

HOME WORK 7
CHAPTER 7

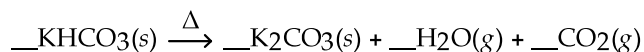
Name _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) Which of the following is evidence for a chemical reaction? 1) _____
- A) A flame is observed.
 - B) A precipitate is formed.
 - C) A gas is detected.
 - D) all of the above
 - E) none of the above

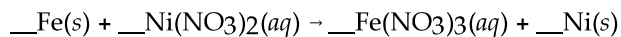
- 2) Which of the following elements occurs naturally as diatomic molecules? 2) _____
- A) fluorine gas
 - B) iodine vapor
 - C) chlorine gas
 - D) all of the above
 - E) none of the above

- 3) What is the coefficient of carbon dioxide after balancing the following equation? 3) _____



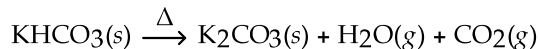
- A) 1
- B) 3
- C) 4
- D) 2
- E) none of the above

- 4) What is the coefficient of nickel metal after balancing the following equation? 4) _____



- A) 4
- B) 2
- C) 1
- D) 3
- E) none of the above

- 5) What type of chemical reaction is illustrated in the following example? 5) _____



- A) double-replacement reaction
- B) single-replacement reaction
- C) combination reaction
- D) decomposition reaction
- E) neutralization reaction

- 6) What type of chemical reaction is illustrated in the following example? 6) _____

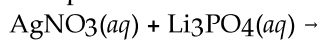
$$\text{AlCl}_3(aq) + \text{AgNO}_3(aq) \rightarrow \text{Al}(\text{NO}_3)_3(aq) + \text{AgCl}(s)$$
 A) double-replacement reaction
 B) combination reaction
 C) decomposition reaction
 D) neutralization reaction
 E) single-replacement reaction
- 7) What is the predicted product from the following combination reaction? 7) _____

$$\text{K}(s) + \text{Cl}_2(g) \xrightarrow{\Delta}$$
 A) KCl_2 B) K_2Cl C) K_3Cl D) KCl E) KCl_3
- 8) Which of the following metals does *not* react with aqueous $\text{Ni}(\text{NO}_3)_2$? 8) _____
 Partial Activity Series: $\text{Mg} > \text{Al} > \text{Ni} > (\text{H}) > \text{Cu}$
 A) Cu
 B) Al
 C) Mg
 D) all of the above
 E) none of the above
- 9) Which of the following metals reacts with sulfuric acid? 9) _____
 A) Cd
 B) Cu
 C) Ag
 D) all of the above
 E) none of the above
- 10) What are the products from the following single-replacement reaction? 10) _____

$$\text{Zn}(s) + \text{CuSO}_4(aq) \rightarrow$$
 A) CuO and ZnSO_3
 B) CuO and ZnSO_4
 C) no reaction
 D) Cu and ZnSO_4
 E) Cu and ZnSO_3
- 11) What are the products from the following single-replacement reaction? 11) _____

$$\text{Mg}(s) + \text{H}_2\text{SO}_4(aq) \rightarrow$$
 A) no reaction
 B) MgO and H_2S
 C) MgSO_4 and H_2
 D) MgO and H_2SO_3
 E) MgSO_4 and H_2O
- 12) Which of the following solid compounds is soluble in water? 12) _____
 A) NiCO_3 B) $\text{Ba}(\text{OH})_2$ C) Ag_3PO_4 D) CuS E) PbCrO_4

13) What are the products from the following double-replacement reaction? 13) _____

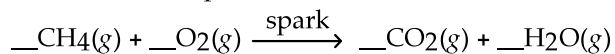


- A) Ag_3PO_3 and LiNO_2
- B) Ag_3PO_4 and LiNO_3
- C) Ag_3P and LiNO_3
- D) Ag_3PO_4 and LiNO_2
- E) Ag_3PO_3 and LiNO_3

14) What are the products from the complete neutralization of phosphoric acid with aqueous lithium hydroxide? 14) _____

- A) $\text{Li}_2\text{PO}_4(aq)$ and $\text{H}_2\text{O}(l)$
- B) $\text{Li}_3\text{PO}_4(aq)$ and $\text{H}_2\text{O}(l)$
- C) $\text{LiHPO}_4(aq)$ and $\text{H}_2\text{O}(l)$
- D) $\text{LiH}_2\text{PO}_4(aq)$ and $\text{H}_2\text{O}(l)$
- E) $\text{Li}_2\text{HPO}_4(aq)$ and $\text{H}_2\text{O}(l)$

15) Methane, CH_4 , can be used as fuel in an automobile to reduce pollution. What is the coefficient of oxygen in the balanced equation for the reaction? 15) _____



- A) 1
- B) 4
- C) 2
- D) 3
- E) none of the above