

Answer completely in the space provided. You may do any work on the back.

1. What is required in order for there to be an electric current in a conductor?
2. **TRUE or FALSE:** The flowing electric charges in a light bulb come from the voltage source.
3. When you turn on the lights in this room, why do all the lights come on at the same instant?
4. Which would provide more electrical resistance...a long, thin wire or a short, fat wire?
5. How much voltage is required to produce a 2 ampere current through a 10 ohm resistor?
6. How much current flows through a 90 watt fluorescent light that is connected to a 120 volt source.
7. The _____ is the same throughout a series circuit.
8. The total resistance of a series circuit _____ as more resistors are added.
9. What is the total resistance of two 10 ohm resistors in series?
...in parallel?
10. A _____ electric circuit provides multiple pathways for current to flow.
11. The _____ across each branch of a parallel circuit is equal.
12. Draw the circuit diagram of circuit with a two cell battery and two resistors in parallel.

Circle the questions you answered incorrectly. Remove this strip and turn in to your teacher.

C9

Current

1
2
3
4

Problems

5
6

Circuit

7
8
9
10
11

Diagram

12

Name: