

**“Here Comes The Sun”
Pre/Post Assessment**

1. In the space provided, describe what you think electricity is.

2. Circle the answer that best describes how alternating current (AC) differs from direct current (DC)?

- A. AC flows only in one direction.
- B. DC alternates or changes the direction of its current.
- C. AC alternates or changes the direction of its current.
- D. They are different names for the same thing.

3. The following are a list of materials. Circle the ones that are conductors and underline the ones that are insulators. If you think the material is neither a conductor nor an insulator leave it unmarked.

Silver

Copper

Dry air

Gold

Glass

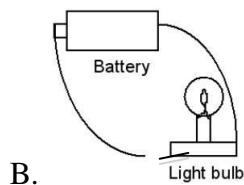
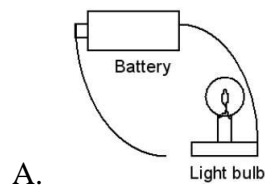
Plastics

Brass

Iron

Rubber

4. Circle the diagram that represents an electrical circuit. Then describe what makes your choice an electrical circuit, while the other diagram is not.



“Here Comes The Sun” Pre/Post Assessment

5. Match the term with the phrase that best describes its meaning by drawing a line from the term to the correct phrase.

Voltage

Measures the rate or quantity of charge flow

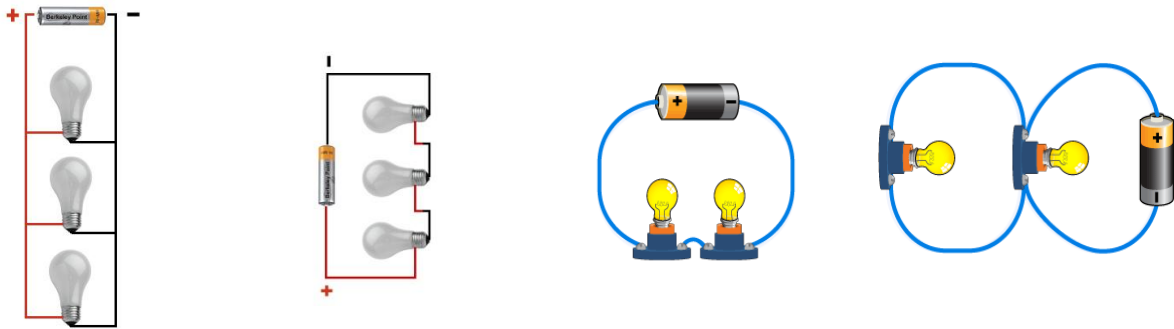
Resistance

The ‘force’ that excites the electrons to flow in a circuit.

Current

The presence of friction or opposition to movement of free electrons.

6. Circle the circuit(s) below that represents a parallel circuit.



7. Which of the two main properties of the sun can be converted into energy on earth?

- A. Heat
- B. Light

8. Circle the phrase that best describes a solar cell.

- A. A device that converts the burning of fossil fuels to electricity.
- B. A device that converts energy of the sun directly into electricity.
- C. A device that produces electricity by using the heat produced by splitting of radioactive atoms.
- D. A device that converts electrical energy into mechanical energy.