Brainpop—Conservation of Mass

Name:

Period:

Watch the Brainpop on the conservation of mass, then answer the questions below.

_____ 1. In science, what is a law?

a. a rule telling you what you are permitted to do

b. a generalization about how the physical universe works

c. a legal document that describes how to behave

_____ 2. The law of conservation of mass says…?

a. substances can neither be **built** nor **torn down**

b. substances can neither be **blended together** nor **separated**

c. substances can neither be **created** nor **destroyed**

d. substances can neither be **condensed** nor **extracted**

_____ 3. What is true about a substance with a lot of mass?

a. it contains a lot of matter

b. it has a large volume

c. it has a high density

_____ 4. Sodium and chlorine combine to form sodium chloride (table salt). What role do the sodium and the chlorine have?

a. a role as producers

b. a role as products

c. a role as reactionaries

d. a role as reactants

_____ 5. When sodium and chlorine combine to form sodium chloride, what do we call the sodium chloride?

a. an originator

b. a reactant

c. a product

d. produce

_____ 6. What do 4 grams of hydrogen and 32 grams of oxygen form when they combine?

a. 36 grams of water

b. 28 grams of hydroxide

c. 32 grams of oxygen

_____ 7. In a chemical reaction, 4 grams of sodium must combine with how many grams of chlorine to produce 10 grams of table salt?

a. 4 grams

b. 6 grams

c. 8 grams

d. 10 grams

Determine if the statement is true or false. If false, replace the word in **bold** with the correct word on the line. If true, write "true" on the line. Possible word choices are provided below:

mass products

1. _____ The **WEIGHT** of an object is the same throughout the universe.

2. _____ In a recipe, ingredients would have the same job as **REACTANTS**.

Imagine that you weigh an unbroken egg in a bowl on top of a scale. You then drop the egg into the bowl on the scale so it breaks open, destroying the shell. Would you now expect the scale to read less than the unbroken egg, the same, or more than the unbroken egg? Explain your answer.

Work: 5 points, Assessment: 3 points