## Law of Conservation of Mass/Physical and Chemical Changes



## Use the picture to the left to answer \#1-4

1. What are the reactants?
2. What are the products?
3. In the above picture, how many Oxygen (O) ATOMS are in the reactants? $\qquad$ products $\qquad$ ?
4. In the above picture, how many Hydrogen (H) ATOMS are in the reactants? $\qquad$ products $\qquad$ ?
5. If six carbon atoms react with water to form sugar, how many carbon atoms are in the products? $\qquad$
6. The formula for the reaction of NaCl and $\mathrm{AgNO}_{3}$ is: $\mathrm{NaCl}+\mathrm{AgNO}_{3} \rightarrow \mathrm{NaNO}_{3}+\mathrm{AgCl}$

What are the reactants? What are the products?
7. The chemical equation for Elephant's Toothpaste is:

$$
2 \mathrm{H}_{2} \mathrm{O}_{2} \rightarrow 2 \mathrm{H}_{2} \mathrm{O}+\mathrm{O}_{2}
$$

a. What are the reactants in this reaction?
b. What are the products in this reaction?
8. Draw examples of 5 KEYS to identify a chemical change (you can find these in your notes).

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|  |  |  |  |  |

Identify the following as a Physical or Chemical Change. Put a P for Physical \& a C for Chemical.

| Example | P for Phusical OR C for Chemical | Example | P for Phusical OR C for Chemical |
| :---: | :---: | :---: | :---: |
| butter melts in a microwave |  | powders react to heat a hand-warmer |  |
|  |  | rust forms on an old tool left outside |  |
|  |  |  |  |
|  |  | food scraps decompose |  |
|  <br> meat is cooked in an oven |  | water boils in a pan on the stove |  |
|  |  | an Alka-Seltzer tablet makes gas bubbles whenit reacts |  |
|  |  | swimming pool water evaporates |  |

