

Acids & Bases Ws #4: pH and pOH

1. Calculate the pH for the following solutions
- and**
- identify as an acid or base

	Ion concentration	pH	Acid or Base
a.	$[H^+] = 6.5 \times 10^{-11}$	10.18	base
b.	$[H^+] = 3.3 \times 10^{-3}$		
c.	$[H^+] = 5.5 \times 10^{-6}$	5.26	acid
d.	$[H^+] = 5.2 \times 10^{-10}$		

2. Calculate the pH for the following solutions
- and**
- identify as an acid or base

	Ion concentration	pOH	pH	Acid or Base
a.	$[OH^-] = 3.4 \times 10^{-6}$	5.47	8.53	base
b.	$[OH^-] = 2.6 \times 10^{-4}$			
c.	$[OH^-] = 8.3 \times 10^{-8}$	7.08	6.92	acid
d.	$[OH^-] = 4.7 \times 10^{-8}$			

3. Fill in the table

	pH	Acid or Base	pOH	$[H^+]$	$[OH^-]$
a.	3.80	acid	10.20	1.6×10^{-4}	6.3×10^{-11}
b.	2.25				
c.	13.50	base	.50	3.2×10^{-14}	.32
d.	5.86				
e.	3.90	acid	10.10	1.3×10^{-4}	7.9×10^{-11}
f.	3.69				
g.	6.66	acid	7.34	2.2×10^{-7}	4.6×10^{-8}
h.	11.5				