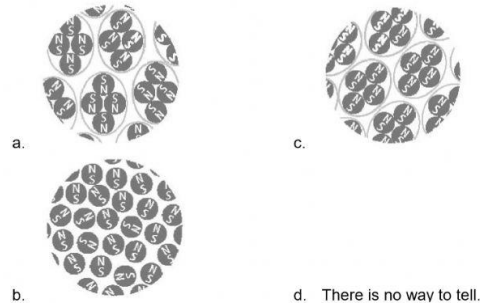
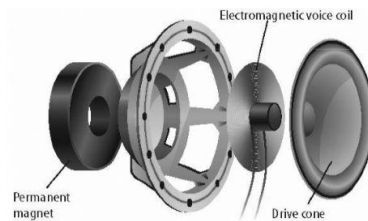


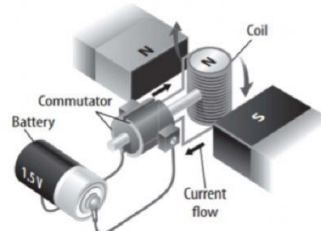
- ___ 31. The loss of static electricity as electric charges move off an object is called
 a. static discharge. c. induction.
 b. friction. d. conduction.
- ___ 32. A particle of electromagnetic radiation is called a _____.
 a. proton c. photon
 b. nucleus d. broadcasting
- ___ 33. Electromagnetic waves are produced by _____.
 a. positive and negative charges c. charged particles in motion
 b. magnetic fields d. electromagnetic energy
- ___ 34. A material that conducts electricity under certain conditions only is a(n)
 a. conductor. c. semiconductor.
 b. insulator. d. vacuum tube.
- ___ 35. What does a transistor do?
 a. allow a current to flow in one direction only
 b. amplify (change) an electronic signal
 c. convert an analog signal into a digital signal
 d. combine thousands of diodes and resistors
- ___ 36. Which of the following shows the arrangement of atoms in material that is a magnet?



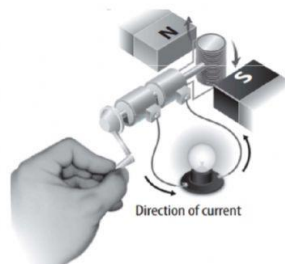
- ___ 37. For the electromagnet to attract and then repel the permanent magnet in the speaker, what has to happen?



- a. Noises sent through the speaker must be very loud.
 b. The electric current must be turned off and on.
 c. The electric current must reverse directions.
 d. More coils must be added to the electromagnet.



- ___ 38. What is the purpose of a commutator in an electric motor?
 a. It reverses the direction of the current in the permanent magnet to keep the motor spinning.
 b. It reverses the direction of the current in the electromagnet 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 stop the motor's spinning.
- ___ 39. What makes an electric motor spin?
 a. The permanent magnet and the electromagnet continuously attract each other.
 b. The permanent magnet and the electromagnet continuously repel each other.
 c. The permanent magnet and the electromagnet continuously attract and repel each other.
 d. The permanent magnet and the electromagnet have no effect on the spinning of the motor.



- ___ 40. What kind of energy are you providing as you turn the crank on a simple electric generator?
 a. magnetic c. mechanical
 b. electrical d. potential