Name:	HOMEWORK
Directions: Read the informational text. Then attach a piece of paper.	answer the questions. If you need more space
You CANNOT see these particles. The subst solvent. The solvent does the dissolving. Water Water is often called the "universal solvent" Solubility is a measure of how easily a solute of Solubility is measured in grams per 100 grams the solute not the solvent. A substance with water than a substance with low solubility. The solubility of a solid or liquid solute var solutes, solubility increases as temperature in in a solvent as temperature increases. The solvent solutes.	solute. The solute breaks apart into tiny particles. ance in which the solute dissolves is called the er is the most common solvent. dissolves into a solvent, specifically water. s (or milliliters) of water. Solubility is a property of high solubility will dissolve more in 100 grams of ies with temperature. For most liquid and solid creases. In other words, more solute can dissolve solubility of a gas solute varies with atmospheric eases as atmospheric pressure increases. As more
Questions: 1. What is the difference between a solute and	d solvent?
2. What is solubility? How do we measure solu	ubility?
3. What is the relationship between solubility	and temperature for solid or liquid solutes? What

is the relationship between solubility and pressure for gas solutes?

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SATURATION

A solvent can only hold so much solute. The amount of solute dissolved in a solvent describes saturation. Saturation depends on the solubility of the solute, properties of the solvent and environmental conditions.

There are three types of saturation:

- 1. When a solvent can dissolve more solute, we say the solution is <u>unsaturated</u>. If you add more solute to an unsaturated solution, the solute will dissolve in the solvent until the solution becomes saturated.
- 2. When a solvent dissolves the maximum amount of solute, we say the solution is <u>saturated</u>. If you add more solute to a saturated solution, the solute will not dissolve. The solute will settle at the bottom of the container.
- 3. A supersaturated solution is a solution in which the solvent holds more solute than under normal conditions. Supersaturated solutions are usually made by increasing temperature or pressure. Soda is a supersaturated solution. It is made by dissolving carbon dioxide in water under high pressure. The pressure is maintained by filling soda in sealed containers.

Questions:

- 1. What is saturation?
- 2. Compare and contrast a saturated and unsaturated solution.
- 3. A student makes the following statement: "An unsaturated solution cannot become a saturated solution but a saturated solution can become an unsaturated solution by adding more solute." Evaluate the student's statement. Identify correct and/or faulty ideas in the student's statement.