



UNITED NATIONS SCHOOL I.E.D.

PEI: COMPREHENSIVE TRAINING OF COMPETENT ENTREPRENEURIAL LEADERS, WITH DEMOCRATIC, TECHNOLOGICAL, CULTURAL AND SPORTS PRINCIPLES

MOTTO: "EDUCATION, SCIENCE, CULTURE AND SPORT TO TRANSCEND"

PREPARATION WORKSHOP FOR THE THIRD PERIOD

CHEMISTRY

EIGHTH GRADE

TEACHER HEISEL QUESADA

The preparation workshop must be carried out in the Chemistry notebook as a requirement to take the competency test

Delivery date: november 8

ASK QUESTIONS 1 TO 5 ACCORDING TO THE FOLLOWING INFORMATION

Students observe the following information in a book, related to the reactions of some elements with hydrogen and oxygen.

Reactivo 1	Reactivo 2	Producto
H ₂	Metal	Hidruro
H ₂	No metal	Acido hidrácido
O ₂	Metal	Oxido básico
O ₂	No metal	Oxido ácido

They reacted 4 elements with oxygen and with only 2 of them they obtained a basic oxide; They then conducted the following experiments.

Experimento 1	Experimento 2
<p>Tomaron una muestra de cada uno de los cuatro elementos y lo pusieron entre los extremos <i>A</i> y <i>B</i> del circuito.</p>	<p>Los estudiantes observaron los cuatro <u>elementos</u> y determinaron si son brillantes o no.</p>

The results obtained in the two previous experiments are shown below

Elemento	Experimento 1	Experimento 2
	El bombillo	Brillo
1	Enciende	Sí
2	No enciende	Sí
3	No enciende	No
4	Enciende	Sí

1. According to the information, which of the elements are metals and allow a basic oxide to be obtained? Write the training equation
2. According to the information, which of the elements are non-metals and allow a hydrocid acid to be obtained? Write the training equation
3. Explain why the light bulb turns on or not in each case
4. Check the properties of: metals, non-metals, basic oxides, hydroacid acids and hydrides
5. Make a concept map with all the inorganic functions

ANSWER QUESTIONS 6 TO 10 ACCORDING TO THE FOLLOWING INFORMATION

$$2\text{H}_2 + \text{C} \rightarrow \text{CH}_4$$

Sustancia	Masa molar (g/mol)
C	12,0
H	1,0
CH ₄	16,0

6. Consult the law of conservation of matter, who nominated it, their biography and explain if the equation of information complies with this law and why
7. Calculate the molecular weights of each of the substances in the equation
8. Pose and solve 5 exercises seen in class regarding conversion factors with the information given
9. Consult the physicochemical properties of the substances in the table
10. Make the following conversions
 - a. 50g C to moles and molecules
 - b. 8 moles of CH₄ to grams and molecules
 - c. 45 molecules from H to grams and moles