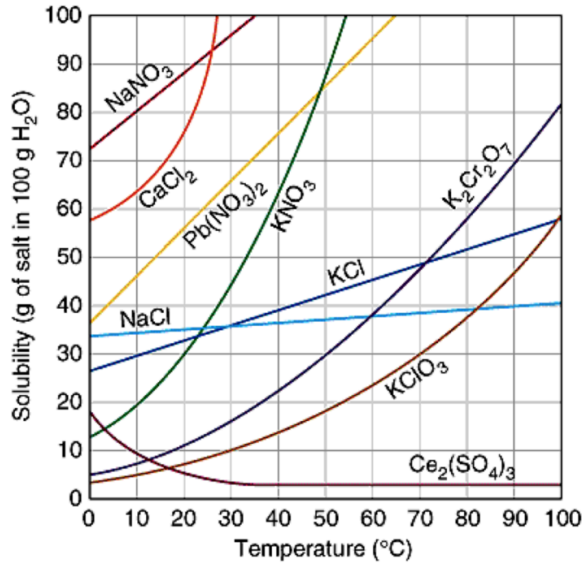
Name: _____

Solubility Curve Worksheet



1. How does the solubility of a solid solute generally change as temperature increases?

2. Which substance has a decrease in solubility as the temperature increases?

3. How many grams of $CaCl_2$ will dissolve in 100 grams of water at 10°C?

4. At which temperature can 30 grams of $KClO_3$ be dissolved in 100 grams of water?

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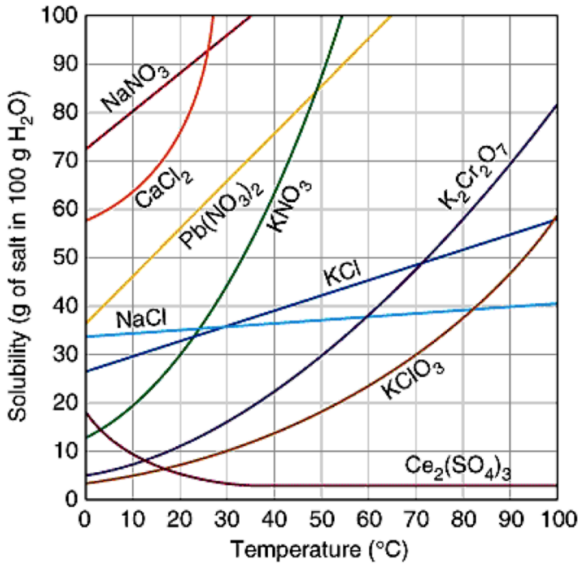

1. How does the solubility of a solid solute generally change as temperature increases?

2. Which substance has a decrease in solubility as the temperature increases?

3. How many grams of $CaCl_2$ will dissolve in 100 grams of water at 10°C?

4. At which temperature can 30 grams of $KClO_3$ be dissolved in 100 grams of water?

5. How would you classify a solution that contains 35 grams of NaCl in 100 grams of water at 30°C?
   a. unsaturated
   b. saturated
   c. supersaturated

6. How would you classify a solution that contains 70 grams of $NaNO_3$ in 100 g of water at 20°C?
   a. unsaturated
   b. saturated
   c. supersaturated

7. If you add more solute to a solution containing 20 grams of $K_2Cr_2O_7$ in 100 grams of water at 90°C, what would happen?

8. If you add more solute to a solution containing 50 grams of KCl in 100 grams of water at 60°C, what would happen?

9. If you add more solute to a solution containing 75 grams of $Pb(NO_3)_2$ in 100 grams of water at 40°C, what would happen?

10. If a solution containing 45 grams of KCl is heated from 60°C to 80°C, it would go from a _____ solution to a _____ solution.
    a. unsaturated, saturated
    b. saturated, unsaturated
    c. supersaturated, saturated
    d. saturated, supersaturated

5. How would you classify a solution that contains 35 grams of NaCl in 100 grams of water at 30°C?
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   c. supersaturated

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