


Acid-Base Packet


Name _____ Per ____ Date _____

1. An acid gives off _____ ion when dissolved in aqueous solution.
2. A base gives off the _____ ion when dissolved in aqueous solution.
3. Draw and label the pH scale acids, bases, and neutral.



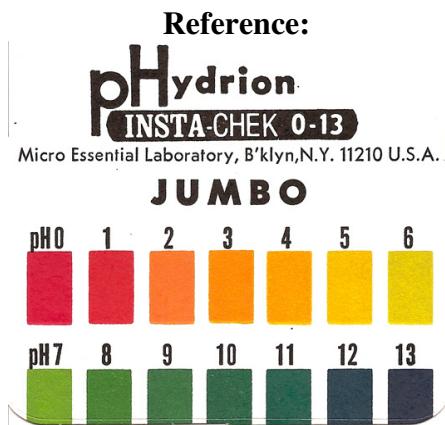
4. What is the difference between a strong acid and a weak acid?
5. What is the difference between a strong base and a weak base?
6. An aqueous solution of an acid/base causes the conductivity tester to shine very bright. What can be said about this solution?
7. An aqueous solution of an acid/base causes the conductivity tester to dimly shine (you can barely tell it is lit). What can be said about this solution?
8. An aqueous solution of an acid does not light the conductivity tester. What can be said about this solution?
9. What is an indicator?
10. What color does litmus paper turn when a base touches it?
11. What color does litmus paper turn when an acid touches it?

12. You test the a pH paper, and it is this color:  What is the pH this solution? _____

13. You test the a pH paper, and it is this color:  What is the pH this solution? _____

14. Pure (distilled) water should have a pH of _____.

15. The “strength” or “weakness” of an acid or base is related to the percentage of ions that dissociate in solution. There are only a few specific “Strong acids” and “Strong Bases.” A strong acid or a strong base typically has 100% dissociation (all the particles dissolve into ions) in aqueous solution. Harness the power of the internet to make a list of Strong Acids and Strong Bases. Other acids/bases not on the list are weak.



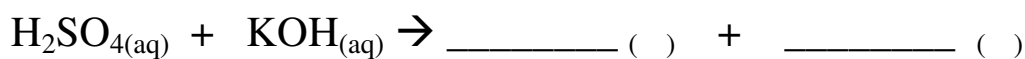
Strong Acids		
	Formula	Name
1.		
2.		
3.		
4.		
5.		
6.		

Strong Bases		
	Formula	Name
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

16. Any time an acid and a base are mixed together, you get a _____ reaction.

17. A _____ reaction (# 16) always forms a _____ and _____.

18. Complete the reactions between an acid and a base:



ACID, BASE OR SALT

Name _____

Classify each of the following compounds as an acid, base or salt. Then, indicate whether each acid and base is strong or weak.

1. HNO_3 _____
2. NaOH _____
3. NaNO_3 _____
4. HCl _____
5. KCl _____
6. $\text{Ba}(\text{OH})_2$ _____
7. KOH _____
8. H_2S _____
9. $\text{Al}(\text{NO}_3)_3$ _____
10. H_2SO_4 _____
11. CaCl_2 _____
12. H_3PO_4 _____
13. Na_2SO_4 _____
14. $\text{Mg}(\text{OH})_2$ _____
15. H_2CO_3 _____
16. NH_4OH _____
17. NH_4Cl _____
18. HBr _____
19. FeBr_3 _____
20. HF _____