

Quiz 13.1 – The Solvation Process

Name: _____

Question 1

For each common solution, list the *solvent* and the *solute* or *solutes*

- The air around us
- Steel
- Tears
- Everclear (≥ 120 proof liquor)

Question 2

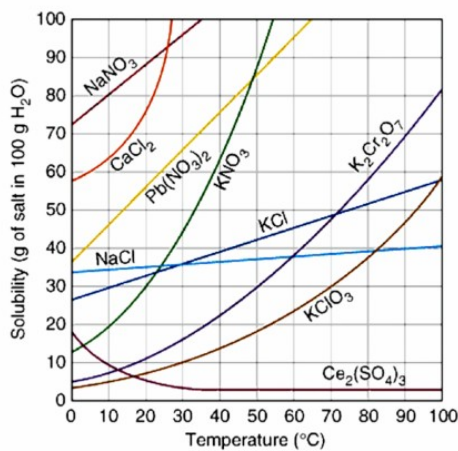
For each type of attractive force listed below, indicate whether they are *broken* or *formed* in the solvation process

Solvent-Solvent

Solvent-Solute

Solute-Solute

Question 3

Refer to the figure of solubilities below. For each condition listed, indicate whether the solution is *saturated*, *unsaturated*, or *supersaturated*

- 50g KCl in 120g H₂O at 70°C
- 12g Pb(NO₃)₂ in 75g H₂O at 20°C
- 80g NaNO₃ in 100g H₂O at 10°C
- 10g Ce₂(SO₄)₃ in 150g H₂O at 5°C
- 10g Ce₂(SO₄)₃ in 150g H₂O at 85°C

For Whom the Bell Tolls

By John Donne

No man is an island,
Entire of itself.
Each is a piece of the continent,
A part of the main.
If a clod be washed away by the sea,
Europe is the less.
As well as if a promontory were.
As well as if a manor of thine own
Or of thine friend's were.
Each man's death diminishes me,
For I am involved in mankind.
Therefore, send not to know
For whom the bell tolls,
It tolls for thee.

Streets

By Naomi Shihab Nye

A man leaves the world
and the streets he lived on
grow a little shorter.

One more window dark
in this city, the figs on his branches
will soften for birds.

If we stand quietly enough evenings
there grows a whole company of us
standing quietly together.
overhead loud grackles are claiming their trees
and the sky which sews and sews, tirelessly sewing,
drops her purple hem.
Each thing in its time, in its place,
it would be nice to think the same about people.

Some people do. They sleep completely,
waking refreshed. Others live in two worlds,
the lost and remembered.
They sleep twice, once for the one who is gone,
once for themselves. They dream thickly,
dream double, they wake from a dream
into another one, they walk the short streets
calling out names, and then they answer.