

Chapter 2

- 2.1 What is the most important benefit of electricity?
- A. Energy can be easily transported.
 - B. Radio communication.
 - C. Television.
 - D. The Internet.
- 2.2 How does a generator work?
- A. An electric current in a coil of wire creates a current in another coil through magnetism.
 - B. The magnetic field from an electric current in a coil of wire spins a magnet.
 - C. Pressurized water or steam spins a magnet, creating an electric current in a coil of wire around it.
 - D. Electricity creates mechanical motion.
- 2.3 A circuit uses batteries to run a motor with fan. How could you reduce the speed of the motor?
- A. Using more batteries to increase the voltage.
 - B. Place a lamp in series with the motor to reduce the voltage to it.
 - C. Remove the fan from the motor.
 - D. None of the above.
- 2.4 A circuit uses batteries to run a motor with fan. How could you reverse the direction of airflow?
- A. Place a lamp in parallel with the motor.
 - B. Place a switch in series with the motor.
 - C. Reverse the batteries.
 - D. None of the above.
- 2.5 Which product would probably NOT have a fuse?
- A. Hand-held radio or CD player.
 - B. Electric saw.
 - C. Tabletop stereo/radio/CD player.
 - D. Microwave oven.
- 2.6 What is the voltage at the electrical outlets in your home?
- A. 5V
 - B. 12V
 - C. 60V
 - D. 120V
- 2.7 When clothes cling together due to static electricity, they are . . .
- A. storing a large electrical charge at a low voltage.
 - B. storing a small electrical charge at a high voltage.
 - C. storing a large electrical charge at a high voltage.
 - D. storing a small electrical charge at a low voltage.
- 2.8 Why do incandescent light bulbs have a glass bulb?
- A. To prevent the filament from reacting with oxygen and burning up.
 - B. To protect people if the filament explodes.
 - C. To protect the copper in the filament.
 - D. The glass looks nicer.
- 2.9 Which of the following would NOT cause a blackout?
- A. A problem in the electrical distribution network cuts off electricity to part of a city.
 - B. All the lights in a city are turned off at night to confuse attacking bombers during a war.
 - C. The power company reduces the voltage it supplies when unable to supply enough current.
 - D. A storm damages the electrical distribution network in a city.
- 2.10 Why do local governments have building codes regulating the electrical wiring of buildings?
- A. To make money for the government through building permit fees.
 - B. To ensure the building will be safe after many years and different owners.
 - C. To ensure local electricians will always have jobs.
 - D. To meet standards imposed by the local power companies supplying the electricity.