

Part 10  
Homework

- 1) In an acidic solution, which of the following is true?  
(A)  $[H^+] > [OH^-]$  (B)  $[H^+] = [OH^-]$  (C)  $[H^+] < [OH^-]$
- 2) How about a basic or neutral solution?
- 3) Which of the following is not a strong acid.  
(A)  $H_2SO_4$ . (B)  $HCl$ . (C)  $HNO_3$  (D)  $CH_3COOH$  ( or  $HC_2H_3O_2$ )
- 4) What does amphoteric mean?
- 5) Give two examples of an amphoteric substance.
- 6) Give an example of an acidic pH?
- 7) Give an example of a basic pH?
- 8) Give an example of a neutral pH?
- 9) Please complete the following table. Report all concentrations to at least 3 significant figures. Report pH and pOH to the hundredth's place.

	$[H_3O^+]$ (M)	pH	$[OH^-]$	pOH
<b>0.000100 M NaOH</b>			0.0001 M or $1.00 \times 10^{-4}$ M	
<b>1.00 M lactic acid</b>		<b>1.93</b>		

Please complete the following table. The pHs should be reported to the hundredths place and concentrations should be reported to 3 significant figures and in scientific notation where appropriate.

	$[H^+]$ or $[H_3O^+]$	pH	$[OH^-]$	pOH
<b>0.00830 M HCl</b>	0.00830 M			
<b>0.200 M <math>NH_3</math></b>		<b>11.27</b>		

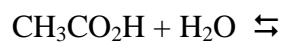
- 10) What are the products of the following reactions?



Which way does the equilibrium lie?                     



Which way does the equilibrium lie? \_\_\_\_\_



Equilibrium lies to the right or left? \_\_\_\_\_



Equilibrium lies to the right or left? \_\_\_\_\_