

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 100 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 38 grams of solute. How much more solute will it take to saturate this solution?

4

A pond of 34,560 L contains 0.247 g of water strider bug legs. What's the PPM of bug legs 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
2.00 M $\text{Ca}(\text{NO}_3)_2(\text{AQ})$ solution?

(Round to nearest whole Kelvin)

8

What is the boiling point of
a one liter
4.00 M $\text{KNO}_3(\text{AQ})$ solution?

(Round to nearest whole Kelvin)

9

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

10

Which is the best electrolyte,
and the worst electrolyte
of these 1.0 liter solutions?


A 1.0 M $(\text{NH}_4)_3\text{PO}_4(\text{AQ})$	B 4.0 M $\text{LiCl}(\text{AQ})$
C 3.0 M $\text{Sr}(\text{NO}_3)_2(\text{AQ})$	D 2.5 M $\text{SrSO}_4(\text{AQ})$

11

How to you prepare a
250. mL 1.33 M $\text{LiNO}_{2(\text{AQ})}$ solution
from a stock solution of 4.68 M?

12

Write in the colligative properties of water,
compare them to a 1.0 M $\text{NaBr}_{(\text{AQ})}$. No math,
say higher or lower than water's numbers.



Colligative Properties	Water	1.0 M $\text{NaBr}_{(\text{AQ})}$
Freezing point		
Boiling Point		
Vapor Pressure @ 25°C		