

March 30<sup>th</sup> - April 1<sup>st</sup> Chemistry II

### Day 1

View the Solutions PowerPoint using the link below. Define the following terms in your notes:

Solute	Saturated Solution
Solvent	Unsaturated Solution
Dilute	Supersaturated Solution
Concentrated	

[https://risingsunschools-my.sharepoint.com/:p/g/person/alevi\\_risingsun\\_k12\\_in\\_us/EeNH3VcKdf9HtoqzORcIDlgBPCeaHD-3LrEjDZQGAEWgw?e=BFjA9u](https://risingsunschools-my.sharepoint.com/:p/g/person/alevi_risingsun_k12_in_us/EeNH3VcKdf9HtoqzORcIDlgBPCeaHD-3LrEjDZQGAEWgw?e=BFjA9u)

### Day 2

1. Pour two equal glasses of water. Make sure they are close to the same temperature. Add a spoonful of salt to one glass and a spoonful of sugar to the other. Stir both and see which dissolves.
2. Which one dissolves has to do with *polarity*. Polarity refers to the way atoms bond with each other. When atoms bond and exert *equal forces* on one another, the molecule is said to be *nonpolar*. When one of the atoms exerts a stronger attractive force, the molecule is said to be *polar*. When discussing solutions, polarity is important because "*like dissolves like*." This means that polar solvents dissolve polar solutes but do not dissolve nonpolar solutes. Likewise, nonpolar solvents dissolve nonpolar solutes but do not dissolve polar solutes.
3. You can determine polarity by using the electronegativity chart on the back of the periodic table. If you don't have your periodic table, I have placed an electronegativity chart below. If the difference between the elements is 0.0 to 0.39 then the substance is nonpolar. If the difference is between 0.4 and 1.7 then the substance is polar. Using water's formula of H<sub>2</sub>O, determine whether water is polar or nonpolar. Then use this info and the experiment of dissolving salt and sugar to decide the polarity of sugar and salt. **Email me the polarity of H<sub>2</sub>O, salt and sugar.**

1 H 2.1																	Decreasing ↓									
3 Li 1.0	4 Be 1.5																	5 B 2.0	6 C 2.5	7 N 3.0	8 O 3.5	9 F 4.0				
																	Increasing →									
11 Na 0.9	12 Mg 1.2																	13 Al 1.5	14 Si 1.8	15 P 2.1	16 S 2.5	17 Cl 3.0				
19 K 0.8	20 Ca 1.0	21 Sc 1.3	22 Ti 1.5	23 V 1.6	24 Cr 1.6	25 Mn 1.5	26 Fe 1.8	27 Co 1.9	28 Ni 1.9	29 Cu 1.9	30 Zn 1.6	31 Ga 1.6	32 Ge 1.8	33 As 2.0	34 Se 2.4	35 Br 2.8										
37 Rb 0.8	38 Sr 1.0	39 Y 1.2	40 Zr 1.4	41 Nb 1.6	42 Mo 1.8	43 Tc 1.9	44 Ru 2.2	45 Rh 2.2	46 Pd 2.2	47 Ag 1.9	48 Cd 1.7	49 In 1.7	50 Sn 1.8	51 Sb 1.9	52 Te 2.1	53 I 2.5										
55 Cs 0.7	56 Ba 0.9	57 La 1.1	72 Hf 1.3	73 Ta 1.5	74 W 1.7	75 Re 1.9	76 Os 2.2	77 Ir 2.2	78 Pt 2.2	79 Au 2.4	80 Hg 1.9	81 Tl 1.8	82 Pb 1.9	83 Bi 1.9	84 Po 2.0	85 At 2.2										
87 Fr 0.7	88 Ra 0.9	89 Ac 1.1															Electronegativities of the Elements									

### Day 3

1. Watch the calculating Molarity Video using the link below. Do the examples along with the video.

<https://www.teachertube.com/videos/calculating-molarity-100749>

2. Complete the online Molarity Calculation Practice using the link below.

<http://science.widener.edu/svb/tutorial/molarity.html>

3. Complete the homework on Molarity Calculations using the Microsoft Forms link below. **This is your grade for the day.**

[https://forms.office.com/Pages/ResponsePage.aspx?id=JFETTPytSUE8OyIWMO7gCPV27dZU1x5MjRaEsfQ\\_2JUNzVHUERWSldTR09ZWDFUU1BKNIE1UIFGNy4u](https://forms.office.com/Pages/ResponsePage.aspx?id=JFETTPytSUE8OyIWMO7gCPV27dZU1x5MjRaEsfQ_2JUNzVHUERWSldTR09ZWDFUU1BKNIE1UIFGNy4u)