

Name _____

Electricity Homework

Directions: Read the attached article and answer the questions in a complete sentence. (Hint: Read the questions first then read the story. Underline your answers as you are reading.)

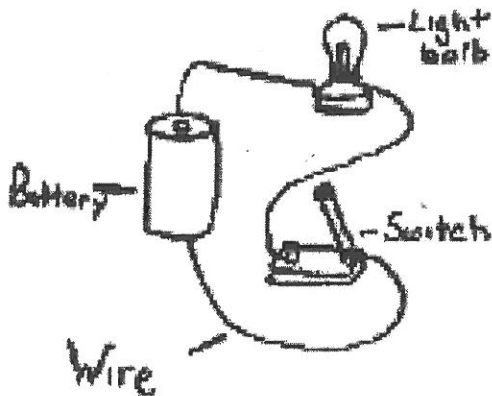
1. What is a conductor? _____

2. What is an insulator? _____

3. What is the battery's job in a series circuit?

4. What is the wire's job in a series circuit?

5. Look at this diagram carefully. **The switch is in the open position.** Will electricity flow through this series circuit? Explain your answer.



Electricity- How does it work?

Electricity is an energy that is sent through wires to our homes and businesses every minute of the day. You use this electricity when you put a plug in a socket. Your refrigerator and lights use electricity.

A conductor is a material that lets electricity flow easily. Metals are good conductors because they help electricity to travel easily.

Insulators are materials that stop the flow of electricity. Did you ever wonder why electrical wires are covered with rubber or plastic? That is because rubber is an insulator and stops you from getting hurt when touching a wire.

You can create your own **series circuit**. All you need is copper wire, a light bulb, a switch, and a battery. A **battery** is the **power source** and has chemical energy inside of it. When wires touch both the positive and negative terminals on the battery, the magic begins. Inside the battery chemicals are mixing with metals to create electricity.

Next the electricity flows through the copper **wire** to a **switch**. A switch that is up will cause an **open circuit**. Electricity does not flow through an **open circuit**. If you close the switch, you close the circuit. A **closed circuit** lets the electricity flow and light the bulb.