Study Guide: Ch. 9, Electricity

Answer the following questions and study the following topics to prepare for the upcoming multiple choice quiz. Note you must know all relevant units.

1) What are the three main particles that reside within an atom? What are their charges?

2) What does Coulomb’s Law have to say about how charges interact with each other?

3) Voltage sources create a potential difference. Explain what a potential difference is. How is this related to the flow of electrical charge in a wire?

4) What is electric current? What causes it? What is the difference between alternating current and direct current?

5) What is electrical resistance?

6) How much current flows through a speaker of resistance 8 ohms when 12V is impressed across the speaker?

7) What is the resistance of an electric blender that draws a current of 12A when connected to a 120V power supply?

8) What causes electric shock?

9) What is the danger in “Overloading” a circuit? How does a fuse handle this danger?