

## Solution Concentrations #2

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

For this assignment, we will be combining the items we learned this week. In these questions, you will be asked to read a solubility curve and find the concentration of the solution. Use the following solubility curve as your data:

1a) Which substance is the most soluble at 10 °C?

1b) How much of the solute can be dissolved at that temperature?

1c) What would be the percent concentration at that temperature?

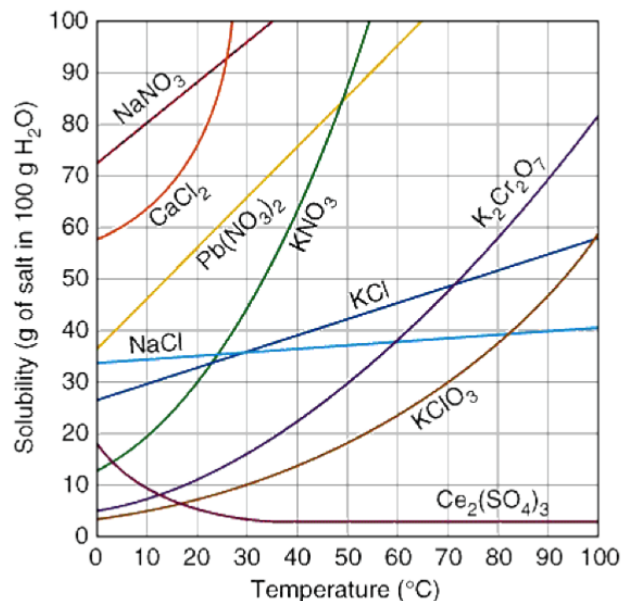
2a) Which substance is least soluble at 10 °C?

2b) What would be the percent concentration at that temperature?

3a) Which two substances have about the same solubility at 70 °C?

b) What would their percent concentration be?

4) What is the percent concentration of  $\text{Pb}(\text{NO}_3)_2$  at 35 °C?



5) What is the percent concentration of a saturated  $\text{CaCl}_2$  solution at  $20^\circ\text{C}$ ?

6a) Suppose instead of 100 g of water, you had 300 g of water. How many grams of KCl could dissolve in  $90^\circ\text{C}$  water?

b) What would the percent concentration of that solution be?

7) What is the ppm concentration of a saturated  $\text{Ce}_2(\text{SO}_4)_3$  solution at  $85^\circ\text{C}$ ?

8) 30 grams of each solute is dissolved 100 grams of water at  $20^\circ\text{C}$ . Which of those solutions would be

a) saturated?

b) unsaturated?

c) supersaturated?