

Write CORRECT FORMULAS AND BALANCE EACH OF THE FOLLOWING:

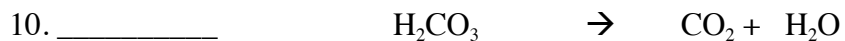
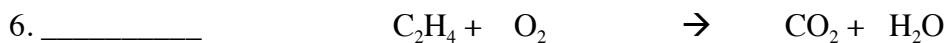
1. Zinc + Aluminum chloride yields zinc chloride + Aluminum

2. Aluminum nitrate + sodium hydroxide yields sodium nitrate + aluminum hydroxide

3. Aluminum + iodine yields aluminum iodide

4. Calcium nitrate + sodium phosphate yields sodium nitrate + calcium phosphate

Identify the type of reaction for each of the following: (Synthesis, Decomposition, Combustion, Single Replacement, or Double Replacement)



11. _____ $\text{Mg} + \text{O}_2 \rightarrow \text{MgO}$
12. _____ $\text{H}_2 + \text{Cl}_2 \rightarrow \text{HCl}$
13. _____ $\text{BaO} + \text{H}_2\text{O} \rightarrow \text{Ba(OH)}_2$
14. _____ $\text{Ca} + \text{H}_2\text{O} \rightarrow \text{Ca(OH)}_2 + \text{H}_2$
15. _____ $\text{KI} + \text{Br}_2 \rightarrow \text{KBr} + \text{I}_2$
16. _____ $\text{AgNO}_3 + \text{NaCl} \rightarrow \text{AgCl} + \text{NaNO}_3$
17. _____ $\text{FeS} + \text{HCl} \rightarrow \text{FeCl}_2 + \text{H}_2\text{S}$
18. _____ $\text{H}_2\text{SO}_4 + \text{KOH} \rightarrow \text{H}_2\text{O} + \text{K}_2\text{SO}_4$
19. _____ $\text{C}_3\text{H}_8 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$
20. _____ $\text{Zn} + \text{HCl} \rightarrow \text{ZnCl}_2 + \text{H}_2$

Determine the number of grams in one mole of each of the following:

21. potassium chlorate _____ Is it made of atoms, molecules or formula units?
22. Aluminum oxide _____ Is it made of atoms, molecules or formula units?
23. Methane (CH_4) _____ Is it made of atoms, molecules or formula units?
24. Lead _____ Is it made of atoms, molecules or formula units?
25. Carbon Monoxide _____ Is it made of atoms, molecules or formula units?
26. How many pieces are in one mole of each of the above?