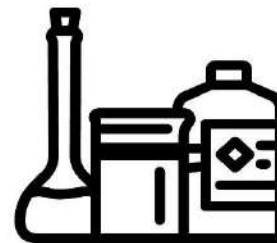


Name _____ Date _____



SOLUTES AND SOLVENTS QUIZ

1. Define the following:

a. Solvent

b. Solute

c. Solution

2. What is the difference between a solute and a solvent?

3. _____ is considered as a universal solvent.

4. Not all solutions are solids dissolved in liquids. Provide two examples of other types of solutions

5. For each of the following solutions, identify the solute and solvent:

Solution	Solute	Solvent
Salt Water		
Kool-Aid (made with kool-aid, sugar, and water)		
Air		

14 karat Gold		
Sparkling Water Lemon water made with lemon juice and water		
Vinegar (made with acetic acid and water)		
Chocolate milk made with chocolate and milk		
Tea made with tea leaves and water		
Soda made with carbon dioxide bubbles and liquid soda		

6. Match the following definitions and vocabulary words.

Solution Dissolving Solute Solvent Insoluble
Soluble

- a. _____ A substance that will dissolve into a solvent.
Example: sugar in lemonade
- b. _____ A substance that a solute dissolves into.
Example: The water that the sugar dissolves into.
- c. _____ When a solute is completely dissolved into a solvent.
Example: Saltwater
- d. _____ When a substance is added to a solvent and seems to
disappear but is really small and suspended between

the particles of the solvent.

Example: When you add salt to water and seems to disappear.

e. _____ A substance that is not able to dissolve into a solvent.

Example: Sulfur in water

f. _____ A substance that can dissolve into a solvent.

Example: Sugar in water

7. For each of the following scenarios, identify the solvent and the solute.

a. Mary dissolved salt in water to make a saline solution.

The solute is _____.

The solvent is _____.

b. Sarah poured vinegar into a bowl of olive oil.

The solute is _____.

The solvent is _____.

c. Alex dissolved baking soda in water for a science experiment.

The solute is _____.

The solvent is _____.

d. Emma added food coloring to a glass of water.

The solute is _____.

The solvent is _____.

e. David combined flour and water to make dough.

The solute is _____.

The solvent is _____.

f. Lisa mixed lemon juice and sugar in a pitcher of water to make lemonade.

The solute is _____.

The solvent is _____.

8. Match the following definitions and vocabulary words.

Supersaturated solution Aqueous solution Saturated solution Non-aqueous solution Unsaturated solution

a. _____ A solution in which the solvent is water.

b. _____ A solution in which the solvent is not water.

c. _____ A solution that contains the maximum amount of solute that can be dissolved at a given temperature.

d. _____ A solution that contains less than the maximum amount of solute that can be dissolved at a given temperature.

e. _____ A solution that contains more solute than it would normally dissolve at a given temperature.