<center>**TYPES OF pH PROBLEMS**</center>

1. *If given [H^{+1}], & you want to solve for pH, then plug into* **pH = -log [H^{+1}]**

ex. [H^{+1}] = 2.5 x 10^{-4} what is the pH?

pH = -log [2.5 x 10^{-4}]
        pH = 3.6 (acidic)

2. *If given pH and you want to find the [H^{+1}] then:*

ex. WORK BACKWARD   **$10^{(-pH)} = [H^{+1}]$**
pH = 3.6
3.6 = -log [H^{+1}]

        2.5 x 10^{-4} = [H+]

3. *If given [OH-], plug it into pOH= -log[OH-] ----just like example 1*

4. *If given pOH and you want to find the [OH-]----just like example 2*

5. **pH + pOH = 14**

NOTES:

SUBSTANCE	pH	pOH	[H+]	[OH -]
Baking soda	8.4			
Bleach			3.16×10^{-13}	
Coffee			1.0×10^{-5}	
blood				2.0×10^{-7}
Hand soap	9.5			
Juice (tomato)		10.0		
Great Salt Lake				1.0×10^{-10}
Shampoo		5.9		
Stomach acid	1.8			
Seawater		6.0		