Name _____ Date _____

E.13.2
Study Guide A

How Does Matter Change?

Main Idea Changes in matter can be classified as physical changes or chemical changes. A chemical change involves a change in the identity of the matter, whereas a physical change does not.

Fill in the blanks with words from the box below. You may use some words more than once.

chemical bond	chemical reaction	physical change
catalyst	chemical change	mass

1. A(n) _____ is a change in the size, shape, or state of matter with no new matter being formed. (page E52)

2. A(n) _____ is a change in matter that results in new substances being formed. (page E53)

3. A chemical change involves breaking a(n) _____ that holds atoms or molecules together and forming new bonds. (page A53)

4. A(n) _____ is a specific example of one or more chemical changes. (page E53)

5. A change in color sometimes indicates a(n) _____. (page E53)

6. A(n) _____ may also give off energy in the form of heat or light. (page E53)

7. A(n) _____ increases the rate of a chemical reaction. (page E55)

8. When matter changes, _____ is always conserved, meaning that it is neither created nor destroyed. (page E56)

Name _____ Date _____

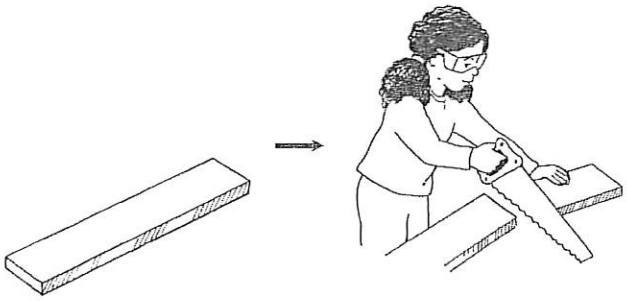
E.13.2
Study Guide A

How Does Matter Change?

Write *true* if the statement is true and *false* if the statement is false.

_____ **9.** New matter forms in a physical change. (page E52)

_____ **10.** The illustration below shows a physical change. (page E52)



_____ **11.** Chemical bonds are broken and new ones are formed during a chemical change. (page E53)

_____ **12.** A chemical change may give off heat or light, or involve a color change. (page E53)

_____ **13.** Sugar dissolved in water is an example of a chemical change. (page E54)

_____ **14.** Lowering the temperature will speed up a chemical reaction. (page E55)

_____ **15.** Regardless of the kind of change taking place in a sample of matter, the amount of matter stays the same.