

Quiz 9.2 – Electrolyte Solutions

Name: _____

Question 1Classify each of the following compounds as a *strong* electrolyte, *weak* electrolyte, or *non*-electrolyte

- | | |
|--|---|
| <input type="radio"/> $\text{Ca}(\text{NO}_3)_2$ | <input type="radio"/> H_2CO_3 |
| <input type="radio"/> N_2 | <input type="radio"/> NH_3 |
| <input type="radio"/> HNO_3 | <input type="radio"/> $\text{C}_6\text{H}_{12}\text{O}_6$ |

Question 2

Give the molal concentration of solute particles in the following solutions:

- ☐ $0.75M \text{MgCl}_2$
- ☐ $0.25M \text{CH}_3\text{CH}_2\text{OH}$
- ☐ A solution with $0.2M \text{NaCl}$ and $0.3M \text{CHCl}_3$

Question 3Find the freezing point of an aqueous solution with $1.5M \text{MgSO}_4$. Water has a freezing point depression constant of $-1.86^\circ\text{C}/m$ **Question 4**Saline solution commonly used in medical practice is made by dissolving $9g$ of NaCl in $1L$ of solution. Find the osmotic pressure of saline solution (in atm)

Good Bones

By Maggie Smith

Life is short, though I keep this from my children.
Life is short, and I've shortened mine
in a thousand delicious, ill-advised ways,
a thousand deliciously ill-advised ways
I'll keep from my children. The world is at least
fifty percent terrible, and that's a conservative
estimate, though I keep this from my children.
For every bird there is a stone thrown at a bird.
For every loved child, a child broken, bagged,
sunk in a lake. Life is short and the world
is at least half terrible, and for every kind
stranger, there is one who would break you,
though I keep this from my children. I am trying
to sell them the world. Any decent realtor,
walking you through a real shithole, chirps on
about good bones: This place could be beautiful,
right? You could make this place beautiful.