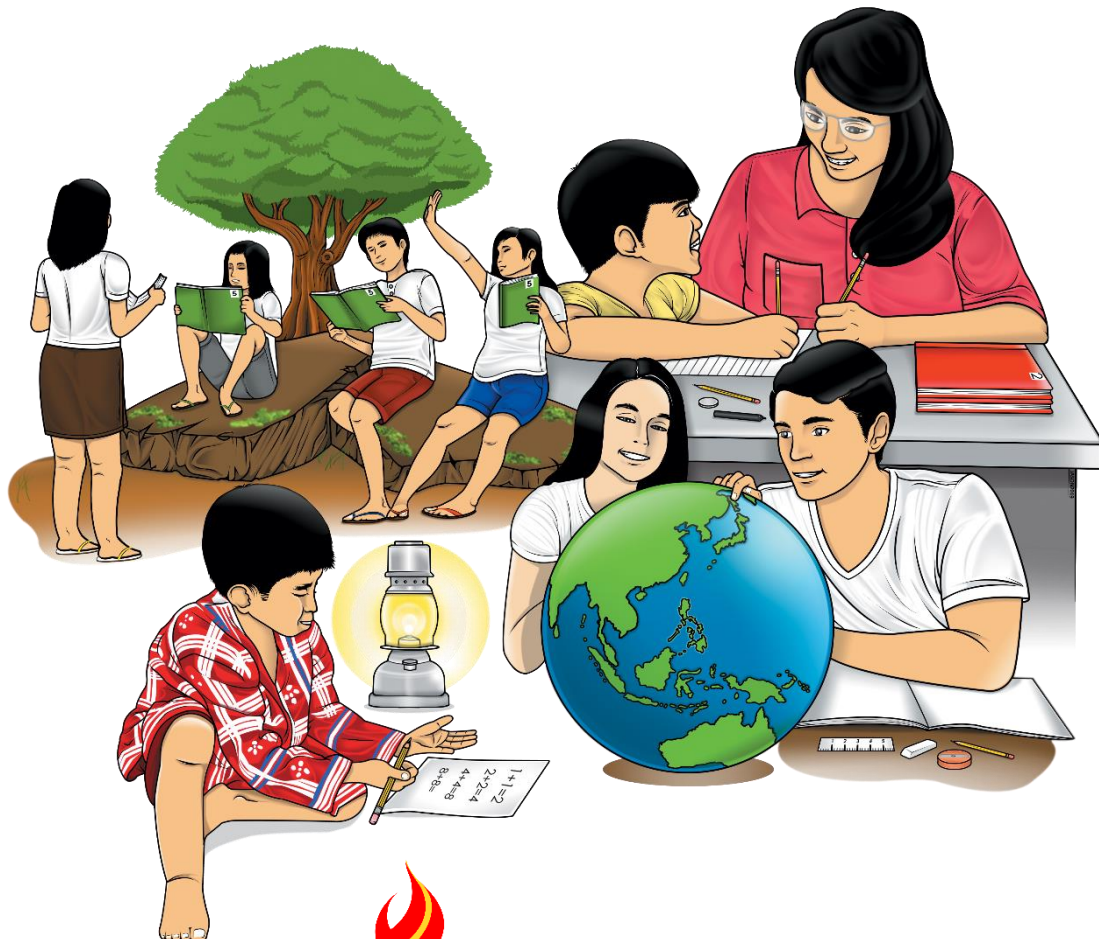


# Health

## Quarter 2 – Module 5: Environmental Protection through Proper Waste Management



**Health – Grade 6**

**Alternative Delivery Mode**

**Quarter 2 – Module 5: Environmental Protection through Proper Waste Management**  
**First Edition, 2020**

**Republic Act 8293, section 176** states that: No copyright shall subsist in any work of the Government of the Philippines. However, prior approval of the government agency or office wherein the work is created shall be necessary for exploitation of such work for profit. Such agency or office may, among other things, impose as a condition the payment of royalties.

Borrowed materials (i.e., songs, stories, poems, pictures, photos, brand names, trademarks, etc.) included in this module are owned by their respective copyright holders. Every effort has been exerted to locate and seek permission to use these materials from their respective copyright owners. The publisher and authors do not represent nor claim ownership over them.

Published by the Department of Education

Secretary: Leonor Magtolis Briones

Undersecretary: Diosdado M. San Antonio

**Development Team of the Module**

<b>Author:</b>	Francilet R. Padios
<b>Editor:</b>	Elsie P. Serafico
<b>Reviewers:</b>	Ma. Lennie F. Pamposa, Elsie P. Serafico and John Mark Q. Apellado
<b>Illustrators:</b>	Zoila Mae P. Panes, Riza E. Celebrado and Marvin P. Pagurayan
<b>Layout Artists:</b>	Catherine P. Padrones, Ma. Jayvee A. Garapan and Mary Grace N. Prologo
<b>Management Team:</b>	Ramir B. Uytico Pedro T. Escobarte Jr. Elena P. Gonzaga, Donald T. Genine Athea V. Landar Jesse M. Gomez Ma. Nilma E. Casamayor, Dexter P. Diergos Winifred S. Panes

**Printed in the Philippines by \_\_\_\_\_**

**Department of Education – Region VI –Western Visayas**

Office Address: Duran Street, Iloilo City, 5000

Telephone Nos.: (033) 509-7653; (033) 336-2816

E-mail Address: region6@deped.gov.ph

Website: region6.deped.gov.ph

# **Health**

## **Quarter 2 – Module 5: Environmental Protection through Proper Waste Management**

# **Introductory Message**

This Self-Learning Module (SLM) is prepared so that you, our dear learners, can continue your studies and learn while at home. Activities, questions, directions, exercises, and discussions are carefully stated for you to understand each lesson.

Each SLM is composed of different parts. Each part shall guide you step-by-step as you discover and understand the lesson prepared for you.

Pre-tests are provided to measure your prior knowledge on lessons in each SLM. This will tell you if you need to proceed on completing this module or if you need to ask your facilitator or your teacher's assistance for better understanding of the lesson. At the end of each module, you need to answer the post-test to self-check your learning. Answer keys are provided for each activity and test. We trust that you will be honest in using these.

In addition to the material in the main text, Notes to the Teacher are also provided to our facilitators and parents for strategies and reminders on how they can best help you on your home-based learning.

Please use this module with care. Do not put unnecessary marks on any part of this SLM. Use a separate sheet of paper in answering the exercises and tests. And read the instructions carefully before performing each task.

If you have any questions in using this SLM or any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator.

Thank you.



## ***What I Need to Know***

This module was designed and written with you in mind. It is here to help you advocate environmental protection through proper waste management.

The module consists of only one lesson.

- Lesson 1 – Environmental Protection through Proper Waste Management

After going through this module, you are expected to advocate environmental protection through proper waste management **(H6CMH-IIij-9)**.



## ***What I Know***

Directions: Write **Yes** if the statement shows advocacy in environmental protection through proper waste management and **No** if it does not. Write your answers on a separate sheet of paper.

1. Tree planting activities
2. Participating in cleanliness drives or programs in the community
3. Making posters about environmental protection
4. Burning garbage in the backyard
5. Supporting the recycling project or activities of the family
6. Campaigning in maintaining a healthier environment by practicing proper waste management
7. Dumping dead animals in bodies of water
8. Organizing the troop for a community service to manage the wastes in the environment
9. Promoting walking or biking activities to lessen air pollution
10. Refusing classmates who will join in recycling activities

**Lesson****1****Environmental Protection  
through Proper Waste  
Management**

A healthful environment is characterized by a healthy physical and psychosocial environment. A safe and clean environment can be achieved through environmental protection. Proper waste management can help maintain the surrounding with good air and water quality. An environment can only be aesthetically pleasing and worth-living if it is well-protected.

***What's In***

Environmental protection is the practice of protecting the natural environment by individuals, groups or organizations and governments. It aims to reduce the presence of polluting substances in land, water and air. Protecting the environment through proper waste management maintains the good condition of our surroundings. Advocacies like cleanliness drive in the community, clean-up activity in the school and recycling projects in the home could help in protecting our environment. Saying yes to support, join, participate and volunteer in these advocacies would also inspire others to do the same. Since Earth is the only living planet, protecting and preserving it is everyone's responsibility.



## ***What's New***

Directions: Look at the pictures below and answer the following questions that follow. Write your answer on a separate sheet of paper.

A.



Burning Wastes

D.



Clean Up Activity

B.



Recycling Activity

E.



Throwing Dead Animal in the River

C.



Clean Up Campaign

F.



Composting Activity

Illustrated by Zoila Mae P. Panes, Riza E. Celebrado, and Marvin P. Pagurayan



Questions:

1. Which of the following pictures show activities that advocate environmental protection? Write the letters only of the correct answers.

---

---

---

---

2. Were you able to join or participate in Clean Up Activity? Yes or No and why?

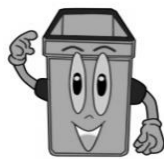
---

---

3. What did you feel after doing or engaging in the activities?

---

B. Direction: Try singing the song to the tune of “Are You Sleeping Brother John” and answer the questions that follow on a piece of paper.



**RECYCLING SONG**  
by: Francilet R. Padios

Pick those bottles, pick those cans  
Throw them in, throw in the bin  
Reduce, reuse, recycle, make them our habit  
Let's all pitch in, to the recyclable bin.



Save those papers, save those tins  
Throw them in, throw in the bin  
Reduce, reuse, recycle, make them our habit  
Let's all pitch in, to the recyclable bin.



Pick those metal scraps and plastic packaging  
Throw them in, throw in the bin  
Reduce, reuse, recycle, make them our habit  
Let's all pitch in, to the recyclable bin.



Illustrated by Zoila Mae P. Panes, Riza E. Celebrado, and Marvin P. Pagurayan

According to the song, what are the things that we can pitch in to the recyclable bin? What will happen if “Reduce, Reuse and Recycle” becomes our habit? Does your family reduce, reuse and recycle things at home? Why?



## ***What is It***

- A. Directions: The pupils figured out that improper waste management is a big problem in their own community. They are sharing ideas about environmental protection through proper waste management. Read carefully and take note of what they are saying.

One way of managing waste is **WASTE REDUCTION**. It is in this process that we reduce or lessen the amount of waste we produce.

As a pupil or a child, how can you reduce waste? Here are some ways of reducing wastes:

1. Recycle! Toss plastic containers, cans and metal scraps into the recycling bin.
2. Reuse! Don't throw paper scraps. Use them as scratch paper. When you write, use both sides of the notebook page to save paper.
3. Save! Save plastic packaging, cans, boxes and bottles after recess for arts and crafts projects.
4. Pack up! If you bring lunch to school, use reusable containers instead of disposable ones. Use refillable water bottle rather than disposable cups.
5. Compost! Composting reduces the amount of waste that has to be dumped or trucked to the landfill.
6. Refuse! When you go to the mall or market to buy things, refuse store plastic bags. Bring with you your reusable bag.



Illustrated by Zoila Mae P. Panes, Riza E. Celebrado, and Marvin P. Pagurayan

Another way of managing waste is **WASTE STORAGE**.

Storage includes containers, tanks, waste piles and landfills. We can use household waste storage like trash can, sack, garbage bag or open pit for our wastes.



Solid waste storage found in public places may be a garbage can, dumpster or other container used or designed to store or deposit solid waste. A pupil like you should use color-coded bins properly. See to it that correct wastes are thrown in the proper bins to help manage the waste in the community.



At home, wastewater storage tank or septic tank is used. A septic tank is an underground chamber through which household wastewater flows. Every home should have a sewage facility. If your family plans for a project like poultry or piggery, proper sewage for wastewater is important to maintain the sanitation of the place. For industries or factories, industrial wastewater treatment is used to treat wastewater.

When you store wastes, remember the following:

1. Use tight-fitting storage containers in storing the waste.
2. All solid wastes must be stored in a fly tight or rat-proof container with secured lids or cover.
3. Store wastes securely in labelled containers for recycling or disposal.
4. Hazardous waste storage uses a sealed container like plastic or metal drums.

Illustrated by Zoila Mae P. Panes, Riza E. Celebrado, and Marvin P. Pagurayan



Another way of managing waste is **WASTE DISPOSAL**. You can use these processes in disposing waste.

### Composting



Make a compost pit where you throw organic or biodegradable wastes to rot or decay. Cover the pit properly to prevent pests from feasting. The bacteria in the soil help in converting organic wastes into natural or organic fertilizers.

### Recycling



Dispose wastes by sorting and selling them in junkshops.



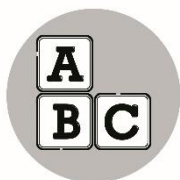
Proper disposal of hazardous wastes could be done by means of landfills. Secure your trash properly for truck loading and disposal to landfills.



It involves burying wastes between layers of soil and covering them with dirt. Heavy equipment like bulldozer is used to compress and smoothen the wastes.



Illustrated by Zoila Mae P. Panes, Riza E. Celebrado, and Marvin P. Pagurayan



## What's More

A. Direction: Let us take a look at the pictures and learn about the pupils' advocacy in environmental protection through proper waste management.



Recycle materials to reduce wastes.



Participate or volunteer in Clean and Green Programs or Clean-up Drive and other environmental protection activities in the school community.



Make posters about environmental protection to remind people to manage their wastes.



Implement proper disposal of garbage.

Illustrated by Zoila Mae P. Panes, Riza E. Celebrado, and Marvin P. Pagurayan



Organize a troop for the community service to manage wastes.



Initiate income generating project in school by selling recycled wastes like cans, bottles and others.



Plant trees because they provide food and oxygen. Trees help clean the air that we breathe.



Buy reusable products!  
Let us save the environment.

Encourage people to buy reusable products such as glass bottles, reusable bags and cups rather than disposable goods.

Illustrated by Zoila Mae P. Panes, Riza E. Celebrado, and Marvin P. Pagurayan



## ***What I Have Learned***

Directions: Complete the sentence with the correct word or words from the box below. Write your answers on a separate sheet of paper.

1. Biodegradable wastes like leaves, twigs, dead animals, rotten plants and food refuse should be disposed in the \_\_\_\_\_ to convert them into organic fertilizer.
2. Dispose hazardous wastes in the \_\_\_\_\_ where wastes are buried between layers of soil and covered with dirt using bulldozers.
3. Organize or join in \_\_\_\_\_ like Clean and Green Program and Community Beautification Program to manage the wastes.
4. Wastes should be \_\_\_\_\_ into biodegradable, non-biodegradable and hazardous to manage them properly.
5. Tin cans, plastic bottles and paper products are \_\_\_\_\_ that should be reused or sold in junkshops.

clean-up activities

recyclable wastes

compost pit

segregated

landfill



## What I Can Do

- A. Directions: Put a check ✓ if the picture shows advocacy in environmental protection through proper waste management and **X** if it does not. Write your answers on a separate sheet of paper.

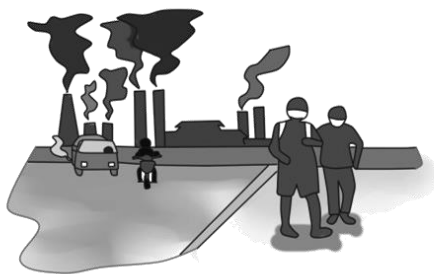
1.



4.



2.



5.



3.



Illustrated by Zoila Mae P. Panes, Riza E. Celebrado, and Marvin P. Pagurayan



B. Directions: Read and learn from this and answer the following questions that follow. Write your answer on a separate sheet of paper.

### REMEMBER!

Recycling is the process of converting waste materials into new materials or things.



### A to Z of Recyclable Wastes

#### Start your compost pile!

- Green items, which break down quickly, like vegetable and fruit peelings, grass cuttings and leaves
  - Brown items, which break down slowly, like paper products, twigs and branches, eggshells, cardboards and sawdust
1. Make a big compost pile by mixing your green and brown items well.
  2. When it warms up and gets hot to the touch, stir it up to cool.
  3. When it heats up again few days or weeks later, stir it again.
  4. Keep doing the process until it stops heating.
  5. Let it rest to finish composting.
  6. It can take a month or two to make compost. Your compost is ready when it turns a rich brown or black color and has an earthy smell.
  7. When it's done, use it to fertilize your garden.



A – aluminum cans  
B – bottle caps, books  
C – cans, crayons  
D – disk, dresses  
E – envelope, electrical item  
F – folder, furniture  
G – glass, garden waste  
H – hat, hanger  
I – iron  
J – jar, jug  
K – kitchen waste, kettle  
L – leaves, lid  
M – magazine, metal scrap  
N – notebook, newspaper  
O – onion peeling  
P – plastic, paper  
R – rag, rubber  
S – slippers, styrofoam  
T – toy, tin  
U – umbrella  
V – vegetable peelings  
W – wood, wire  
X – xylophone toy  
Y – yarn, yard cuttings  
Z – zipper

It's not only these items. You can add some more examples in our A to Z of recyclable wastes.

Illustrated by Zoila Mae P. Panes, Riza E. Celebrado, and Marvin P. Pagurayan

Questions:

1. What are the materials that can be used in making compost? Name four examples.

---

---

---

---

2. Were you able to join or participate in composting activity in home, school or community? Yes or No and why?

---

---

3. What recyclable waste can you give that starts with the following letters: Give one example for each.

A      

---

M      

---

S      

---

B      

---



## **Assessment**

Directions: Write **Agree** if the statement shows advocacy in environmental protection through proper waste management and **Disagree** if it does not. Write your answers on a separate sheet of paper.

1. Join clubs or groups that promote environmental protection through proper segregation of wastes.
2. Burn garbage found in the community to solve the problem of waste.
3. Make a recycling project in the community like old tires being used as plant boxes or planters.
4. Encourage friends to help in different programs like Clean and Green, Clean-up Drive and Beautification Program.
5. Refuse to volunteer in waste management campaigns.
6. Practice composting at home to reduce wastes.
7. Support tree planting activities to help maintain a clean environment.
8. Make a poster that shows proper waste management and post it on the school bulletin board to remind schoolmates to protect the environment.
9. Discourage the Boy Scouts and Girl Scouts from giving service in the community. Tell them that they should play or enjoy rather than do activities for environmental protection.
10. Launch a campaign in minimizing air pollution by non-burning of wastes in households and communities.

Thank you for accomplishing this module. Congratulations!



## ***Additional Activity***

Directions: Make an advocacy statement/slogan or poster on the issue of waste disposal, waste reduction and waste storage. Do it in a short bond paper or 1 whole sheet of pad paper. You may share your slogan or poster to your family and friends with the consent of your parent or guardian.



## Answer Key

<p><b>Additional Activity</b></p> <p>Pupil's work may vary.</p> <p>Output: Slogan/Poster showing proper waste disposal, waste reduction and waste storage</p>	<p><b>Assessment</b></p> <ol style="list-style-type: none"> <li>1. Agree</li> <li>2. Disagree</li> <li>3. Agree</li> <li>4. Agree</li> <li>5. Disagree</li> <li>6. Agree</li> <li>7. Agree</li> <li>8. Agree</li> <li>9. Disagree</li> <li>10. Agree</li> </ol>	<p><b>What I Can Do</b></p> <p>A.</p> <ol style="list-style-type: none"> <li>1. ✓</li> <li>2. X</li> <li>3. X</li> <li>4. ✓</li> <li>5. ✓</li> </ol> <p>B. 1-3. Pupils answers may vary.</p>
<p><b>What I Have Learned</b></p> <ol style="list-style-type: none"> <li>1. compost pit</li> <li>2. landfill</li> <li>3. clean-up activities</li> <li>4. segregated wastes</li> <li>5. recyclable wastes</li> </ol>	<p><b>What's New</b></p> <p>A.1. B, C, D, F (In any order)</p> <p>2-3. Pupils answers may vary for the 2 succeeding questions.</p> <p>B. Pupils answers may vary in the given questions</p>	<p><b>What I Know</b></p> <ol style="list-style-type: none"> <li>1. Yes</li> <li>2. Yes</li> <li>3. Yes</li> <li>4. No</li> <li>5. Yes</li> <li>6. Yes</li> <li>7. No</li> <li>8. Yes</li> <li>9. Yes</li> <li>10. No</li> </ol>

## References

- Environmental awareness. In *Pachamama Alliance*. Retrieved on July 3, 2020 from <https://www.pachamama.org/environmental-awareness>
- Environmental protection. Retrieved on July 6, 2020 from [https://en.wikipedia.org/wiki/Environmental\\_protection](https://en.wikipedia.org/wiki/Environmental_protection)
- Environmental protection definition. In *OECD Glossary of Statistical Terms*. Retrieved on July 6, 2020 from <https://stats-oecd.org/glossary/detail.asp?ID=836>
- How to manage your home waste. Retrieved on July 6, 2020 from <https://www.wikihow.life/Manage-Your-Home-Waste>
- K to 12 Health Curriculum Guide August 2016, page 58
- MELC Health 6, page 353
- Protecting our planet starts with you. In *National Ocean Service*. Retrieved on July 5, 2020 from <https://oceanservice.noaa.gov/ocean/earthday/html>
- Recycling domestic waste. In *Citizens Information Recycling*. Retrieved on September 15, 2019 from [https://www.citizensinformation.ie/en/environment/waste\\_management\\_and\\_recycling/domestic\\_recycling\\_services.html](https://www.citizensinformation.ie/en/environment/waste_management_and_recycling/domestic_recycling_services.html)
- Waste management using the 5Rs techniques. Retrieved on July 6, 2020 from <https://www.slideshare.net/kazekage15/waste-management-using-the-5rs-techniques>
- What is waste management and various methods of waste disposal? In *Conserve Energy Future*. Retrieved on July 6, 2020 from <https://www.conserve-energy-future.com/waste-management-and-waste-disposal-methods.php>
- Woodford, Chris. 2019. "Recycling." <https://www.explainthatstuff.com/recycling.html>
- Your cool facts and tips in waste management. In *eSchool Today*. <https://www.eschooltoday.com/waste-recycling/what-is-recycling.html>

**For inquiries or feedback, please write or call:**

Department of Education – Bureau of Learning Resources (DepEd- BLR)

Office Address: Ground Floor, Bonifacio Building, DepEd Complex  
Meralco Avenue, Pasig City, Philippines 1600

Telefax: (02) 634-1072 or 634-1054; 631-4985

E-mail Address: [blr.lrqad@deped.gov.ph](mailto:blr.lrqad@deped.gov.ph) \* [blr.lrpd@deped.gov.ph](mailto:blr.lrpd@deped.gov.ph)