Tutorial_0010

1. Write a balanced chemical equation for the reaction which occurs when NaOH and H_3PO_4 are mixed.

2. Write a balanced chemical equation for the reaction which occurs when $Ca(OH)_2$ and HBr are mixed.

3. How many grams of solid NaOH is needed to neutralize 2.5 mL of 0.10 M HCl solution?

4. a) What is the pH of 0.50 M HCl solution?

   b) What is the pH of 0.1 M NaOH solution?

5. What is the pH of 0.030 M $Al(OH)_2$ solution?

6. What is the molarity of a KOH solution if 20.9 mL of his solution is neutralized by 10.00 mL of 0.1005 M HCl solution?

7. The pH of blood is about 7.35. Calculate the hydrogen ion and hydroxide ion concentration in blood.

8. Some commercial antacid tablets contain $Al(OH)_3$. How many grams of stomach acid, HCl, can be neutralized by a tablet which contains 0.15 g of $Al(OH)_3$.

9. Write the net ionic equation to the acid base reaction in (8.).

10. Fill in the blanks.

Symbol	Charge	Mass number, A	Atomic number, Z	# of electrons	# of neutrons
	0			9	
Na	0				
	0		13		
Cl	1-				
	0	12			6
Mg	2+				