LEARNING AS ONE NATION
Expanded Project

Phys Sci (Chem)_QP

SHS LEARNING ACTIVITY

Name: _____ **Score/Mark:** _____
Grade and Section: _____ **Date:** _____
Strand: ☐ STEM ☐ ABM ☐ HUMSS ☐ ICT (*TVL Track*)
Subject: *Physical Science*
Type of Activity: ☐ Concept Notes ☐ Skills: Exercise/Drill ☐ Illustration
☐ Performance Task ☐ Essay/Report ☑ Others: Quarterly Plan

Activity Title: **Quarterly Plan of Activities in Physical Science - Chemistry**
Learning Target: To outline the topics to be taken up in the Chemistry portion of Physical Science.
References: *(Author, Title, Pages)*
1) Department of Education. (2020). *Most Essential Learning Competencies Matrix*, pp. 534-538;
2) Sadudaquil, J. A. *CVIF–DLP Learning Activities*

Subject Description:

This subject is designed to enhance the evolution of our understanding of matter from ancient times to the present. This also highlights the applications of chemistry concepts in contexts such as drugs, sources of energy, pollution and recycling, fitness and health, and cosmetics.

Topic	LAS	Activity Title
Formation of the Elements	01	**Review**: Atomic Theory of Matter
	01.1	Exercises on **Review:** Atomic Theory of Matter
	02	Basic Concepts on Nuclear Reactions
	03	Synthesis of Elements: Light and Heavy Elements
	03.1	Exercises on Synthesis of Elements: Light and Heavy Elements
	04	Synthesis of Elements: Transuranium Elements
From Elements to Bonds to Molecules	05	Lewis Electron Dot Structure: Atomic Species
	06	Electronegativity and Bond Formation
	07	Bond Polarity
	08	Molecular Geometry: The VSEPR Theory
	09	Molecular Polarity
	10	Lewis Electron Dot Structure: Compounds
	10.1	Exercises on Lewis Electron Dot Structure: Compounds
Structure, Properties, and Functions of Compounds	11	Intermolecular Forces of Attraction
	12	Factors Affecting Rate of Chemical Reactions
	13	Structure, Properties, and Functions of Biomolecules
	14	Key Ingredients in Cosmetic Products
	15	Key Ingredients in Cleaning Agents
	16	**Performance Task**: Product Label Analysis
Stoichiometry	17	Molecular Mass and Elemental Percentage Composition Calculations
	18–19	The Mole Concept and Its Relations 1&2
	19.1	Exercises on The Mole Concept and Its Relations
	20	Mole and Mass Ratio Calculations
	21	Limiting Reagents
Energy Sources	22	Harnessing Different Energy Sources
	23–24	Pros and Cons of the Different Energy Sources 1&2
	25	**Performance Task**: Bohol's Energy Supply Platform