

SOLUBILITY CURVES

Use Table G: Solubility Curves

FINDING GRAMS

1) What is the maximum amount of NaNO_3 that can be dissolved in 100 grams of H_2O at 20°C ?

2) What is the solubility of HCl at 30°C ?

3) How many grams of KCl does it take to saturate 100 grams of H_2O at 90°C ?

FINDING TEMPERATURE

4) At what temperature will 55 grams of NH_3 saturate 100 grams of H_2O ?

FINDING TYPE OF SOLUTION

5a) 40 grams of NaCl are dissolved in 100 grams of water at 20°C . What type of solution is this, unsaturated, saturated or supersaturated?

5b) 70 grams of KNO_3 are dissolved in 100 grams of water at 50°C . What type of solution is this, unsaturated, saturated or supersaturated?

THE "BIG" PROBLEM

- 6a) If you add 85 grams of KNO_3 to 100 grams of H_2O at 30°C , will all of it dissolve?
- b) If not, how much of the KNO_3 remains undissolved?
- c) What type of solution is this, unsaturated, saturated or supersaturated?
- d) Without adding more water, what can you do to make all 85 grams of KNO_3 dissolve? BE SPECIFIC
- e) After dissolving all of the KNO_3 , what type of solution do you have then?

DOING A RATIO

- 7) At 20°C , how many grams of SO_2 will saturate 50 grams of H_2O ?