

Worksheet

NAME

DATE

CLASS

Complete the question, or put a check ✓ in the ☐ next to the correct answer.

1. What is the voltage value the multimeter gets from the battery?
2. What is the resistance value the multimeter gets from the first resistor?
3. What is the current value the multimeter gets from the first circuit?
4. Insert the values above in the correct places in the Ohm's Law equation $V=IR$.
Do your results demonstrate Ohm's Law?
5. What is the resistance value the multimeter gets from the second resistor?
6. What is the current value the multimeter gets from the second circuit?
7. Insert the values from the second circuit in the correct places in the Ohm's Law equation $V=IR$. Do your results demonstrate Ohm's Law?
8. What is the resistance value the multimeter gets from the third resistor?
9. What is the current value the multimeter gets from the third circuit?
10. Insert the values from the third circuit in the correct places in the Ohm's Law equation $V=IR$. Do your results demonstrate Ohm's Law?
11. If you substituted a 1000 Ohm resistor, what would the current value of the circuit be?
12. If you substituted a 1.5 Volt battery for the 9 volt battery in the circuit with a 1000 Ohm resistor described in question 8, what would the current value of the circuit be?

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13. If you had a circuit with a voltage of 9 volts, and you wanted it to have a current as close as possible to 3 amps, what kind of fixed resistor would you add to the circuit: .33 Ohms, 3 Ohms or 27 Ohms?

☐ .33 Ohms☐ 3 Ohms☐ 27 Ohms

14. If you had a circuit with a 9 volt battery, and the current was 1 milliamp, what would be the value of the fixed resistor?