1. Explain why solutions are classified as mixtures instead of compounds.

2. Solutions are _______________ mixtures made up of very small particles that are actually molecules, __________, or ________.

3. Solutions are said to be in a _______________ phase even though the components may have been in different phases before the solution was formed.

4. Pure gold is 24 carat. 14-carat gold contains 14 parts gold and 10 parts other metals. 14-carat gold is said to be a(n) ____________, which is a type of ________________ solution. An example of a gaseous solution is ________________, which is made up mostly of ________________ and nitrogen when dry. The most common solutions are ________________ solutions.

5. Define miscible:

6. Define immiscible:

7. Because of the _______________ _______________, you can see the light beams from car headlights in a fog.

8. Multiple choice: To increase the rate of solution of a solid in water,
   a. increase the pressure over the water.
   b. decrease the pressure over the water.
   c. crush the particles of the solid.
   d. chill the water.

9. If 15 grams of iodine are dissolved in 1000 mL of alcohol, the alcohol is the (solute, solvent) and the solution is said to be a(n) ________________.

10. A substance that dissolves other materials is a (solute, solvent). The substance being dissolved is a (solute, solvent).
11. In (solutions, suspensions) the substances separate after standing a while. The substances (can also, can not) be separated by filtration.

12. Smoke is an example of a _______________ of solid dirt and dust particles in air. After a while, the solid particles will fall to the ground.

13. A(n) _______________’s particles are between those of a solution and a suspension.

14. _______________ are actually colloids comprised of one liquid in another liquid. A(n) _______________ agent keeps the particles mixed.

15. What is an aqueous solution?

16. What is the solute in a brass alloy containing 75% copper and 25% zinc?

17. How does a solution behave differently from a suspension when a beam of light is shined through it?

18. Substances that conduct electricity when dissolved are said to be _______________, while substances that do NOT conduct electricity when dissolved are said to be _______________.