

## Factors that Affect Solubility

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Per: \_\_\_\_\_

**Directions:** Fill in the data table of observations at the beginning of each station and at the end of each station. Then use your results to answer the questions that follow.

Station Number	Initial Observation	Final Observations
STATION 1		
STATION 2		
STATION 3		
STATION 4		
STATION 5		
STATION 6		

1. From station 1, explain the effect that agitation had on each tube.
  
2. Examine your results from station 1 and compare the effects that different solvents can have on the same solute.

3. Examine your results from station 2 and determine how the particle size affects the rate of dissolving.
  
4. From station 3 explain what it means if bubbles were visible.
  
5. Examine your results from station 3 and determine what happens to the solubility of gases in liquids as temperatures increase.
  
6. Examine your results from station 4 and explain the relationship between the temperature of a solvent and the time necessary to dissolve a solute.
  
7. Examine your results from station 5 and using the descriptive terms *saturated*, *unsaturated*, and *supersaturated*, identify which word would best describe the solution at the end of each step.
  
8. Examine your results from station 6 and explain the relationship between amount of solute and the ability to form a solution.
  
9. The solution you created in station 6 is said to be in equilibrium. What does this mean?
  
10. Make a general list of factors that affect solubility and the effect each one has on forming a solution.