



Name -----	Gr. / 7	Subject/ Science	Worksheet#3
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Unit4: Lesson:1
Chemical Reaction
Textbook Pgs. (212 - 223)

Lesson Vocabulary

Chemical reaction	is the process in which atoms are rearranged to produce new substances.
Chemical formula	is the use of chemical symbols and numbers to represent a given substances.
Chemical equation	is an expression that uses symbols to show the relationship between the starting substances and the substances that are produced by a chemical reaction.
Exothermal reaction	is a chemical reaction that released energy to the surroundings.
Endothermal reaction	is a chemical reaction that requires energy.
Law of conservation of energy	states that energy cannot be created or destroyed, however energy can change form.

Law of conservation of mass	states that matter is neither created or destroyed in ordinary chemical and physical changes.
Reactant	are the substances that participate in a chemical reaction.
Products	are substances formed in a reaction.

Q1. Choose the correct answer.

1- The subscript in the chemical formula H_2O tells you there are two.....

- a. atoms of hydrogen in the molecule
- b. electrons on the hydrogen atom
- c. atoms of oxygen in the molecule

2- How many oxygen atoms are contained in the formula $2CO_2$?

- a. two oxygen atoms
- b. four oxygen atoms
- c. six oxygen atoms

3- When we use chemical symbol and numbers to represent a given substance. This is called.....

- a. chemical reaction
- b. chemical formula
- c. chemical equation

4- Which of the following will not increase the rate of a reaction?

- a. adding a catalyst
- b. increasing the temperature of the reaction
- c. decreasing the concentration of the reactants

Q2. Complete the following sentences.

1-is a chemical reaction where energy is released to the surroundings.

2- Photosynthesis is an example of an.....reaction.

3- The.....states that matter is neither destroyed nor created in ordinary chemical or physical changes.

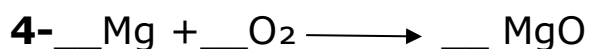
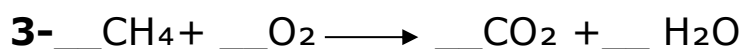
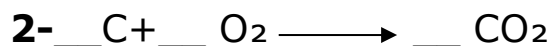
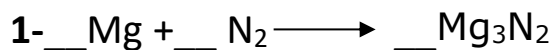
4-are substances that participate in a chemical reaction.

Q3. Compare between the following.

1- Endothermic and exothermic reaction. Give example.

Endothermic reaction	Exothermic reaction
.....
.....
.....
.....

Q4. Balance the following reactions by writing in the correct coefficient(s).



Q5. Answer the following questions.

a. Describe the four ways you could increase the rate of a chemical reaction.

1.
2.
3.
4.

b. What is the name of the elements in each of the following molecules, and how many atoms of each element are present in each one?

1. H_2O

.....
.....

2. CO_2

.....
.....

3. $\text{C}_6\text{H}_{12}\text{O}_6$

.....
.....