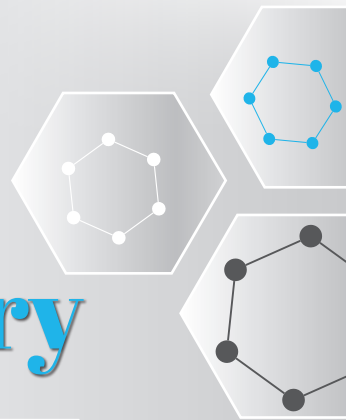


CLIL LESSON

cenario

02

chemistry



Erasmus+

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TASK

1

READ THE TEXT AND ANSWER THE QUESTIONS IN THE QUIZ. COUNT YOUR POINTS

Science matters

Most of the universe consists of matter. All matter is composed of basic elements. Elements are substances consisting of one type of an atom. For example pure gold is composed of one type of an atom, gold atoms. When different types of atoms join together they form a compound. For example water is a compound made up of the oxygen atom and the hydrogen atoms. Atoms are the smallest particles into which an element can be divided. Each atom has protons (with a positive charge), neutrons (with a neutral charge) and electrons (with a negative charge). When atoms share electrons they form a chemical bond. In the middle of an atom there is a nucleus surrounded by shells. Electrons move around the nucleus. The last shell is called a valence shell.

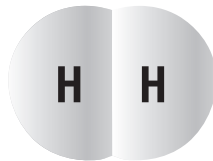
The Quiz

- 1 When atoms of one type join together they form:
 - a) a neutron
 - b) charge
 - c) an element
 - d) a compound
- 2 Two or more different atoms bond together to create a/an:
 - a) nucleus
 - b) element
 - c) compound
 - d) proton
- 3 One example of a compound is:
 - a) gold
 - b) carbon
 - c) water
 - d) oxygen
- 4 Atoms are made up of protons, neutrons and...
 - a) electrons
 - b) nucleus
 - c) matter
 - d) shell
- 5 Neutrons have a charge.
 - a) powerful
 - b) positive
 - c) negative
 - d) neutral
- 6 Electrons move around the of an atom.
 - a) neutrons
 - b) protons
 - c) nucleus
 - d) shells

TASK
2

DECIDE
WHETHER THE FOLLOWING
PICTURES REPRESENT AN ELEMENT
OR A COMPOUND

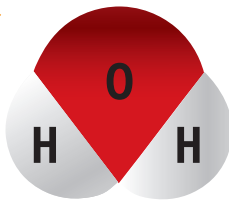
1



element

compound

2



element

compound

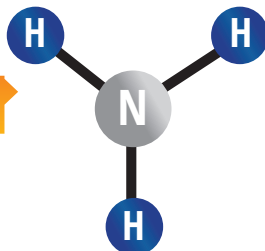
3



element

compound

4



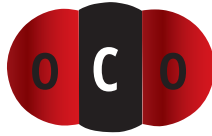
element

compound

TASK
2

DECIDE
WHETHER THE FOLLOWING
PICTURES REPRESENT AN ELEMENT
OR A COMPOUND

1



element

compound

2



element

compound

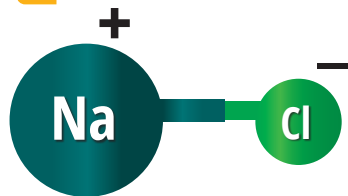
3



element

compound

4



element

compound

TASK

3

CLASSIFY THE FOLLOWING
SUBSTANCES INTO ELEMENTS
AND COMPOUNDS:

H_2O , Cl_2 , H_2 , SO_2 , HBr , O_2 , $HClO_4$

1

Elements:

.....

2

Compounds:

.....

TASK

4

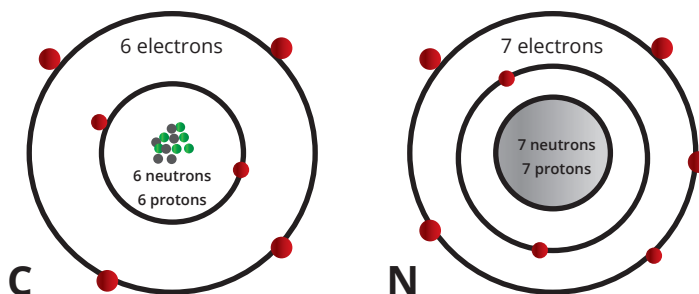
MATCH THE NAMES OF THE ELEMENTS
AND COMPOUNDS TO THEIR FORMULAE

hydrogen oxide	O_2	hydrogen bromide	H_2O
chlorine	N_2	carbon IV oxide	Cl_2
sulphur IV oxide	CO_2	iodine	SO_2
oxygen	$MgCl_2$	magnesium chloride	HBr
nitrogen	H_2CO_3	carbonic acid	I_2

TASK
5

THE TEACHER PREPARES
A SET OF CARDS WITH MODELS
OF DIFFERENT ELEMENTS

Example:



- 1** Tell the students that they are going to work in pairs and draw models of atoms in their notebook.
- 2** Give each student one card but ask them not to show it to each other.
- 3** Their task is to listen to a friend and draw a model according to his/her suggestions.
*It has got 6 neutrons and 6 protons in the nucleus.
It has got 2 shells. On the first shell it has got 2 electrons and on the second shell it has got 4 electrons.*
- 4** Having finished their drawings the students look at the periodic tables and define the name of the element in the picture.
- 5** The students show the cards to each other and check if they guessed correctly.