LEARNING AS ONE NATION

Expanded Project

GC1 Q1_9

SHS LEARNING ACTIVITY

Name: _____ **Score/Mark:** _____

Grade and Section: _____ **Date:** _____

Strand: ☑ STEM ☐ ABM ☐ HUMSS ☐ ICT (*TVL Track*)

Subject: *General Chemistry 1*

Type of Activity: ☑ Concept Notes ☐ Skills: Exercise/Drill ☐ Illustration ☐ Performance Task ☐ Essay/Report ☐ Others: _____

Activity Title: **A-07. Common Anions**

Learning Target: To familiarize with the most typical anions
To name anions

References: *(Author, Title, Pages)*
Chang, Chemistry 10th ed., pp. 60–61
Petrucci, Chemistry 10th ed., pp. 88-91
V. Sojo, J. Sadudaquil, and M.D.A.D. Cadeliña, CVIF-DLP Learning Activities

We can recall that anions are the result of an atom gaining one or more electron/s. Thus, they are negatively charged. Below are the guidelines in naming anions:

1. Monatomic (containing one atom) anions are named by adding –ide to the root of the element's name.

F^-	fluoride	Cl^-	chloride	N^{3-}	nitride

There are also polyatomic (more than one atom) anions with names ending in –ide.

OH^-	hydroxide	O_2^{2-}	peroxide	CN^-	cyanide

2. Oxyanions (oxygen-containing polyatomic anion) have names ending in –ate or –ite.

SO_4^{2-}	sulfate	ClO^-	hypochlorite	PO_4^{3-}	phosphate
SO_3^{2-}	sulfite	ClO_2^-	chlorite	CrO_4^{2-}	chromate
NO_3^-	nitrate	ClO_3^-	chlorate	$Cr_2O_7^{2-}$	dichromate
NO_2^-	nitrite	ClO_4^-	perchlorate	CO_3^{2-}	carbonate

3. Anions formed through addition of H^+ are named by adding the word hydrogen (if one is added) or dihydrogen (if two are added) as a prefix. An older method utilizing prefix bi- can also be used for some ions.

HSO_3^-	bisulfite	hydrogen sulfite	HPO_4^{2-}	biphosphate	hydrogen phosphate
HSO_4^-	bisulfate	hydrogen sulfate	$H_2PO_4^-$	dihydrogen phosphate	

Exercises: Write the name or the formula on the blank provided.

1. I^- _____
2. _____ oxide
3. Br^- _____
4. _____ sulfide
5. HCO_3^- _____
6. _____ hydride