

Science Activity Sheet

Quarter 2- MELC 4

Week 4

Carbon Compounds



REGION VI – WESTERN VISAYAS

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. 4 **Carbon Compounds**

I. Learning Competency with Code

Explain how the structure of the carbon atom affects the type of bonds it forms (**S9MT-IIg-17**)

Support Competency

1. Identify the properties of common organic compounds and their uses.

II. Background Information for Learners

Most of the things that you use every day such as alcohols, kerosene, lubricating oil, gasoline etc. are basically organic compounds. But do you really know their behavior? Do you believe that ethyl alcohol is flammable?

Every kind of organic compound has specific properties or characteristics. Although these compounds may show similarities in some properties, these compounds do not have exactly the same properties.

Let's explore about how the structure of the carbon atoms affects the type of bonds it forms, properties of common carbon compounds and their uses by going through this learning activity.

III. Accompanying DepEd Textbook and Educational Sites

Department of Education. (2014). K to 12 Basic Education Curriculum
Science 9 Learner's Material pp.131 - 140. Pasig City, Philippines.

IV. Activity Proper

Directions: Refer to Science 9 Learner's Material, pp. 132-135 and do the following:

1. Copy, complete the table and answer the guide questions. Write your answer on a separate sheet of paper.
 - a. Activity 1 – Table 1- Organic Compounds and Their Uses
Guide Questions 1 and 2 on page 132
 - b. Activity 2 – Table 1- Properties of Common Organic Compounds
Guide Questions 3 to 6 on page 135

V. Reflection:

Why is it important to know the specific properties of common organic compounds?

VI. Answer Key

Guide Questions:

Activity 1

Q1. What do you think are the characteristics of the materials which give their uses?

Answer: Fuel for vehicles, Fuel for lamps, can be used to removed paints, fuels for gas stove and cars, disinfectant and use of main ingredient in liquors, used to removed nail polish, used as component of vinegar and can be used for fungal infection.

Q2. Why do you think these kinds of organic compounds are very important?
Answer: These common organic compounds are very important because they have many uses at home and in the industry.

Activity 2

Q3. Lubricating oil. Common uses of viscous materials or liquids are used to lubricate parts of machines, instruments, or appliances such as motor of electric fan; and protect metals from rusting.

Q4. Kerosene and ethyl alcohol. Flammable liquids such as kerosene is used as fuel for lamps (*gaseera*) and portable stove (*kusiniya*). Although ethyl alcohol is also flammable, it is not used as fuel for stoves or lamps only. It is also used as a component of biofuels for vehicles, as an ingredient for liquors, and as a disinfectant.

Q5. Kerosene and ethyl alcohol.

Q6. It is important to have knowledge about the properties of these compound so people will be aware of their behavior, uses, and effects on people.

Reflection:

It is important to know the common properties of organic compound for safety, proper storage and handling.

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