



Science Activity Sheet

Quarter 4 - MELC 2

Week 2

Sustainable Ways of Using Earth's Resources



REGION VI-WESTERN VISAYAS

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Science 7

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Introductory Message

Welcome to **Science Grade 7!**

The **Learning Activity Sheet** is a product of the collaborative efforts of the Schools Division of Sipalay 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 teaching-learning activities specified in each Most Essential Learning Competency (MELC) with minimal or no face-to-face encounter between you and the learner. This will be made available to the learners with 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 ACTIVITY SHEET NO. 2

Sustainable Ways of Using Earth's Resources

I Learning Competency

Cite and explain ways of using Earth's resources sustainably.

II Background Information for Learners

Planet Earth is composed of different things like air, water, plants, animals, soil, rocks, minerals, crude oil, and other fossil fuels. They are found in nature and are called **natural resources**. People use them for survival. The sunlight and the wind are also natural resources. They are used to satisfy needs for all living things.

The Philippines is considered rich in natural resources. Its fertile land, high diversity of plants and animals, extensive coastlines, and rich minerals deposits make it suitable to inhabit. Adding to its richness are the available natural gas, coal and geothermal energy. Fossil fuels which were formed from remains of plants and animals living on earth millions of years ago are also considered treasures of the country.

But not all resources are in endless supply for some of it took millions of years to develop before man can accumulate them. Meaning, there is a great need to conserve these natural resources.

To conserve natural resources, you need to protect or use them wisely without wasting or using them up completely. You can also advise to use renewable resources, like wind and solar energy, instead of non-renewable resources, like fossil fuels. Using these resources should not cause harm to the environment. It should be conserved in a way that it will last and still available for future generations. This is what sustainability of natural resources mean. Each one should think about how to make things sustainable. Remember, the lives of future generation depend on how you use the natural resources today.

In this learning activity, you will cite and explain ways how to use the earth's natural resources sustainably.

III. Accompanying DepEd Textbook and Educational Sites

Department of Education. *Science 7 Teacher's Guide* (p286-289). Pasig City. Philippines. 2017

Department of Education. *Science 7 Learner's Material* (p285-302). Pasig City. Philippines. 2017

IV. ACTIVITY PROPER

Activity 1. Treasures in Your Community

Directions: Cite at least five examples of earth resources present in your locality/ place. Identify whether they are renewable or non- renewable and explain ways to sustain them. Copy and complete the table below in your answer sheet.

Earth resources	Renewable or Non Renewable	Explain ways of using and sustaining Earth's resources
Ex. Forest	Renewable	- When you cut a tree in the forest, you replace it by planting new trees.
1.		
2.		
3.		
4.		
5.		

Two Types of Natural Resources on Earth

1. Renewable Resources

- The food that people eat comes from plants and animals. Plants are replaced by new ones after each harvest. People also eat animals. Animals have the capacity to reproduce and are replaced when animals are born. Water in a river or in a well may dry up. But when the rain comes, the water is replaced. To summarize, organic natural resources which can be replenish such as plants, animals, wind, sunlight, and water are called **renewable resources**.

2. Non- Renewable Resources

- Soil is considered a nonrenewable resource since it comes from rocks and materials from dead plants and animals. It takes thousands of years for soil to form. Soil cannot be replaced easily, or it takes a very long time to replace. Also, Metals like copper, iron, and aluminum are abundant on Earth. But people are using them up fast. They have to dig deeper into the ground to get what they need. Coal, oil and natural gas (fossil fuel) were formed from plants and animals that lived on Earth millions of years ago. It takes millions of years for dead plants and animals to turn into fossil fuels.
- To summarize, natural resources which cannot be easily changed or replenished such as coal, oil, petroleum, natural gas, soil, rocks and metals like copper, iron, and aluminum are **nonrenewable resources**.

Activity 2. Predict the future

Direction: Analyze the picture below and complete the table by explaining the utilization whether it is sustainable or not and support your answer. Write your answer on a separate sheet of paper.

Utilization of Natural Resources	Sustainable use or Not	Support your answer
		
		
		
		
		

Protecting Resources in Your Own way

- All resources used by humans, including fuels, metals, and building materials, come from the Earth. Many of these resources are not in endless supply. It took millions of years to develop and accumulate these resources. To prevent from the shortage of supply, these resources should be conserve.

- To conserve natural resources is to protect or use them wisely without wasting them or using them up completely. Conserving natural resources can make them last and be available for future generations. This is what **sustainability** of natural resources mean.
- To use natural resources sustainably you need to rethink which resources you use and how you use them. You should also ask if there is really a need to use them in the first place. Humans will always need natural resources to live, so when you consume resources you should keep in mind the needs of future generations.
- Sustainable resource use occurs when the rate of consumption can continue forever without damaging the environment. The following are ways on how you use the resources sustainably.
 - ✓ Use renewable resources, like wind and solar energy, instead of non-renewable resources, like fossil fuels.
 - ✓ Use those resources which cause less harm to the environment.
 - ✓ Cut back on the amount of natural resources, and in particular non-renewable resources you use, by reducing, reusing and recycling.

V. Reflection

After going through this learning activity...

I think...

I believe...

I feel...

I will...

VI. Answer key

Activity 1	Q1 - Fertile arable land
	- High diversity of plants and animals
	- Extensive coastlines
	- rich minerals deposit
	- natural gas
	- coal
	- geothermal energy
	- fossil fuel
Activity 2	
	- Not
	- it can cause soil erosion & flashfloods
	- Sustainable
	- it helps to protect our environment
	- Not
	- it can harm to our environment
	- Not
	- scarcity of marine resources
	- Sustainable
	- helps to maintain the beauty of our environment