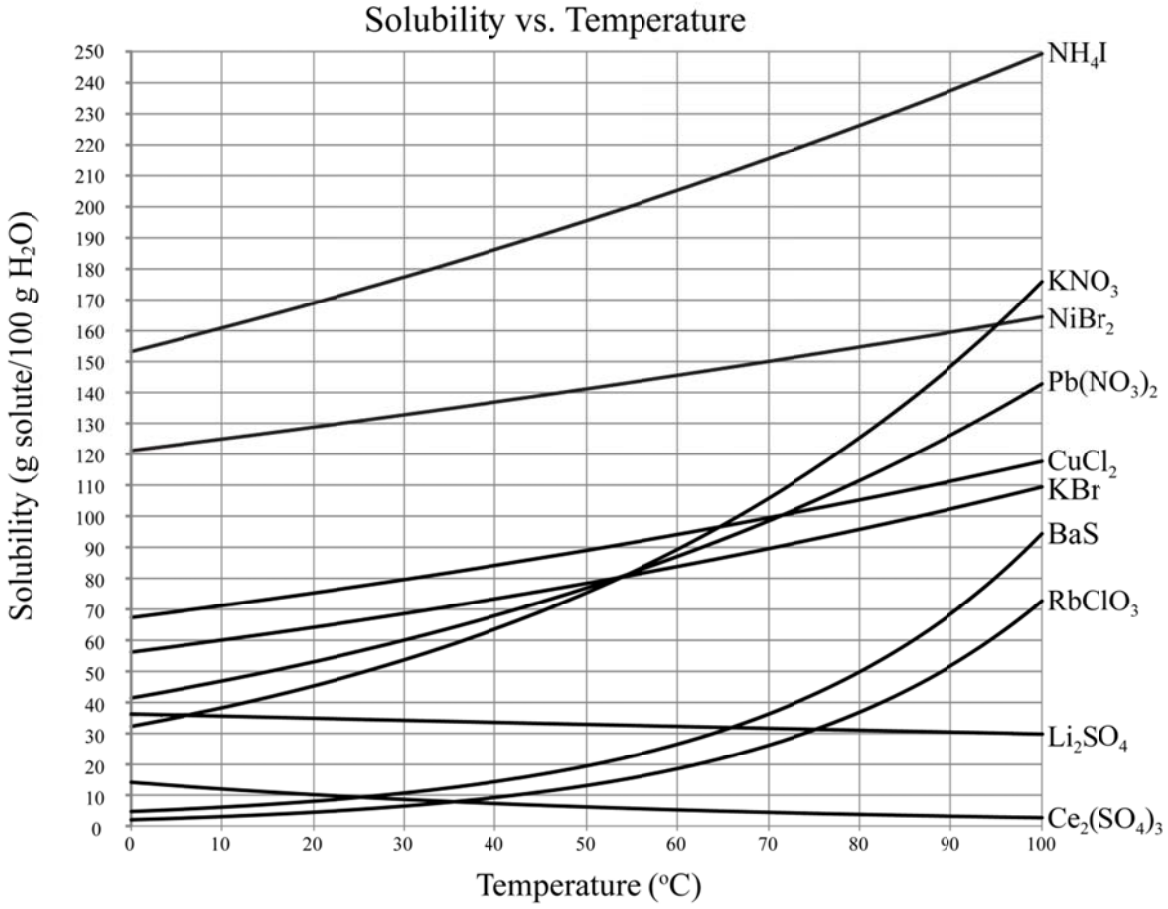
Solubility and Temperature

Name: _____
Period: ___

Use the given solubility curve to answer the questions below.



(1) In general, what happens to the solubility of a salt as temperature increases? What salts are exceptions to this trend?

(2) Write the chemical name of each salt beside the formula on the solubility curve.

(3) Which salt has a solubility of approximately 105 g (per 100 g H_2O) at 70 °C?

(4) Which salt has a solubility of approximately 80 g (per 100 g H_2O) at 30 °C?

(5) What is the solubility (in g solute /100 g H_2O) of KBr at 60 ºC?

(6) What is the solubility (in g solute /100 g H_2O) of $Ce_2(SO_4)_3$ at 20 ºC?

(7) What is the solubility (in g solute/100 g H_2O) of NH_4I at 10 ºC?

(8) What is the solubility (in g solute /100 g H_2O) of $Pb(NO_3)_2$ at 80 ºC?

(9) What is the solubility (in **mol** solute /100 g H_2O) of $RbClO_3$ at 90 ºC?

(10) What is the solubility (in **mol** solute /100 g H_2O) of BaS at 50 ºC?

(11) What is the solubility (in **mol** solute /100 g H_2O) of $NiBr_2$ at 40 ºC?

(12) What is the solubility (in **mol** solute /100 g H_2O) of Li_2SO_4 at 100 ºC?