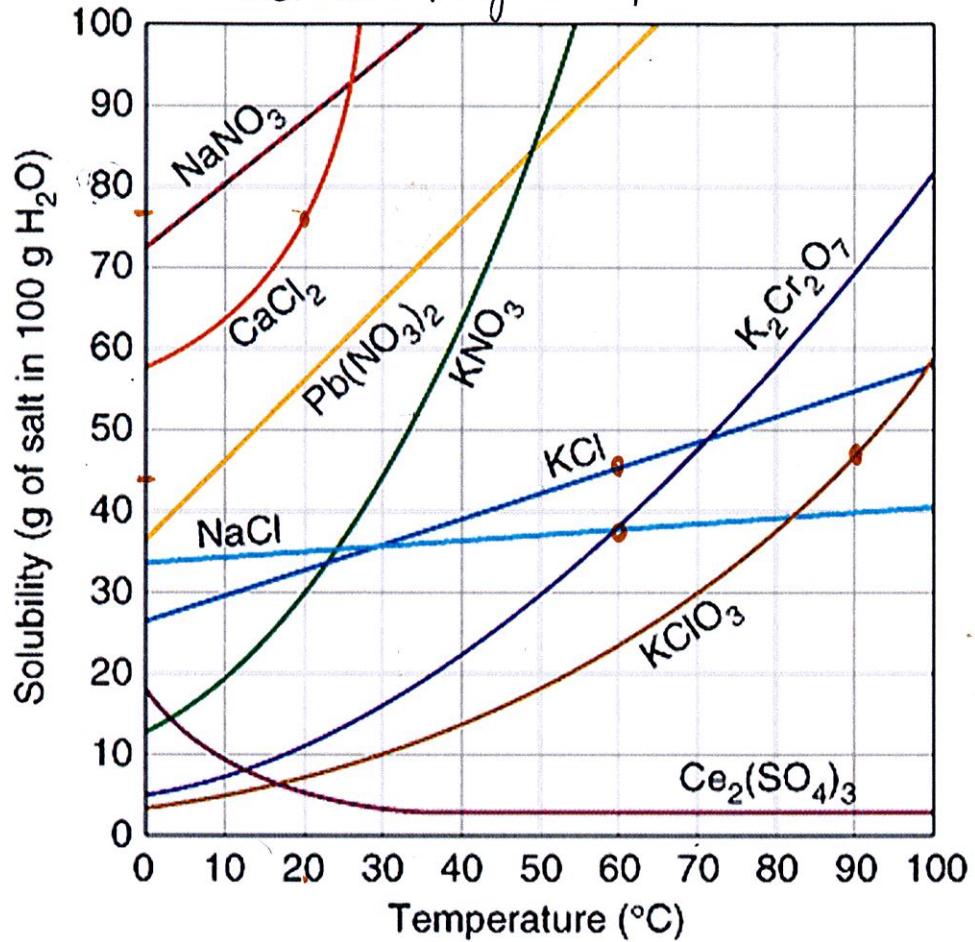


Solubility Graph



Solubility Graph Example ?s.

- 1) What mass of $K_2Cr_2O_7$ must be added to 100g of water to make a saturated solution at $50^\circ C$?

$30\text{g } K_2Cr_2O_7$

- 2) What mass of KCl must be added to 100g of water to make a saturated solution at $55^\circ C$?

$\sim 43\text{g } KCl$

- 3) If you dissolved 18g of $KClO_3$ in 100g of water at $70^\circ C$, is the solution unsaturated, saturated, or supersaturated?

sat 30g unsaturated

- 4) If you dissolved 80g $CaCl_2$ in 100g of water at $20^\circ C$, is the solution unsaturated, saturated, or supersaturated?

sat 76g supersaturated

- 5) If you dissolved 100g of KCl in 200g of water at $60^\circ C$, is the solution unsaturated, saturated, or supersaturated?

sat $\frac{48\text{g } KCl}{100\text{g H}_2O}$

$\frac{92\text{g } KCl}{200\text{g H}_2O}$

supersaturated

- 6) Which is more concentrated at $90^\circ C$: a saturated solution of $KClO_3$ or an unsaturated solution of KCl made by dissolving 52g of KCl in 100g of water?

sat 48g

- 7) If 55g of $K_2Cr_2O_7$ are added to 100g of water at $60^\circ C$, how many grams of $K_2Cr_2O_7$ do not dissolve?

$\sim 38\text{g}$
sat

-55
 -38
 $\overline{17\text{g}}$