

NEUTRALIZATION AND HYDROLYSIS WORKSHEET

Salt solutions may be acidic, basic or neutral depending on the original acid and base that formed the salt.

strong acid + strong base → neutral salt
strong acid + weak base → acidic salt
weak acid + strong base → basic salt

A weak acid and a weak base will produce any type of solution depending upon the relative strengths of the acid and base involved.

Complete the table below for each of the following salts.

SALT	PARENT ACID	PARENT BASE	TYPE OF SOLUTION acidic, basic, neutral
1. KCl			
2. NH_4NO_3			
3. Na_3PO_4			
4. CaSO_4			
5. AlBr_3			
6. CuI_2			
7. MgF_2			
8. NaNO_3			
9. $\text{LiC}_2\text{H}_3\text{O}_2$			
10. ZnCl_2			
11. SrSO_4			
12. $\text{Ba}_3(\text{PO}_4)_2$			

- Acid + Base → _____ + _____
- Write a balanced equation for the following
 - $\text{HCl} + \text{NaOH} \rightarrow$ _____
 - $\text{H}_2\text{SO}_4 + \text{KOH} \rightarrow$ _____
 - $\text{HNO}_2 + \text{LiOH} \rightarrow$ _____
- In the above reactions, label the strong and weak acids and bases.
- In the above reactions, label the salts as acidic, basic or neutral.