

Name:

Reaction Types Reading Questions

1. When is an equation balanced?
2. Explain why an unbalanced equation disobeys the law of conservation of mass.
3. What does $4\text{H}_2\text{O}$ tell you about the number of molecules and the total number of atoms of each element?
4. What is the mole ratio of C_5H_{12} to H_2 in the following reaction? $\text{C}_5\text{H}_{12} \rightarrow \text{C}_5\text{H}_8 + 2\text{H}_2$
5. What is a mole ratio?
6. What does classifying reactions allow you to do?
7. How are decomposition reactions related to synthesis reactions?

8. When water reacts with potassium, what type of reaction is this?

9. What is a combustion reaction?

10. What are the products of a combustion reaction?

11. What factor is dependent upon the completion of a full combustion reaction?

12. Provide an example of a:
 - a. Synthesis

 - b. Decomposition

 - c. Single-displacement

 - d. Double-displacement

 - e. Combustion

13. Substances in a fire extinguisher help prevent air from reaching a burning material. Why would this be a good way to fight a fire?