1

A saturated 100 mL solution of ammonium chloride at 80°C is cooled to 40°C . How many grams of solute precipitate out?

2

A saturated 325 mL solution of ammonia at 20°C is warmed up to 40°C . How many grams of solute precipitate out?

3

A 100 mL solution of HCl at 40°C contains 20 grams of solute. How much more solute can fit into this solution?

4

A pond of 34,560 liters contains 247 grams of water strider bug urine. What is the PPM of bug urine in this solution?

5

What is the molarity of a saturated solution of sodium nitrate at 30°C?

6

A 3475 mL solution contains 573 grams of $CuCl_2$, what is the molarity of this solution?

7

What is the freezing point of a 1.0 Liter 2.25 M $Ca(NO_3)_{2(AQ)}$ solution?

8

What is the boiling point of one liter of 4.25 M $KNO_{3(AQ)}$ solution?

9

How many moles of NaCl are in 375 mL of saturated solution at 90°C?

10

Name the best and worst electrolyte, all are 1.0 liter solutions:

3.0 M $Sr(NO_3)_2$

1.0 M $(NH_4)_3PO_4$

2.5 M $SrSO_4$

4.0 M LiCl

11

How to you prepare a 225 mL 1.33 M $LiNO_{2(AQ)}$ solution from a stock solution of 4.68 M?

12

Compare the colligative properties of water with a solution of 1.0 M $ZnBr_{2(AQ)}$. No math, say higher or lower than water's numbers.

	Water	1.0 M $ZnBr_{2(AQ)}$
Freezing point		
Boiling Point		
Vapor Pressure		