

**Instructions:** Using the scientific method and the discussions held in class, predict the results of an experiment that compares incandescent light bulbs and compact fluorescent light bulbs. Conduct the experiment and record your results.

**Part A**

1. Pick two topics from the list made by the class. Develop a question for each of the topics that will help you determine the efficiency of both bulbs.

a. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. For both of your questions develop a prediction about what the answer will be.

a. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. How will you test your predictions? Describe the experiments that you will use.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. Record the results from your experiments.

Incandescent bulb \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Compact fluorescent bulb \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Part B**

5. Using the light bulb packages write down any additional information that you can about your light bulbs.

Incandescent bulb \_\_\_\_\_

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Compact fluorescent bulb \_\_\_\_\_

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6. Using the information from the light bulb packages, the *Electricity* poster and the background information discuss the following:
- Were the results of your experiment accurate?
  - Was there anything that you did not consider in your predictions that you should have?
  - Which light bulb do you now think is the most effective and why?