Name:_____

PHYSICS

Assignment:

Ohm's Law Online Lab

Part 1: Exploring the Simulation

1. Describe what changes in the circuit as the voltage is increased.

2. Describe what happens in the equation when the voltage is increased. What do those changes illustrate?

3. Describe what changes in the circuit as the resistance is increased.

4. Describe what happens in the equation when the resistance is increased. What do the changes illustrate?

5. How do the sliders for voltage and resistance need to be moved to produce the SMALLEST current?

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6. How do the sliders for voltage and resistance need to be moved to produce the LARGEST current?

Part 2: Quantitative Relationship Between Variables

7. Data Table for First Resistance. Above the table enter the resistance that you used and then fill in the table.

Resistance = Ω

Voltage (V)	Current (mA)

8. Data Table for the Second Resistance. Above the table enter the resistance that you used and then fill in the table.

Resistance = Ω

Voltage (V)	Current (mA)

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9. Data Table for the Third Resistance. Above the table enter the resistance that you used and then fill in the table.

Resistance = Ω

Voltage (V)	Current (mA)

10. Use data from the investigation to describe the relationship between voltage, resistance, and current.