

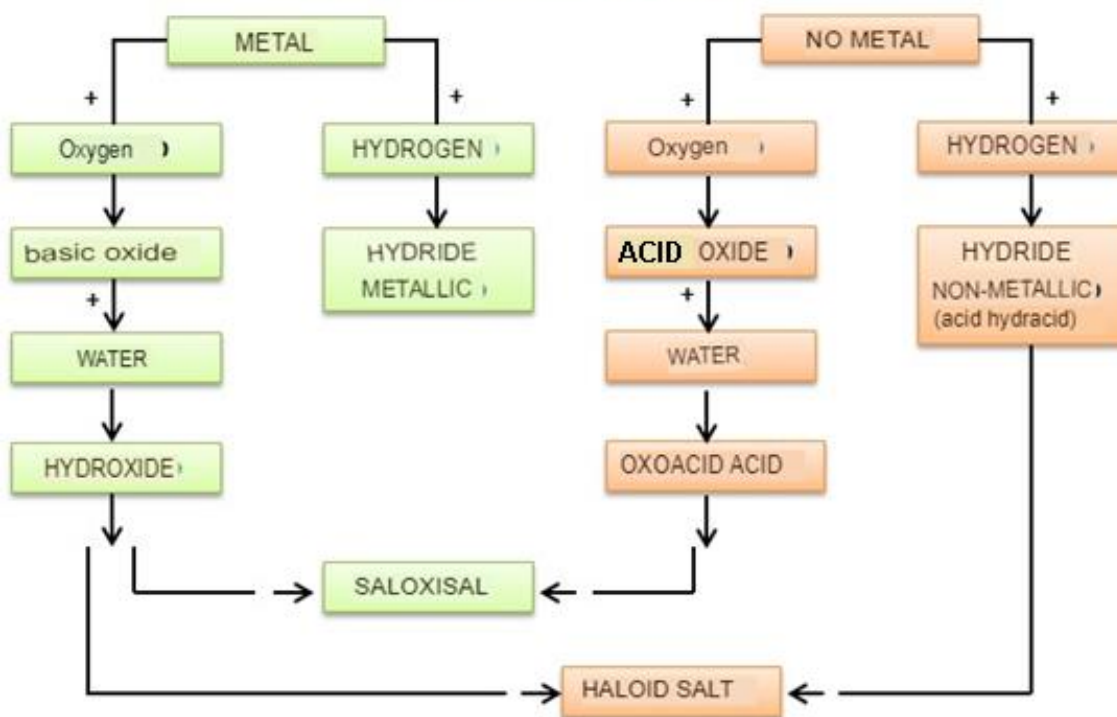


UNITED NATIONS SCHOOL I.E.D.
PEI: COMPREHENSIVE TRAINING OF COMPETENT ENTREPRENEURIAL LEADERS, WITH
DEMOCRATIC, TECHNOLOGICAL, CULTURAL AND SPORTS PRINCIPLES
MOTTO: "EDUCATION, SCIENCE, CULTURE AND SPORT TO TRANSCEND"

PREPARATION WORKSHOP FOR THE FIRST PERIOD
CHEMISTRY
NINETH 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: April 1

INORGANIC CHEMICAL FUNCTIONS



- Describe the formative reaction to Hidroxide
 - Basic oxide
 - Salt oxisal
 - Oxoacid acid
 - Haloid salt
- Complete the following reactions, write the name of the inorganic function for each reactant and product
 - $\text{NaOH} + \text{HCl} \rightarrow \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$
 - $\underline{\hspace{2cm}} + \underline{\hspace{2cm}} \rightarrow \text{H}_2\text{TeO}_3$
 - $\text{Ca} + \text{O}_2 \rightarrow \underline{\hspace{2cm}}$
 - $\underline{\hspace{2cm}} + \underline{\hspace{2cm}} \rightarrow \text{BeCl}_2 + \underline{\hspace{2cm}}$
 - $\underline{\hspace{2cm}} + \underline{\hspace{2cm}} \rightarrow \text{Ni}(\text{OH})_3$

3. Line join columns as appropriate

HIO ₃	hidroxiide
MgO	acid oxide
Tc(OH) ₇	haloid salt
Cl ₂ O ₅	basic oxide
H ₂ S	oxacid acid
RaBr ₂	hidracid acid
Th(NO ₃) ₄	oxisal salt

4. Write true or false at the front of each of the following statements. If the claim is false, write it correctly

- A hydroxide cannot be formed from an acid oxide
- The formation of salts always has water as a product
- Oxacid acids are formed from a basic oxide and water
- Water is needed to form hydroxides
- Chlorine is metal and scandium is non-metal

5. Replace the metal with the Eu element and the non-metal with the Br element in the concept map. Performs all the reactions of the inorganic functions

Acid rain is mainly formed due to the presence of sulfur oxides (SO₂ and SO₃) and nitrogen oxides (NO_x) in the atmosphere. These compounds are mainly generated by human activities such as the burning of fossil fuels in industries, power plants, and vehicles.

When sulfur-containing coal, oil, or natural gas is burned, the sulfur combines with oxygen in the air to form sulfur dioxide (SO₂). In the atmosphere, sulfur dioxide can be further oxidized to form sulfur trioxide

Nitrogen oxides are mainly formed during high-temperature combustion in vehicle engines and industrial processes.

Once in the atmosphere, sulfur dioxide (SO₂) and sulfur trioxide (SO₃), as well as nitrogen dioxide (NO₂), react with water (H₂O) and oxygen (O₂) to form sulfuric acid (H₂SO₄) and nitric acid (HNO₃), respectively

- Make a proposal for the reactions of formation of the oxides and acids mentioned in the Reading
- What is the environmental consequence of the formation of sulfuric acid and nitric acid in the atmosphere, according to the reading?
- What are the main human activities responsible for the emission of sulphur oxides and nitrogen oxides? How could they be mitigated?
- It depicts the formation of acid rain through a drawing
- Give 5 preventive actions to prevent acid rain from forming