

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 electrons move in metal conductors but protons do not?

---

---

2. What creates “pressure” in a wire, pushing charge along? (Circle one.)

- a. current
- b. resistance
- c. voltage

3. How does current flow in a circuit? (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?

---

---

---

---

5. What causes a wire to get hot when it is conducting a charge?

---

---

6. Ohm’s law explains the relationship between what three quantities? State Ohm’s law in your own words.

---

---