CHEM - Solutions  t Name.

Additional Terms for Concentration:

l. Dilute-

1. Concentrated 
2. Saturated -
3. Unsaturated
4. Supersaturated 

Using Reference Table - Solubility Curves

l . The maximum solubilities of 3 gases (HCI, S02, and NH3) and 8 salts are represented with curved lines. Any point on the solubility curve of a substance represents a solution for that substance.

1. Most salts become more soluble as the temperature



1. The solubility of gases will alwaysas the temperature Increases.

Using Reference Table - Solubilities in Water

l . This table can be used to determine the name of the product expected to precipitate when 2 salt solutions are mixed

  Name:

l) Which compounds on the solubility chart are gases?

•2) What is the effect of temperature on the solubility of gases?

78 ) Which compound on the chart is most effected by temperature?

'l) Which compound on the chart is least effected by temperature?

1. At 300C, how many grams of NH3 are required to make a saturated solution in 1009 of 1420?
2. At 600 C, how many grams of KNOg are required to make a saturated solution on 509 of HO?
3. At 200C, 70g of NaN03 are added to 1009 of HD. how many more grams of NaNOg will be required to saturate this solution?
4. 1009 of H20 are mixed with 859 of KNOB. At what temperature will this solution be saturated?
5. At what temperature do KCI + KNOg have the same solubility in 1009 of H20?
6. Are the following saturated, unsaturated, or supersaturated solutions,

a) log Nacl in 1009 HO at 25 0C

 b) 1509 Kl in 1009 Hno at 10t

* + 1. 209 SO. in 1009 HO at 700C
    2. 259 NHtcl in 509 HO at 700C
    3. 759 HCI in 259 HD at 300C
    4. 12.59 NH4Cl in 259 HO at 50t