

Study Guide: Chemical Reactions and Groups of the Periodic Table 2016 Test

A **precipitate** is a formation of a solid during a chemical reaction.

The number of atoms in a compound is written as a **subscript**.

In the equation $KF + NaCl \rightarrow KNa + ClK$, the reactants are **KF + NaCl**

Alkali metals are metals that are so reactive that in nature they are found only combined with other elements.

Elements whose atoms are radioactive are **actinides-rare earth**.

Transition metals are nonmetals that do not react with other elements under normal conditions.

Metals that have two outer-level electrons are **alkaline-earth metals**.

Halogens are very reactive nonmetals.

Metals in Groups 3-12 that do not give away their electrons as easily as atoms of Groups 1 and 2 are **transition metals**.

Rusting is not a clue that a chemical reaction has taken place.

In the formula H_2O there is **one** oxygen atom.

There are **twelve** oxygen atoms present in the reactant in this chemical equation $4Fe + 6O_2 \rightarrow 2Fe_2O_6$

The **law of conservation of mass** states that mass cannot be created or destroyed in a chemical reaction.

H₂O is the product in this chemical formula $H_2 + O_2 \rightarrow H_2O$

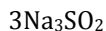
The symbol for carbon is C. The symbol for hydrogen is H. The symbol for oxygen is O. The formula for glucose is $C_6H_{12}O_6$. There are **twelve** hydrogen atoms in one molecule of glucose.

A magnesium chloride molecule 1 magnesium (Mg) atom and 2 chlorine (Cl) atoms. In the formula $MgCl_2$ there are **two** atoms of chlorine.

When H_2O freezes it is a **physical change**.

When a new substance is formed with different properties it describes a **chemical change**.

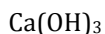
How many atoms are shown below (Show your work)



$$Na = 3 \times 3 = 9$$

$$S = 3$$

$$O = 3 \times 2 = 6$$



$$Ca = 1$$

$$O = 3$$

$$H = 3$$

Circle the reactants and **box** the products for the following equations.

