

SCH4U Acid Base Equilibrium

Worksheet – Beginning pH Mathematics

$$\text{pH} = -\log [\text{H}^+]$$

$$\text{pOH} = -\log [\text{OH}^-]$$

$$\text{pH} + \text{pOH} = 14$$

$$[\text{H}^+] \cdot [\text{OH}^-] = 1.0 \times 10^{-14}$$

Complete the table.

$[\text{H}^+]$	$[\text{OH}^-]$	pH	pOH	Acid Or Base?
3.5×10^{-5}				
		2.4		Acid
			5.6	
	4.57×10^{-9}			
9.72×10^{-2}				
			11.3	
		11.3		Base
	1.24×10^{-2}			
		13.9		

SCH4U Acid Base Equilibrium

Worksheet – More Beginning pH Mathematics

$$\text{pH} = -\log [\text{H}^+]$$

$$\text{pOH} = -\log [\text{OH}^-]$$

$$\text{pH} + \text{pOH} = 14$$

$$[\text{H}^+] \cdot [\text{OH}^-] = 1.0 \times 10^{-14}$$

Complete the table.

[H ⁺]	[OH ⁻]	pH	pOH	Acid Or Base?
1.2×10^{-2}				
		1.4		Acid
			9.6	
	2.5×10^{-7}			
2.7×10^{-12}				
			1.0	
		4.2		
	1.24×10^{-6}			
		7.9		