

Name:

Date:

**➤ Main Ideas, Key Points, Questions:**

*After watching the video segment, write down key points, main ideas, and big questions.*

**➤ Objective(s):**

- *Understand how and why charges move in a conductor.*
- *Learn electrical circuit concepts of voltage, current, and resistance.*

**➤ Notes:**

*During the video segment, use words, phrases, or drawings to take notes.*

**➤ Summary:**

*After watching the video segment, write at least three sentences explaining what you learned. You may ask yourself: "If I was going to explain this to someone else, what would I say?"*

**Answer the following.**

1. Why do we say that in metal conductors, electrons move but protons don't?

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2. What is it that creates 'pressure' in a wire, pushing charge along? (Circle one)

- a. Current
- b. Resistance
- c. Voltage

3. Current in a circuit flows (Circle one).

- a. from higher to lower potential.
- b. along an equipotential line.
- c. from lower to higher potential.
- d. perpendicular to the electric field.

4. Electrons in a live wire move really slowly - you could easily outwalk them! But when you turn on a light switch, the bulb instantly lights up. Why?

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5. When a wire gets hot, what is happening microscopically that causes this?

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6. What three quantities does Ohm's Law connect together? State Ohm's Law in your own words.

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