

Instructions for Completing Retest Assignment

1. You have been given the correct answers; however, you should go through and answer the questions as though you do not in order to see which items you need help with during tutoring.
2. You must write 1-2 sentences per question explaining why the answer is what it is. This must be done on your own paper.
3. You should come to tutoring to ask questions about any of the questions you do not understand. Attending tutoring is not required, but strongly encouraged.
4. This assignment is due on the day of the retest and must be completed before you will be allowed to take the retest.
5. Retest date is _____ in room _____ from 2:30-3:30pm.

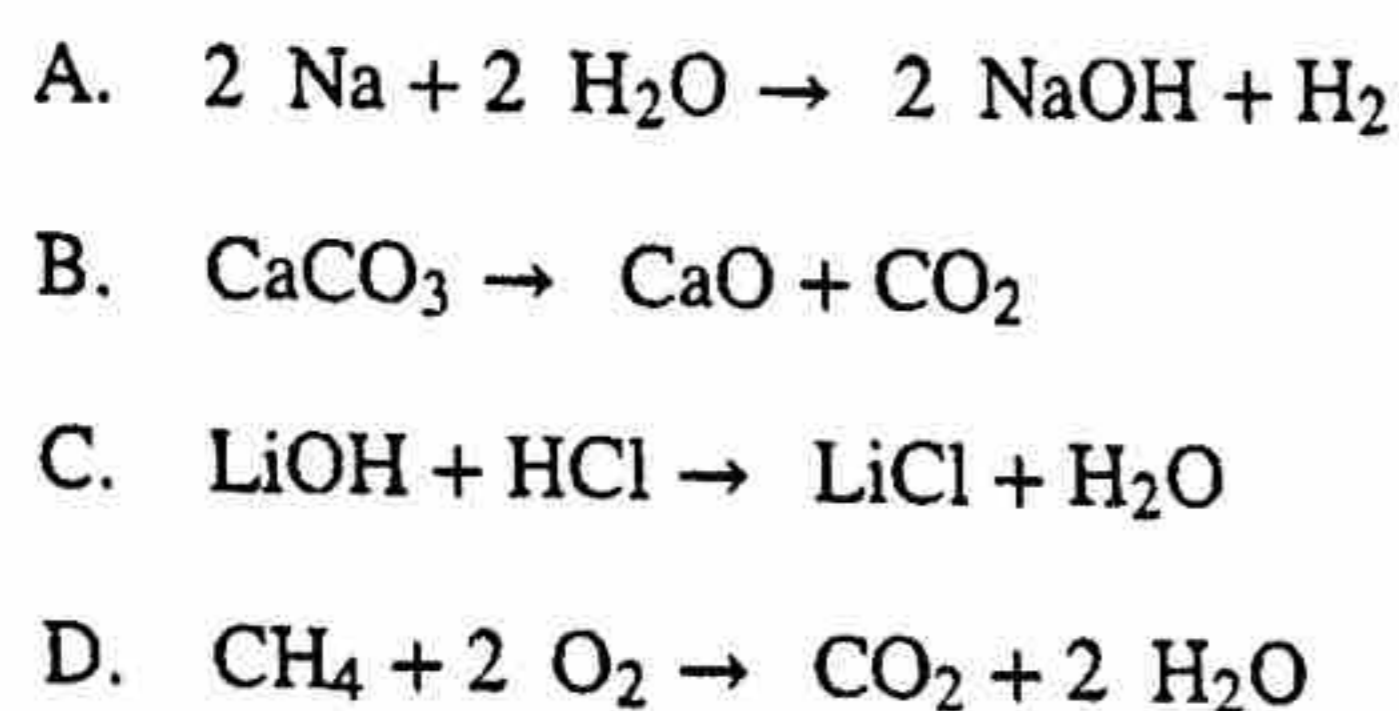
Questions I have and need to ask about:

Chemical Reactions Retest Assignment

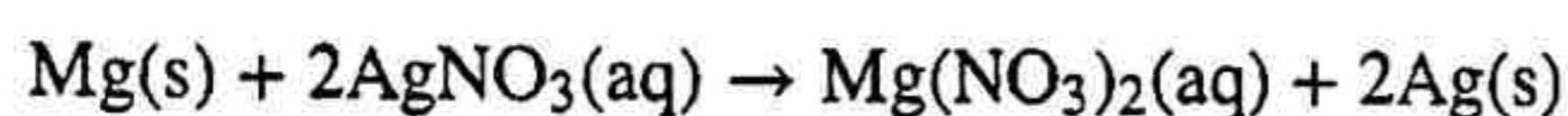
Name: _____

Date: _____

1. Which equation represents a double replacement reaction?



2. Given the reaction:



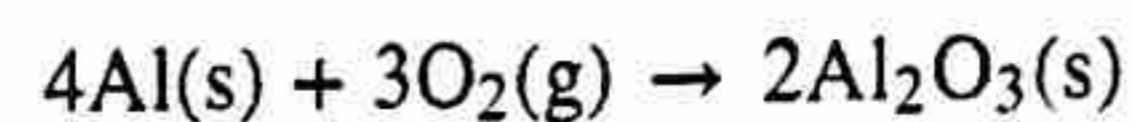
Which type of reaction is represented?

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

3. Which process represents a chemical change?

- A. melting of ice
B. corrosion of copper
C. evaporation of water
D. crystallization of sugar

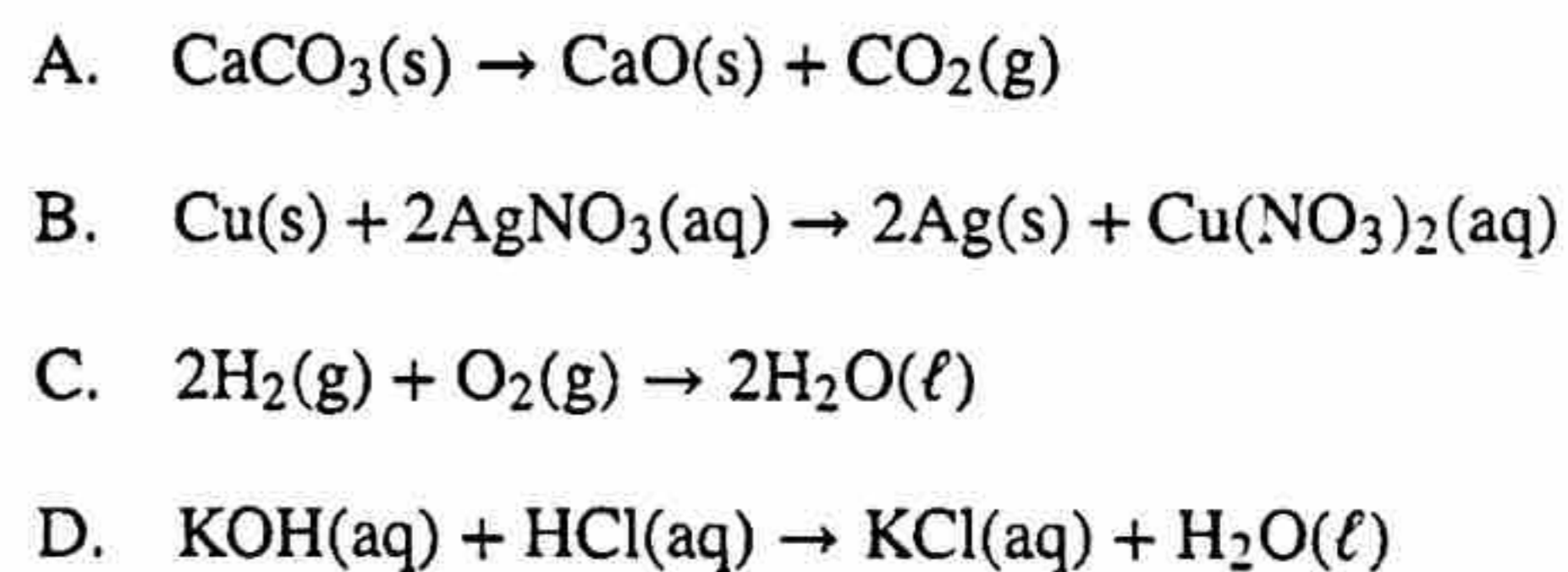
4. Given the balanced equation representing a reaction:



Which type of chemical reaction is represented by this equation?

- A. double replacement B. single replacement
C. substitution D. synthesis

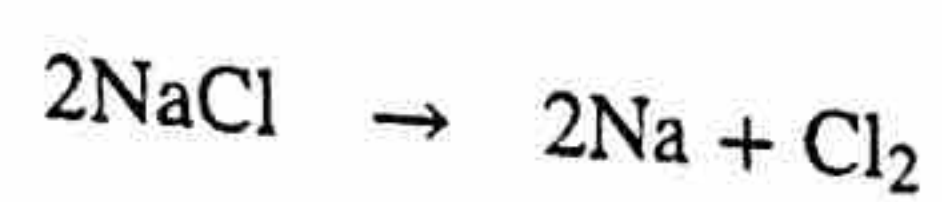
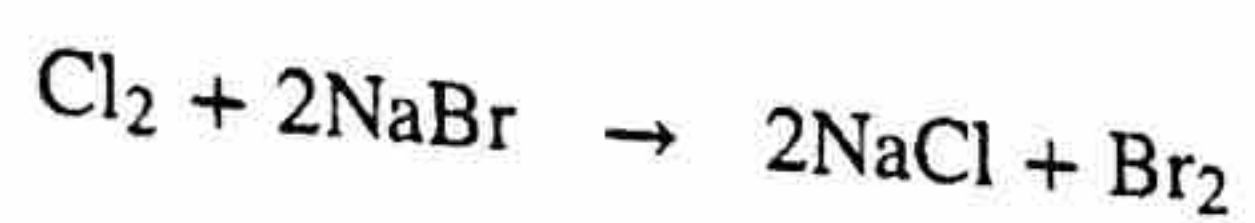
5. Which equation represents a decomposition reaction?



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

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

7. Given the balanced equations representing two chemical reactions:



Which types of chemical reactions are represented by these equations?

- A. single replacement and decomposition
- B. single replacement and double replacement
- C. synthesis and decomposition
- D. synthesis and double replacement

8. Given the word equation:

sodium chlorate \rightarrow sodium chloride + oxygen

Which type of chemical reaction is represented by this equation?

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

9. Which is an example of a chemical reaction?

- A. nails rusting
- B. glass melting
- C. sugar dissolving
- D. alcohol vaporizing

10. $\text{C}_3\text{H}_8 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$

This chemical equation represents the combustion of propane. When correctly balanced, the coefficient for water is

- A. 2.
- B. 4.
- C. 8.
- D. 16.

11. Hydrazine, N_2H_4 , and dinitrogen tetroxide, N_2O_4 , react to form gaseous nitrogen and water. Which of these represents a properly balanced equation for this reaction?

- A. $\text{N}_2\text{H}_4 + \text{N}_2\text{O}_4 \rightarrow \text{N}_2 + \text{H}_2\text{O}$
- B. $2\text{N}_2\text{H}_4 + \text{N}_2\text{O}_4 \rightarrow 2\text{N}_2 + 4\text{H}_2\text{O}$
- C. $2\text{N}_2\text{H}_4 + \text{N}_2\text{O}_4 \rightarrow 3\text{N}_2 + 4\text{H}_2\text{O}$
- D. $2\text{N}_2\text{H}_4 + 3\text{N}_2\text{O}_4 \rightarrow 5\text{N}_2 + 6\text{H}_2\text{O}$

12. $\underline{\hspace{1cm}} \text{NH}_3(\text{g}) + \underline{\hspace{1cm}} \text{O}_2(\text{g}) \rightarrow$
 $\underline{\hspace{1cm}} \text{N}_2(\text{g}) + \underline{\hspace{1cm}} \text{H}_2\text{O}(\text{g})$

When the reaction above is completely balanced, the coefficient for NH_3 will be

- A. 2.
- B. 3.
- C. 4.
- D. 6.

13. In the reaction of solid zinc with hydrochloric acid (HCl), the products of hydrogen gas and aqueous zinc chloride are produced.

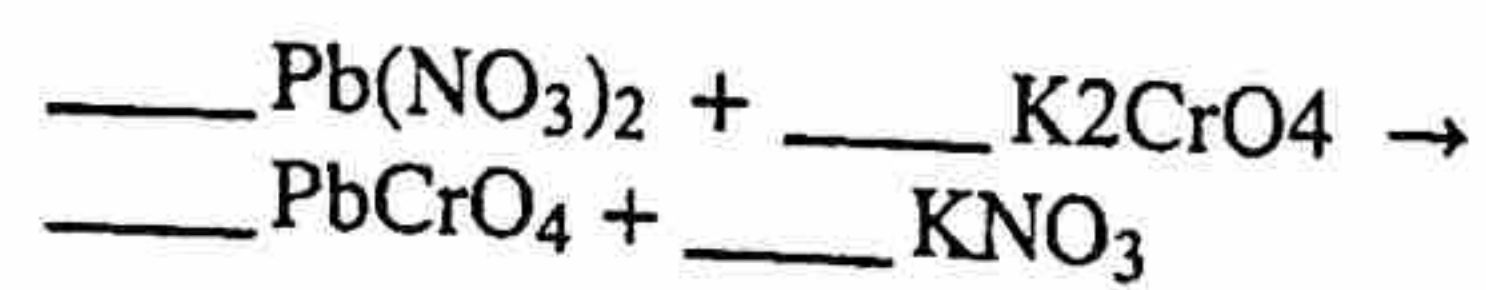
Which of these is the balanced equation from the reaction?

- A. $\text{Zn(s)} + \text{HCl(aq)} \rightarrow \text{ZnCl}_2\text{(aq)} + \text{H(g)}$
B. $2\text{Zn(s)} + 4\text{HCl(aq)} \rightarrow \text{Zn}_2\text{Cl}_4\text{(aq)} + \text{H}_2\text{(g)}$
C. $\text{Zn(s)} + 2\text{HCl(aq)} \rightarrow \text{ZnCl}_2\text{(aq)} + \text{H}_2\text{(g)}$
D. $\text{Zn}_2\text{(s)} + \text{HCl(aq)} \rightarrow 2\text{ZnCl(aq)} + \text{H}_2\text{(g)}$

14. A balanced chemical equation reflects the idea that the mass of the products

- A. is greater than the mass of the reactants.
B. is less than the mass of the reactants.
C. equals the mass of the reactants.
D. is not related to the mass of the reactants.

15. An unbalanced chemical equation is shown below.



Which coefficients are needed to balance this equation?

- A. 2, 4, 4, 6
B. 2, 4, 4, 3
C. 1, 1, 1, 2
D. 1, 6, 6, 2

16. What products are formed when the metal potassium is added to water?

- A. K and H_2O B. KOH and H_2O
C. K_2O and H_2 D. KOH and H_2

17. When Na_2O reacts with H_2O , what is produced?

- A. HNaO_2 B. $\text{Na} + \text{H}_2\text{O}$
C. $\text{NaO} + \text{H}_2$ D. NaOH

18. Consider this incomplete chemical equation:



What are the products of this equation?

- A. BaCl_2 and CuCl_2 B. BaCuCl_2 and Ba
C. BaCl_2 and Cu D. BaCu and Cl_2

19. Which pair of substances will likely undergo a single replacement reaction?

- A. Na and BaCl_2 B. Zn and BaCl_2
C. Ca and BaCl_2 D. K and BaCl_2

20. What is the net ionic equation for the reaction between aqueous solutions of LiBr and AgNO₃?

- A. $\text{Ag}^+(\text{aq}) + \text{Br}^-(\text{aq}) \rightarrow \text{AgBr}(\text{s})$
- B. $\text{Li}^+(\text{aq}) + \text{NO}_3^-(\text{aq}) \rightarrow \text{LiNO}_3(\text{s})$
- C. $\text{Li}^+(\text{aq}) + \text{Br}^-(\text{aq}) \rightarrow \text{LiBr}(\text{s})$
- D. $\text{Ag}^+(\text{aq}) + \text{NO}_3^-(\text{aq}) \rightarrow \text{AgNO}_3(\text{s})$

21. When aluminum and sulfur react, which compound is produced?

- A. Al₂S₃
- B. Al₃S₂
- C. AlS₂
- D. AlS

22. Which action demonstrates a chemical change?

- A. Long hair is cut and dried.
- B. A wooden pencil is sharpened and breaks.
- C. An ice cube melts and becomes a clear liquid.
- D. An iron nail becomes orange and flaky on the surface.

23. When methane (CH₄) is burned in the presence of oxygen (O₂), the two chemicals react together in a process called combustion.

Which of these compounds could be a possible product of this combustion reaction?

- A. NH₃
- B. SO₂
- C. H₂O
- D. CS₂

Chemical Reactions Retest Assignment 3/8/2018

1.
Answer: C
2.
Answer: A
3.
Answer: B
4.
Answer: D
5.
Answer: A
6.
Answer: A
7.
Answer: A
8.
Answer: C
9.
Answer: A
10.
Answer: B
11.
Answer: C
12.
Answer: A
13.
Answer: C
14.
Answer: C
15.
Answer: C
16.
Answer: D
17.
Answer: D
18.
Answer: C
19.
Answer: D
20.
Answer: A

21.
Answer: A
22.
Answer: D
23.
Answer: C