

Name _____ Date _____ Class _____

CHAPTER 3 STUDY GUIDE FOR CONTENT MASTERY

Section 3.2 Changes in Matter

In your textbook, read about *physical change and chemical change*.

What kinds of changes do these words indicate? Write each word under the correct heading. Use each word only once.

boil	crumple	crush	explode
burn	ferment	freeze	grind
condense	melt	oxidize	rot
corrode	rust	tarnish	vaporize

Physical Change	Chemical Change
1. <u>boil</u>	9. <u>explode</u>
2. <u>freeze</u>	10. <u>rust</u>
3. <u>condense</u>	11. <u>oxidize</u>
4. <u>vaporize</u>	12. <u>corrode</u>
5. <u>melt</u>	13. <u>tarnish</u>
6. <u>grind</u>	14. <u>ferment</u>
7. <u>crumple</u>	15. <u>burn</u>
8. <u>crush</u>	16. <u>rot</u>

For each item in Column A, write the letter of the matching item in Column B.

Column A	Column B
c. 17. The new substances that are formed in a chemical reaction	a. chemical change
a. 18. A chemical reaction that involves one or more substances changing into new substances	b. reactants
d. 19. Shows the relationship between the reactants and products in a chemical reaction	c. products
e. 20. States that mass is neither created nor destroyed during a chemical reaction	d. chemical equation
b. 21. The starting substances in a chemical reaction	e. law of conservation of mass

Answer the following question. Write an equation showing conservation of mass of reactants and products.

22. In a laboratory, 178.8 g of water is separated into hydrogen gas and oxygen gas. The hydrogen gas has a mass of 20.0 g. What is the mass of the oxygen gas produced?

