



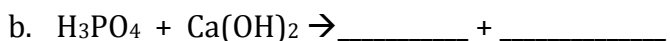
Neutralization Practice - Supplemental Worksheet

1. A salt is produced in the reaction between an _____ and a _____. A salt is a(n) _____ compound in which the anion is neither _____ nor _____.

2. Identify the salts among the following compounds:

CaO, HClO₄, Na₂SO₄, NH₃, CH₄, CH₃NH₂, Ba(OH)₂, H₂C₂O₄, H₂O₂, K₂O,
NH₄Cl, Fe(OH)₃, C₆H₆, HOCN, Li₃PO₃.

3. Write down the products of the following neutralization reactions, balance the equations and name the salts:





4. What volume of a 0.025 M lithium hydroxide solution, LiOH , is needed to react completely with 75 mL of a 0.50 M nitric acid solution, HNO_3 ? Do not forget to write a balanced chemical equation!

5. What volume of a 0.025 M calcium hydroxide, Ca(OH)_2 , solution is needed to completely neutralize 75 mL of a 0.50 M perchloric acid solution, HClO_4 ?

6. A 10. mL sample of 0.20 M chloric acid solution is required to neutralize 20. mL of sodium hydroxide solution, NaOH .
 - a. What is the molarity of the sodium hydroxide solution?

 - b. What is the molarity of the salt that forms?

7. A 10. mL sample of 0.20 M hydrochloric acid solution is required to neutralize 20. mL of barium hydroxide, Ba(OH)_2 .
 - a. What is the molarity of the barium hydroxide solution?

 - b. What is the molarity of the salt that forms?

8. We use 625. mL of a sodium hydroxide, NaOH , solution to completely neutralize 4.50 grams of phosphoric acid.
 - a. What is the molarity of the NaOH solution?

 - b. What are the name and the mass of the salt that forms?

9. What volume of 0.405 M KOH solution is needed to react completely with 2.15 g of copper (II) sulfate, CuSO_4 ? The products of the chemical reaction are copper (II) hydroxide and potassium sulfate.