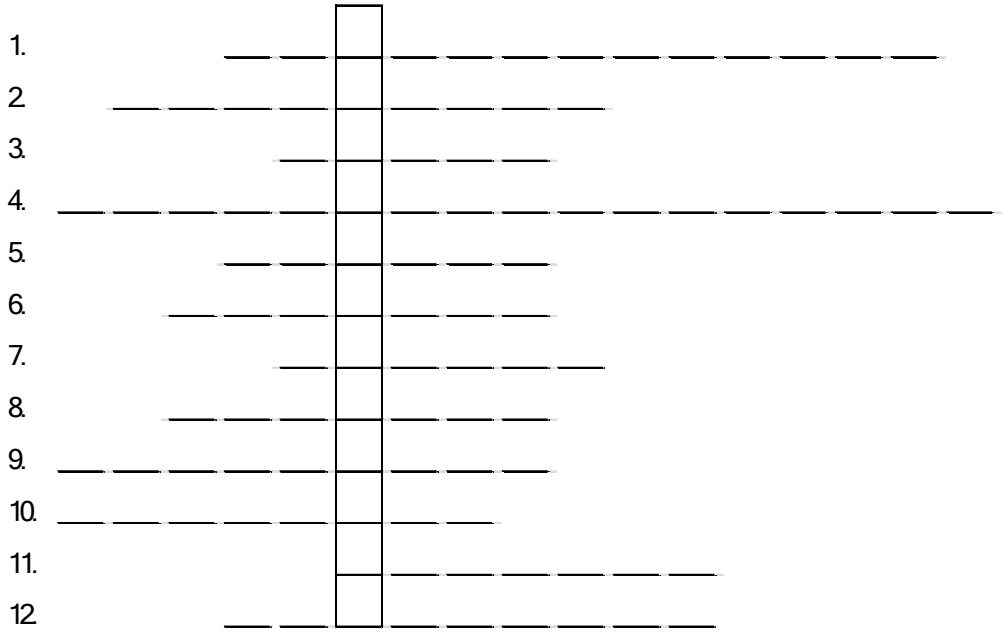
NAME_____ **DATE**_____ **CLASS**_____

STUDY GUIDE Chapter 7

Electric Charge

Solve the puzzle below by writing the words in the diagram that best fit the descriptions given. You will find another term spelled vertically in the black box.



Descriptions

1. exerts a force on anything that has an electric charge (2 words)
2. material that does not allow an electric current to pass through it easily
3. what like charges do
4. accumulation of electric charges on an object (2 words)
5. materials that usually are good conductors of electricity
6. what unlike charges do
7. metal that is often used in wires that conduct electricity
8. material that is often used to insulate wires that conduct electricity
9. any material that allows electricity to pass through it easily
10. neutral particles found in the nucleus of an atom
11. positively charged particles that are found in the nucleus of an atom
12. negatively charged particles that are found outside the nucleus of an atom

Fill in the blank below with the term enclosed by the black box.

An _____ is a device that can detect the presence of electric charges.

NAME_____ DATE_____ CLASS_____

REINFORCEMENT Chapter 7

Electric Charge

Determine whether the italicized term makes each statement true or false. If the statement is true, write the word "true" in the blank. If the statement is false, write in the blank the term that makes the statement true.

_____ 1. The positively charged particles in an atom are *protons*.

_____ 2. The negatively charged particles of an atom are *neutrons*.

_____ 3. If an atom has an equal number of protons and electrons, the entire atom is electrically *neutral*.

_____ 4. If an atom has a greater number of electrons than protons, the entire atom has a *positive* charge.

_____ 5. The accumulation of electric charges on an object is called *magnetism*.

_____ 6. The electric field caused by an electron is *weakest* near the electron.

_____ 7. An electric field becomes weaker as distance from the electron *increases*.

_____ 8. A conductor is a material that allows electrons to flow through it *easily*.

_____ 9. Metals are *poor* conductors of electricity.

_____ 10. Plastics, rubber, wood, and glass are good *conductors*.

_____ 11. Earth serves as a *conductor* of electricity.

_____ 12. The presence of electric charges can be detected with an *electroscope*.

_____ 13. The leaves of an electroscope hang straight down when the device receives a *charge*.

_____ 14. If both leaves of an electroscope receive a negative charge, the leaves will *attract* each other.

_____ 15. When an object loses electrons, it gains a *negative* charge.