

Science Activity Sheet

Quarter 2- MELC 6

Week 6

General Classes and Uses of Organic Compounds



REGION VI – WESTERN VISAYAS

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Science 9

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Introductory Message

Welcome to Science Grade 9!

The **Learning Activity Sheet** is a product of the collaborative efforts of the Schools Division of Escalante City and DepEd Regional Office VI - Western Visayas through the Curriculum and Learning Management Division (CLMD). This is developed to guide the learning facilitators (teachers, parents and responsible adults) in helping the learners meet the standards set by the K to 12 Basic Education Curriculum.

The **Learning Activity Sheet** is self-directed instructional materials aimed to guide the learners in accomplishing activities at their own pace and time using the contextualized resources in the community. This will also assist the learners in acquiring the lifelong learning skills, knowledge and attitudes for productivity and employment.

For learning facilitator:

The **Science Activity Sheet** will help you facilitate the leaching-learning activities specified in each Most Essential Learning Competency (MELC) with minimal or no face-to-face encounter between you and learner. This will be made available to the learners with the references/links to ease the independent learning.

For the learner:

The **Science Activity Sheet** is developed to help you continue learning even if you are not in school. This learning material provides you with meaningful and engaging activities for independent learning. Being an active learner, carefully read and understand the instructions then perform the activities and answer the assessments. This will be returned to your facilitator on the agreed schedule.

Name of Learner: _____
Grade and Section: _____ Date: _____

SCIENCE 9 ACTIVITY SHEET No. 6

General Classes and Uses of Organic Compounds

I. Learning Competency with Code

Recognize the general classes and uses of organic compounds
(S9MT-IIh-18)

II. Background Information for Learners

Have you ever experienced escaping your meals because you are conscious about your body figure? What have you felt? Why is there is a need to eat? Yes, you're right, foods are necessary for survival. From the food that you eat, you obtain energy to let you do different tasks. Generally, the structure of the chemical components of your body is made up of the substances from the food that you eat. The food type that you consume daily performs an important role for maintaining and sustaining life. Oftentimes, you are advised to eat only nutritious and balanced foods to keep healthy and strong.

There are four (4) general classes of organic compounds namely **carbohydrates, lipids, proteins** and **nucleic acids**. Organic compounds are naturally produced by living organisms but can also be produced artificially. In order to learn more about the uses of common organic compounds please refer to page 132 of Science 9 Learner's Material.

III. Accompanying DepEd Textbook and Educational Sites

Department of Education. (2014). K-12 Basic Education Curriculum, Science 9 Learner's Material page 132. Pasig City, Philippines

IV. Activity Proper

Complete the Table 1 in Science 9 Learner's Material, p. 132 and answer the guide questions below. Write your answer on a separate sheet of paper.

Guide Questions

Q1. What are the general classes of organic compounds?

Q2. What are the characteristics of organic compounds?

Q3. What are the importance of these organic compounds?

V. Reflection

Choose one and explain your answer.

- A. What is balanced diet for you?
- B. What do mean by balanced diet?
- C. Give an example of balanced diet.

Table 1 : Organic Compounds and their uses

Organic Compounds						
	Gasoline	Ethanol	Acetone	LPG	Kerosene	Acetic acid
Uses	Beverage	/				
	Food					
	Antiseptic	/				/
	Fuel	/		/	/	/
	Cleaner			/	/	

(* This activity is adapted, with minor modification, from Glencoe Physical Science Texas Edition. (1997). Glencoe/McGraw-Hill Companies Inc., page 369)

Exercises 1

Q1.

Compounds	Uses	Compounds	Uses
Gasoline	Fuel for vehicles	Ethanol	Disinfectant, and used as main ingredient in liquors.
Kerosine	Fuel for lamps (gasera) and portable cooking stove (kusiniya).	Acetone	Used to remove nail polish
LPG (liquefied petroleum gas)	Can be used to remove paints. Fuel for gas stove and cars.	Acetic Acid	Used as component of vinegar (4% by volume)
			Can be used to treat fungal infection

Q2. These common organic compounds are very important because they have many uses at home and in the industry.

Exercises 2

- CARBOHYDRATES
- LIPIDS
- POTIONS
- NUCLEIC ACIDS

VI. Answer Key