

Classifying and Balancing Equations

Multiple Choice

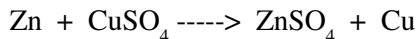
Name _____

Date _____

Per _____

PRACTICE TEST

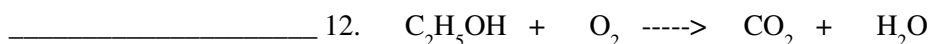
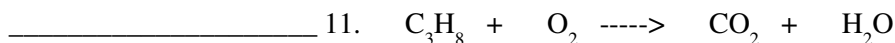
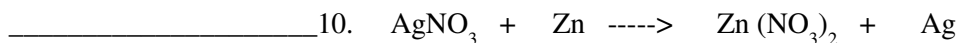
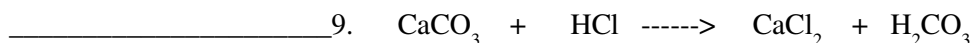
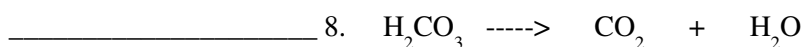
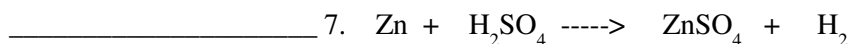
- _____ 1. A chemical reaction is a process in which
a. products change into reactants c. substances can change state
b. the law of conservation of mass applies d. all of these
- _____ 2. During a chemical reaction,
a. new elements are produced c. atoms are destroyed
b. atoms are rearranged d. elements are destroyed
- _____ 3. An equation is balanced by
a. changing subscripts c. erasing elements as necessary
b. adding coefficients d. adding elements as necessary
- _____ 4. An atom's ability to undergo chemical reactions is determined by its
a. protons b. innermost electrons c. neutrons d. valence electrons
- _____ 5. What are the reactants in the following chemical equation:



- a. zinc and copper c. zinc and copper (II) sulfate
b. zinc sulfate and copper d. only zinc
- _____ 6. What are the products in the above equation?
a. zinc and copper c. zinc and copper (II) sulfate
b. zinc sulfate and copper d. only zinc

Short Answer

For questions 7-12, classify the reaction according to the type it is. Put that answer in the blank. Then add coefficients to balance the reaction when necessary.



Write a balanced equation for each of the following reactions:

13. Magnesium chloride is the product of a reaction between magnesium and chlorine.

14. Copper (II) hydroxide and potassium sulfate are produced when potassium hydroxide reacts with copper (II) sulfate.

Unit 6 Practice Test – Key

1. b
2. b
3. b
4. d
5. c

6. B
7. Single replacement 1,1,1,1
8. Decomposition 1,1,1
9. Double replacement 1,2,1,1-
CaCO_{3(s)} is ppt (see Ref.Table)
10. Single replacement 2,1,1,2

11. Combustion 1, 5, 3, 4
12. Combustion 1,3,2,3
13. Mg + Cl₂ -> MgCl₂ 1,1,1
14. KOH + CuSO₄ -> Cu(OH)₂ + K₂SO₄ 2,1,1,1

