

## Chapter 34 Four-square concept questions

### Electric Current (Section 34.2,34.5,34.7,34.10)

*Directions: Complete the following questions using the above sections. Provide evidence for each question (page #).*

#### **Definition of Electric current with symbols and unit:**

- Q1:** What is Ohm's Law (the formula)?
- Q2:** When you plug in a cord, where do the electrons come from?
- Q3:** Whether is cord is unplugged or plugged in, what is the net charge in the wire?
- Q4:** What is the difference between DC and AC current?

### Resistance (Section 34.4, 34.5)

*Directions: Complete the following questions using the above sections. Provide evidence for each question (page #).*

#### **Definition of Resistance with symbols and unit:**

- Q5:** How are current and resistance related?
- Q6:** What 3 characteristics of a wire give it MORE resistance?
- Q7:** What 3 characteristics of a wire give it LESS resistance?

### Voltage ( Potential Difference) Section (34.1, 34.2, 34.3, 34.5)

*Directions: Complete the following questions using the above sections. Provide evidence for each question (page #).*

#### **Definition of Voltage with symbols and unit:**

- Q8:** How are current and voltage related?
- Q9:** What are 2 voltage sources?
- Q10:** What is meant by "electric pressure"?

### Electric Power (34.11)

*Directions: Complete the following questions using the above sections. Provide evidence for each question (page #).*

#### **Definition of Electric Power with symbols and unit:**

- Q11:** What are our common household units for electric power?
- Q12:** What are common household unit for electric energy?