGHT BULBS AT ANY TIME! THEY ARE VERY HOT AND CAN BURN YOU.**
2. Read the instructions before beginning the activity.
3. Assign each group member a role: Time-Keeper, Recorder (2), Thermometer Reader, Kill-a-watt Reader.
4. Kill-a-watt Reader: Plug the Kill-a-watt meter into the ten foot extension cord.
5. Thermometer Reader: Measure room temperature (in degrees Fahrenheit (F)) above the unplugged light bulbs. The top of the glass should touch the black line above all of the numbers. **(When measuring, do not touch the glass part of the thermometer or your reading will be wrong).**
6. Recorder: write down the temperature where it says 'Room Temperature' below.
7. Thermometer Reader: Hold thermometer 1 inch above the unplugged CFL.
8. Time-keeper: Be ready to time for two minutes and call out 15 second intervals.
9. Kill-a-watt Reader: Plug in the CFL light bulb cord into the Kill-a-watt meter.
10. Time-keeper: Begin timing *immediately* after the bulb is plugged in.
11. Thermometer Reader: Say the temperature (in degrees Fahrenheit) every 15 seconds for two minutes. Have one Recorder write down the temperature every 15 seconds in their data table.
12. Kill-a-watt Reader: Say the Kill-a-watt meter number (in kWh) every 15 seconds. Have the second Recorder write down the number said every 15 seconds in the data table.
13. Stop recording after 2 minutes. Unplug the CFL from the Kill-a-watt meter.
14. Repeat steps 7-13 for the incandescent light bulb. After 2 minutes stop recording, and unplug the light bulb.
15. Share recorded data so that all group members have complete data charts.