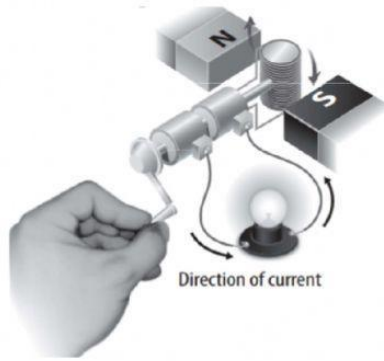


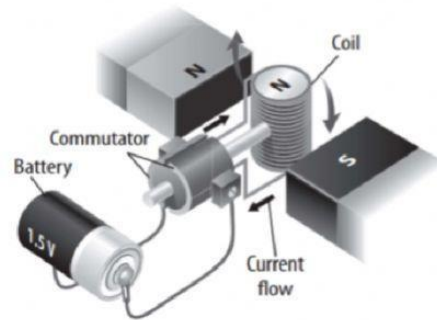
Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

- ___ 6. A material that conducts electricity under certain conditions only is a(n)
- a. semiconductor.
 - b. insulator.
 - c. vacuum tube.
 - d. conductor.



- ___ 7. What kind of energy are you providing as you turn the crank on a simple electric generator?
- a. mechanical
 - b. potential
 - c. electrical
 - d. magnetic
- ___ 8. Electromagnetic waves are produced by ____.
- a. magnetic fields
 - b. electromagnetic energy
 - c. charged particles in motion
 - d. positive and negative charges
- ___ 9. The function of a lightning rod is to
- a. make an object lighter.
 - b. prevent short circuits in a building's wiring.
 - c. protect a building from damage due to lightning.
 - d. produce lightning.
- ___ 10. The region around a magnet where the magnetic forces act is the
- a. magnetic attraction
 - b. magnetic field
 - c. electromagnetic
 - d. magnetic pole



- ___ 11. What makes an electric motor spin?
- a. The permanent magnet and the electromagnet have no effect on the spinning of the motor.
 - b. The permanent magnet and the electromagnet continuously attract and repel each other.
 - c. The permanent magnet and the electromagnet continuously repel each other.
 - d. The permanent magnet and the electromagnet continuously attract each other.
- ___ 12. What is the purpose of a commutator in an electric motor?
- a. It reverses the direction of the current in the electromagnet to stop the motor's spinning.
 - b. It reverses the direction of the current in the permanent magnet to keep the motor spinning.
 - c. It reverses the direction of the current in the permanent magnet to stop the motor's spinning.
 - d. It reverses the direction of the current in the electromagnet to keep the motor spinning.
- ___ 13. An electromagnet would most likely be used as a
- a. pocket compass.
 - b. ski lift.
 - c. refrigerator decoration.
 - d. device on the end of a crane to lift junked cars.
- ___ 14. A particle of electromagnetic radiation is called a ____.
- a. broadcasting
 - b. proton
 - c. nucleus
 - d. photon
- ___ 15. An example of a conductor is
- a. aluminum.
 - b. plastic.
 - c. glass.
 - d. wood.