1. $Mg(s) + 2 HCl(aq) \leftrightarrow MgCl_2(aq) + H_2(g)$ 6. $H_2(g) + I_2(g) \leftrightarrow 2 HI(g)$ What type of reaction is shown above? A) synthesis A) synthesis B) decomposition B) decomposition C) single replacement C) single replacement D) double replacement D) double replacement 7. 2. $Ba(NO_3)_2(aq) + Na_2SO_4(aq) \rightarrow$ $2 \text{ NaNO}_3(aq) + BaSO_4(s)$ A) synthesis B) decomposition What type of reaction is shown above? C) single replacement A) synthesis D) double replacement B) decomposition 8. C) single replacement D) double replacement 3. $N_2(g) + 3 H_2(g) \leftrightarrow 2 NH_3(g)$ A) synthesis What type of reaction is shown above? B) decomposition A) synthesis C) single replacement B) decomposition D) double replacement C) single replacement D) double replacement 4. $2 \operatorname{CO}(g) + \operatorname{O}_2(g) \leftrightarrow 2 \operatorname{CO}_2(g)$ A) synthesis B) decomposition What type of reaction is shown above? C) single replacement A) synthesis D) double replacement B) decomposition 10. C) single replacement D) double replacement 5. $2 \operatorname{SO}_3(g) \leftrightarrow 2 \operatorname{SO}_2(g) + \operatorname{O}_2(g)$ A) synthesis) B) decomposition C) single replacement What type of reaction is shown above? D) double replacement A) synthesis

- B) decomposition
- C) single replacement
- D) double replacement

What type of reaction is shown above?

 $2 \text{ NH}_3(g) \leftrightarrow \text{N}_2(g) + 3 \text{ H}_2(g)$

What type of reaction is shown above?

 $Cu(s) + 2 HCl(aq) \leftrightarrow CuCl_2(aq) + H_2(g)$

What type of reaction is shown above?

9. In which type of reaction do two or more substances combine to produce a single substance?

 $2 \operatorname{SO}_2(g) + \operatorname{O}_2(g) \leftrightarrow 2 \operatorname{SO}_3(g)$

What type of reaction is shown above?

11. $F_2(g) + CaBr_2(g) = CaF_2(g) + Br_2(g)$	17. Given the word equation:
What type of reaction is shown above?	sodium chlorate \rightarrow sodium chloride + oxygen
A) synthesisB) decompositionC) single replacement	Which type of chemical reaction is represented by this equation?
D) double replacement 12. $2 \operatorname{CO}(g) + \operatorname{O}_2(g) \leftrightarrow 2 \operatorname{CO}_2(g)$	 A) double replacement B) single replacement C) decomposition D) synthesis 18. In which type of chemical reaction do two or more reactants combine to form one product, only? A) synthesis B) decomposition C) single replacement
What type of reaction is shown above?	
 B) decomposition C) single replacement D) double replacement 	
reactions?	D) double replacement
A) decomposition, single replacement, and solidificationB) decomposition, single replacement, and double	19. Given the balanced equations representing two chemical reactions: $Cl_2 + 2NaBr \rightarrow 2NaCl + Br_2$
replacement C) solidification, double replacement, and decomposition	$2\mathrm{NaCl} \rightarrow 2\mathrm{Na} + \mathrm{Cl}_2$
 D) solidification, double replacement, and single replacement 	Which type of chemical reactions are represented by these equations?
 14. Which equation represents a single replacement reaction? A) ^{2H₂O₂ → ^{2H₂O + O₂}} 	 A) single replacement and decomposition B) single replacement and double replacement C) synthesis and decomposition D) synthesis and double replacement
B) $2H_2 + O_2 \rightarrow 2H_2O$ 20C) $H_2SO_4 + Mg \rightarrow H_2 + MgSO_4$ 20. Given th reaction:D) $HCl + KOH \rightarrow KCl + H_2O$ 20. Given th reaction:	20. Given the balanced equation representing a reaction:
15. Which change results in the formation of different substances?	$\rm Zn(s) + \rm H_2SO_4(aq) \rightarrow \rm ZnSO_4(aq) + \rm H_2(g)$
A) burning of propaneB) melting of NaCl(s)	Which type of reaction is represented by this equation?
C) deposition of CO₂(g)D) solidification of water	A) decompositionB) double replacement
16. Which terms identify types of chemical reactions?	C) single replacementD) synthesis
A) decomposition and sublimationB) decomposition and synthesis	

- C) deposition and sublimation
- D) deposition and synthesis

- 21. Which balanced equation represents a single-replacement reaction?
 A) Mg + 2AgNO₃ → Mg(NO₃)₂ + 2Ag
 B) 2Mg + O₂ → 2MgO
 C) MgCO₃ → MgO + CO₂
 D) MgCl₂ + 2AgNO₃ → 2AgCl + Mg(NO₃)₂
 22. Which equation represents a decomposition reaction?
 A) CaCO₃(s) → CaO(s) + CO₂(g)
 B) Cu(s) + 2AgNO₃(aq) → 2Ag(s) + Cu(NO₃)₂(aq)
 C) 2H₂(g) + O₂(g) → 2H₂O(l)
 D) KOH(aq) + HCl(aq) → KCl(aq) + H₂O(l)
- 23. Given the balanced equation representing a reaction:

- A) double replacement
- B) single replacement
- C) substitution
- D) synthesis
- 24. Given the balanced equation:

 $2KClO_3 \rightarrow 2KCl + 3O_2$

Which type of reaction is represented by this equation?

- A) synthesis
- B) decomposition
- C) single replacement
- D) double replacement
- 25. Given the balanced equation:

 $AgNO_{3}(aq) + NaCl(aq) \rightarrow NaNO_{3}(aq) + AgCl(s)$

This reaction is classified as

- A) synthesis
- B) decomposition
- C) single replacement
- D) double replacement

26. Given the reaction:

$$Mg(s) + 2 AgNO_3(aq) \rightarrow Mg(NO_3)_2(aq) + 2 Ag(s)$$

Which type of reaction is represented?

- A) single replacement
- B) double replacement
- C) synthesis
- D) decomposition
- 27. Which term identifies a type of chemical reaction?
 - A) decomposition B) distillation
 - C) sublimation D) vaporization
- 28. Given the balanced equation representing a reaction:

 $6\mathrm{Li} + \mathrm{N}_2 \rightarrow 2\mathrm{Li}_3\mathrm{N}$

Which type of chemical reaction is represented by this equation?

- A) synthesis
- B) decomposition
- C) single replacement
- D) double replacement