

Balance these reactions

1. ____ CaCO_3 \rightarrow ____ CaO + ____ CO_2
2. ____ N_2 + ____ H_2 \rightarrow ____ NH_3
3. ____ NH_4NO_3 \rightarrow ____ N_2O + ____ H_2O
4. ____ $\text{Cu}(\text{NO}_3)_2$ \rightarrow ____ CuO + ____ NO_2 + ____ O_2
5. ____ H_3PO_3 \rightarrow ____ H_3PO_4 + ____ PH_3
6. ____ KClO_3 \rightarrow ____ KCl + ____ KClO_4
7. ____ TiCl_4 + ____ H_2O \rightarrow ____ TiO_2 + ____ HCl
8. ____ H_2 + ____ Br_2 \rightarrow ____ HBr
9. ____ $\text{C}_6\text{H}_{12}\text{O}_6$ \rightarrow ____ $\text{C}_2\text{H}_5\text{OH}$ + ____ CO_2

Write equations for these and balance them

10. Phosphorus trichloride and chlorine gas react to produce phosphorus pentachloride
11. Solid Antimony reacts with oxygen gas to produce Tetraantimony hexaoxide
12. Solid carbon is heated in the presence of oxygen to produce carbon monoxide
13. Water vapor reacts with potassium metal to produce hydrogen gas and potassium hydroxide
14. Magnesium carbonate is heated to drive off carbon dioxide and produce magnesium oxide.
15. Propane gas, C_3H_8 , burns in the presence of oxygen forming carbon dioxide and water
16. Sulfurous acid forms when sulfur dioxide reacts with water
17. Zinc metal reacts with sulfuric acid to produce zinc sulfate and hydrogen gas
18. Calcium phosphate reacts with solid carbon to produce calcium phosphide and carbon monoxide