

General Solubility Worksheet

Define each:

- unsaturated solution

- saturated solution

- solubility

What types of units is solubility measured in?

Describe the relationship between the rate of dissolving and the rate of crystallization when a small amount of solute is added to an unsaturated solution.

Describe the relationship between the rate of dissolving and the rate of crystallization when a small amount of solute is added to a saturated solution.

Describe the relationship between the rate of dissolving and the rate of crystallization when a small amount of solute is added to a supersaturated solution.

Which of the above solutions would need to be prepared in order to determine the solubility of an ionic solution.

Describe how you would prepare a saturated solution.

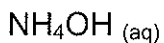
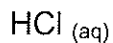
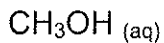
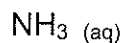
Describe how you would determine the solubility of NaCl in water at 20°C.

What is the effect of temperature on solubility?

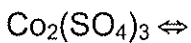
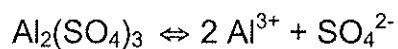
If you were given a saturated, unsaturated and supersaturated solution, how would you distinguish one from another?

- Unsaturated solution:
- Saturated solution:
- Supersaturated solution:

Classify each as an ionic or molecular (covalent) solution.



Write dissociation equations to represent the equilibrium present for a saturated solution of each ionic compound. The first one is done.



Write dissociation equations for any chemicals which dissociate when dissolved in water:



(ionic compounds dissociate)



(molecular compounds do not dissociate)

