



Classifying Reactions and Balancing Chemical Equations

 The type of chemical reaction (synthesis, decomposition, single displacement, or double displacement)

1. Balance the skeletal equation: $\text{___ Cu} + \text{___ O}_2 \rightarrow \text{___ CuO}$

 Reaction type: _____

2. Balance the skeletal equation: $\text{___ H}_2\text{O} \rightarrow \text{___ O}_2 + \text{___ H}_2$

 Reaction type: _____

3. Balance the skeletal equation: $\text{___ Fe} + \text{___ H}_2\text{O} \rightarrow \text{___ Fe}_2\text{O}_3 + \text{___ H}_2$

 Reaction type: _____

4. Balance the skeletal equation: $\text{___ H}_2\text{S} + \text{___ AsCl}_3 \rightarrow \text{___ As}_2\text{S}_3 + \text{___ HCl}$

 Reaction type: _____

5. Balance the skeletal equation: $\text{___ CaCO}_3 \rightarrow \text{___ CO}_2 + \text{___ CaO}$

 Reaction type: _____

6. Balance the skeletal equation: $\text{___ H}_2\text{S} + \text{___ KOH} \rightarrow \text{___ K}_2\text{S} + \text{___ HOH}$

 Reaction type: _____

7. Balance the skeletal equation: $\text{___ S}_8 + \text{___ Fe} \rightarrow \text{___ FeS}$

 Reaction type: _____

8. Balance the skeletal equation: $\text{___ H}_2\text{SO}_4 + \text{___ Al} \rightarrow \text{___ Al}_2(\text{SO}_4)_3 + \text{___ H}_2$

 Reaction type: _____

9. Balance the skeletal equation: $\text{___ H}_3\text{PO}_4 + \text{___ NH}_4\text{OH} \rightarrow \text{___ (NH}_4)_3\text{PO}_4 + \text{___ HOH}$

 Reaction type: _____

10. Balance the skeletal equation: $__ \text{O}_2 + __ \text{Al} \rightarrow __ \text{Al}_2\text{O}_3$

 Reaction type: _____

11. Balance the skeletal equation: $__ \text{H}_2\text{SO}_4 + __ \text{Al}(\text{OH})_3 \rightarrow __ \text{Al}_2(\text{SO}_4)_3 + __ \text{HOH}$

 Reaction type: _____

12. Balance the skeletal equation: $__ \text{Cl}_2 + __ \text{KBr} \rightarrow __ \text{KCl} + __ \text{Br}_2$

 Reaction type: _____

13. Balance the skeletal equation: $__ \text{Ca} + __ \text{HOH} \rightarrow __ \text{Ca}(\text{OH})_2 + __ \text{H}_2$

 Reaction type: _____

14. Balance the skeletal equation: $__ \text{H}_2\text{O}_2 \rightarrow __ \text{O}_2 + __ \text{H}_2\text{O}$

 Reaction type: _____

15. Balance the skeletal equation: $__ \text{Na} + __ \text{Cl}_2 \rightarrow __ \text{NaCl}$

 Reaction type: _____

16. Balance the skeletal equation: $__ \text{Zn} + __ \text{Pb}(\text{NO}_3)_2 \rightarrow __ \text{Zn}(\text{NO}_3)_2 + __ \text{Pb}$

 Reaction type: _____

17. Balance the skeletal equation: $__ \text{NaI} + __ \text{Pb}(\text{NO}_3)_2 \rightarrow __ \text{NaNO}_3 + __ \text{PbI}_2$

 Reaction type: _____

18. Balance the skeletal equation: $__ \text{P}_4 + __ \text{O}_2 \rightarrow __ \text{P}_2\text{O}_5$

 Reaction type: _____

19. Balance the skeletal equation: $__ \text{NH}_4\text{NO}_3 \rightarrow __ \text{H}_2\text{O} + __ \text{N}_2\text{O}$

 Reaction type: _____

20. Balance the skeletal equation: $__ \text{CaI}_2 + __ \text{AgNO}_3 \rightarrow __ \text{Ca}(\text{NO}_3)_2 + __ \text{AgI}$

 Reaction type: _____