Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block: \_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Electricity: Simple Circuits**

Materials: flashlight bulb, D cell battery, wire

CAUTION: If the wire becomes warm, disconnect it. You have short-circuited the system.

Directions: In groups, connect the bulb, battery and wire in as many ways as you can develop. Find the **4** ways to make the bulb light. Sketch each arrangement you develop under the appropriate section, the bulb lights or the bulb does not light.

 The Bulb Lights The Bulb Does Not Light

Questions:

1. How are the sketches that show a lighted bulb similar?
2. How are they different from the arrangements in which the bulb does not light?
3. What requirement must be met for the bulb to light?
4. In which of the following diagrams will the bulb not light?