

Name_____

Hour_____

Section 2-1/2-2 Review

A. Use the vocabulary terms in the following list, fill in the blanks in the statements below.

atom

atomic number

compound

electron

element

mass number

neutron

nucleus

proton

1. A substance that cannot be broken down into other substances by ordinary chemical means is a(n)_____.
2. A substance formed by the chemical combination of two or more elements is a(n)_____.
3. The basic unit of structure of all elements is the_____.
4. Atoms are made up of three types of particles:_____, _____, and _____.
5. The dense central portion of the atom is the_____.
6. The number of protons in the nucleus of its atom is the_____ of an element.
7. The number of protons plus the number of neutrons in the nucleus of an atom is its_____.

colloid

covalent bonding

ionic bonding

isotope

mixture

pH

solution

suspension

1. Different varieties of the same element having different numbers of neutrons in the nuclei are called_____.

9. Chemical bonding in which there is a transfer of electrons from one atom to another is _____.
10. Chemical bonding in which there is a sharing of electrons between atoms is _____.
11. Measurement of the hydrogen ion concentration of a solution may be given in terms of _____.
12. A purely physical association of substances is a _____.
13. Three types of mixtures are _____, _____, and _____.

B. If the statement is true, write **TRUE** in the space at the left. If the statement is false, write **FALSE** in the space at the left.

- _____ 1. Compounds are the pure substances that are the building blocks of matter.
- _____ 2. Only about 24 elements are commonly found in living organisms.
- _____ 3. The mass of an atom is mainly in the neutron.
- _____ 4. An electron has a positive charge.
- _____ 5. The second energy level can hold up to two electrons.
- _____ 6. A substance in which two or more different elements are chemically combined is called a compound.
- _____ 7. Chemical bonding in which electrons are shared is called ionic.
- _____ 8. Atoms that carry positive or negative charges are known as solids.
- _____ 9. Particles are likely to be farthest apart in a liquid.
- _____ 10. The freezing of water is a physical change.
- _____ 11. In a mixture, there is no bonding of atoms.
- _____ 12. A solute dissolves in a solvent.
- _____ 13. Adding starch to water and stirring will form a solution.

_____ 14. Jello is an example of a colloidal suspension.

_____ 15. A solution with fewer OH^- ions than H^+ ions is a base.

C. Fill in the blanks with the correct vocabulary word.

1. The nucleus, the center of the atom, is made up of _____ and _____.
2. The negatively charged particles in atoms are called _____.
3. Different isotopes of the same element have different numbers of _____.
4. In a(an) _____ bond, electrons are transferred from one atom to another.

D. Match the following term with the best definition.

a. polarity b. acidic c. basic

- _____ 1. unequal sharing of electrons
- _____ 2. lemon juice, pH 1.5
- _____ 3. lower concentrations of H^+ ions than pure water
- _____ 4. ammonia, pH 11.5
- _____ 5. a slight negative charge at one end of a molecule, a slight positive charge at the other end
- _____ 6. pH values that are below 7
- _____ 7. alkaline solutions