CLIL Module: Chemical Reactions

Unit 2: Chemical Reaction

Lesson 1: Elements, Compounds & Chemical Equation

Lesson Objectives:

- to understand the difference between an element and a compound
- to be aware of the difference between an atom and a molecule
- to understand what a chemical equation represents
- to know the meaning of the symbols present in a chemical equation

Key Vocabulary:

element - compound - to break down - to split into - to consist of - chemical bond - means - reaction - reactants - products - arrow - to occur - to yield - chemical formula - skim through

Task 1: ***Match the opposites.***

to release	to be inert
to light	base
to react	to absorb
to heat	condensation
empty	to put out
pure substance	freezing
acid	full
vaporisation	decomposition
melting	to cool
synthesis	mixture

Task 2: ***Choose the correct option to complete each statement.***

1) A substance which can NOT be split into other simpler substances is:
   a. a liquid
   b. a compound
   c. an element
   d. a solid

2) The smallest particle conserving the chemical properties of an element is:
   a. an atom
   b. a molecule
   c. a compound
   d. a mixture

3) A compound is:
   a. a substance which breaks down by means of physical processes
   b. a mixture of elements of constant composition
   c. a substance which breaks down using chemical means
   d. a substance with no homogeneous properties

4) Which of the following substances is an element?
   a. water
   b. salt
   c. methane
   d. sodium

Task 3: Skim through the questions on your worksheet, then watch the video. When it is over, discuss and agree with your group mates upon the possible answers to the questions. Write them down.

https://www.khanacademy.org/science/biology/chemistry--of-life/chemical-bonds-and-reactions/v/chemical-reactions-introduction

a) How many reactants are present in the reaction? How many products?

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b) Can you name the chemical elements which are present in the molecules of the reactants? What about the elements present in the molecules of the product?

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c) What happens, during the chemical reaction, to the two molecules of hydrogen and to the one of oxygen?

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d) At a certain point, the author mentioned and showed the space shuttle. Why?

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Space for Notes and New Vocabulary:

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