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Government Property LE

## Science

# Quarter 1 - Module 3A: Ways of Disposing Materials According to their Properties





**Department of Education • Republic of the Philippines**Science – Grade 4

Alternative Delivery Mode

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### Science

# Quarter 1 - Module 3A: Ways of Disposing Materials According to Their Properties

This instructional material was collaboratively developed and reviewed by educators from public and private schools, colleges, and/or universities. We encourage teachers and other education stakeholders to email their feedback, comments, and recommendations to the Department of education at region10@deped.gov.ph.

We value your feedback and recommendations.

Department of Education • Republic of the Philippines



#### What This Module is About

The world is a wonderful place to live in, but if people continue to throw their trash anywhere, this beautiful place will no longer be a haven of life.

This module will help you understand the importance of taking care of our mother earth by finding ways of disposing materials according to their properties.



#### Notes to the Teacher

Dear Teacher,

This is a self-paced module with various activities to be done at home by the learners. Clear and careful instructions must be given to the learners to ensure safety and avoid misconceptions in performing the activities.



Waste materials around us can be classified as to decaying and non-decaying. Non-decaying materials can be recycled and reused. Decaying materials can be turned into organic fertilizer.

#### **Learning Objectives:**

- 1. Observe ways of disposing waste materials by sorting them according to its properties
- 2. Identify ways of disposing waste materials according to its properties

Time Duration: 4 Days

#### How to Learn from this Module

To achieve the objectives cited above, you are to do the following:

- Take your time reading the lessons carefully.
- Follow the directions and/or instructions in the activities and exercises diligently.
- Answer all the given tests and exercises.

#### Icons of this Module

	What I Need to Know	This part contains learning objectives that are set for you to learn as you go along the module.
	What I Know	This is an assessment as to your level of knowledge to the subject matter at hand, meant specifically to gauge prior related knowledge
	What's New	An introduction of the new lesson through various activities, before it will be presented to you
	What is It	These are discussions of the activities as a way to deepen your discovery and understanding of the concept.
	What's More	These are follow-up activities that are intended for you to practice further in order to master the competencies.
	What I Have Learned	Activities designed to process what you have learned from the lesson
	What I Can Do	These are tasks designed to showcase your skills and knowledge gained, and applied into real-life concerns and situations.
	Post Assessment	This assessment evaluates your level of mastery in achieving the learning objectives
00	More Activities	Activities designed to increase the strength of your skills and knowledge gained and tends to induce repetitions of actions / learning



**Direction:** Choose the letter of the correct answer.

- 1. Ana is assigned to segregate waste materials at home. How will she do it?
  - A. According to its ability to float and sink
  - B. According to its color
  - C. Into decaying and non- decaying groups
  - D. Into small and big groups
- 2. People in Metro Manila produce large amount of wastes. However, garbage collectors are few. Because of this, garbage stays uncollected for how many days. What should they do to reduce their garbage and keep them away from diseases?
  - A. Follow the technique of total recycling scheme
  - B. Take vitamins to make the immune system strong
  - C. Throw the materials anywhere
  - D. Wear mouth mask to avoid inhaling polluted air
- 3. The city health officer gives lectures to the households of Valencia City on how to dispose their waste properly. Which of the following shows a proper waste disposal?
  - A. Putting all the waste materials in one container
  - B. Scattering waste materials on the road
  - C. Segregating waste into decaying and non- decaying wastes
  - D. Throwing waste materials on a vacant lot
- 4. Some people just throw their waste materials anywhere. What would happen if the decaying materials are not properly disposed?
  - A. It allows free flow of rain water run -off
  - B. It can cause loss of humus soil.
  - C. It makes our surroundings beautiful and colorful.
  - D. It will become breeding places of pests.
- 5. How to prevent the harmful effects of decaying materials?
  - A. Disposed your garbage properly
  - B. Keep the left over foods in the refrigerator
  - C. Segregate the decaying and non- decaying materials
  - D. All of the above

- 6. If you are going to dispose waste materials commonly found at home, what are you going to do with the decaying materials?
  - A. Keep them in the cabinet and use them again
  - B. Make a compost
  - C. Mix them with the non-decaying
  - D. Throw them in the river

Given inside the box, answer questions 7-9 below:

A B

Fishbone Chicken feathers kangkong stem potato peeling leftover meat Bottle of mineral water glass empty container of catsup toyo/vinegar broken pail basin

C

Empty can
empty bottles of softdrinks
milk
cereal drinks
sardines
corned beef
meatloaf

- 7. Which group of materials will undergo decay?
  - A. A and B
  - B. C and A
  - C. A
  - D. B
- 8. Which group of materials is recyclables?
  - A. A and B
  - B. B and C
  - C. A and C
  - D. C

- 9. Which group of materials can be turned into fertilizer?
  - A. A and C
  - B. B and C
  - C. B
  - D. A
- 10. How should non-decaying wastes be disposed?
  - A. By composting
  - B. By recycling

  - C. Reusing
    D. Both b and C

#### Lesson

## 1

# How Will I Sort or Separate Materials?

To dispose of the materials properly is to use a technique or procedure we call the Total Recycling Scheme, which utilizes wastes into factory returnables, fertilizers, feeds, fermentables, fuel, fine crafts and filling materials. These are what we identify as then multi-F's Recycling Scheme.

Week 3

Day 1



What's In

#### **Quick Check!**

Ask: Why do people need to consider the information on product labels when buying products to be stored at home?



#### Which way to go?

**Directions**: Classify the following materials as decaying and non-decaying. Put a check mark on its appropriate column. Write your answers in your answer sheet.

Materials	Biodegradable	Non-Biodegradable
1.Old toys made of wood		
2. Old toys made of plastic		
3.Plastic water bottle		
4. Balloons		
5.Empty boxes of medicines		
6. leaves		
7. Empty bottles of dextrose		
8. Disposable diapers		
9.candy wrappers		
10.soft drink cans		
11.broken pieces of glass		
12.disposable syringe		
13. juice wrappers		
14.meal leftovers		
15. pieces of cloth		



#### **Learning Circuit**

**Biodegradable**- capable of being slowly destroyed and broken down into very small parts by natural processes

**Non- Biodegradable-** not capable of being broken down by the action of living organisms

- \* To dispose of the materials properly is to use a technique or procedure we call the Total Recycling Scheme, which utilizes wastes into factory returnables, fertilizers, feeds, fermentables, fuel, fine crafts and filling materials. These are what we identify as then multi- F's Recycling Scheme.
- \* Recycling is collecting, processing and manufacturing materials instead of throwing them away. Recycling lessen the amount of garbage we have to dispose.

Ask: How will you dispose the waste materials? Write your answers in your Answer Sheet.

\_\_\_\_\_



Write your answer in the A	nswer Sheet.
b	(ibgabaodedrea) It is capable of eing slowly broken down into very mall parts by natural processes.
n	(grneiclycy) It is collecting, rocessing and manufacturing naterials instead of throwing them way.
p	(ullopoint) It is the action or rocess of making land, water and ir dirty.
to U re fe	(Itoat greneiclycy emsceh) It is a echnique or procedure which tilizes wastes into factory eturnables , fertilizers, feeds, ermentables, fuel, fine craft, and lling materials.
C	(onn ibgabaodedrea) It is not apable of being broken down by ne action of living organisms.



#### What I Have Learned

**Directions:** Identify ways of disposing and recycling of the following materials by matching column A with column B. Write your answer in your Answer Sheet.

Δ

- 1. Plastic bottle
- 2. Old magazine
- 3. Candy wrapper
- 4. Empty can
- 5. Empty box

В

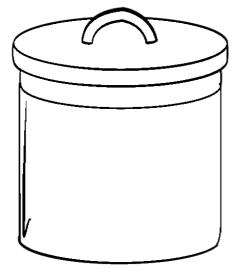
- A. flower pot
- B. organizer
- C. paper basket
- D. hanging décor/ curtain
- E. throw pillow



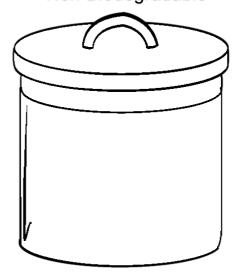
#### What I Can Do

**Directions:** Give three examples each of biodegradable and non-biodegradable materials. Draw them in the correct garbage container in your Answer Sheet.

#### Biodegradable



#### Non-Biodegradable





#### Post Assessment

**Directions:** Choose the letter of the correct answer. Write your answers on the Answer Sheet.

- 1. People in Metro Manila produce large amount of wastes. However, garbage collectors are few. Because of this, garbage stays uncollected for how many days. What should they do to reduce their garbage and keep them away from diseases?
  - A. Follow the technique of total recycling scheme.
  - B. Take vitamins to make the immune system strong.
  - C. Throw the materials anywhere.
  - D. Wear mouth mask to avoid inhaling polluted air.
- 2. Some people just throw their waste materials anywhere. What would happen if the decaying materials are not properly disposed?
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- 4. Ana is assigned to segregate waste materials at home. How will she do it?
  - A. According to its ability to float and sink
  - B. According to its color
  - C. Into decaying and non- decaying groups
  - D. Into small and big groups.

- 5. If you are going to dispose waste materials commonly found at home, what are you going to do with the decaying materials?
  - A. Keep them in the cabinet and use them again
  - B. Make a compost
  - C. Mix them with the non-decaying
  - D. Throw them in the river

Given inside the box, answer questions 6-8 below:

Δ

Fishbone
Chicken feathers
kangkong stem
potato peeling
leftover
meat

Bottle of mineral water glass empty container of catsup toyo/vinegar broken pail basin

В

C

Empty can
empty bottles of softdrinks
milk
cereal drinks
sardines
corned beef
meatloaf

- 6. Which group of materials is recyclables?
  - A. A and B
  - B. B and C
  - C. A and C
  - D. C
- 7. Which group of materials can be turned into fertilizer?
  - A. A and C
  - B. B and C
  - C. B
  - D. A
- 8. Which group of materials will undergo decay?
  - A. A and B
  - B. C and A
  - C. A
  - D. B

- 9. The city health officer gives lectures to the households of Valencia City on how to dispose their waste properly. Which of the following shows a proper waste disposal?
  - A. Putting all the waste materials in one container
  - B. Scattering waste materials on the road
  - C. Segregating waste into decaying and non- decaying wastes
  - D. Throwing waste materials on a vacant lot
- 10. How should non-decaying wastes be disposed?
  - A. By composting
  - B. By recycling
  - C. Reusing
  - D. Both b and C



#### Additional Activities

<b>Directions:</b> Draw the five recyclable materials that you can find at home in the box provided for:			

Congratulations for working diligently with this module. Try to share your experience with your teacher or elder brother or sister at home.



#### **QUARTER 1- MODULE 3A**

Lesson

### **How Will I Sort or Separate Materials?**

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D	.6
В	.8
Э	٦.
В	.9
D	.5
D	4.
Э	3.
A	.2
Э	٦.
WHAT I KNOW	

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В	.41
NB	13.'
NB	12.
NB	:11
NB	.01
NB	.6
NB	.8
NB	٦.
8	.9
В	.5
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NB	3.
NB	٦.
В	1.
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ANSWERS MAY VARY

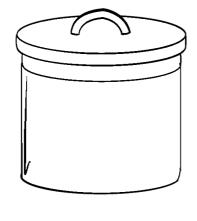
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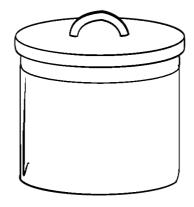
ANSWERS MAY VARY

What's In

NON BIODE@BABLE	.c	
TOTAL RECYCLING SCHEME	.4	
POLLUTION	.ε	
RECYCLING	.2	
BIODEGRADABLE	٦.	
What's More		

What Can I Do (Answers may Vary)





В	.5
AA	4.
D/E	.5
Э	2.
8\A	٦.
What I have Learned	

В	S.	
AA	4.	
D/E	3.	
Э	2.	
A/B	٦.	
What I have Learned		

10. D

Э

Э

D В

В

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a D

POST ASSESSMENT

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1	Additional Activity (answers may vary)
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1	

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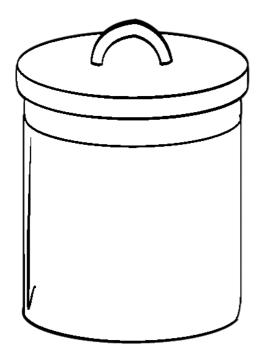
#### **QUARTER 1- MODULE 3A**

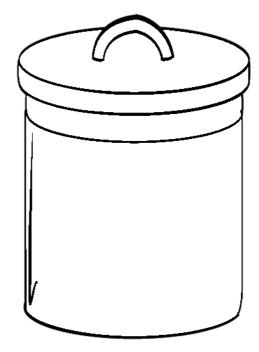
Lesson 1

# **How Will I Sort or Separate Materials?**

Name:	Grade &Section:	Score:
	Answer Sheet	
WHAT I KNOW	What's In	
1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	What is it	
What's New		
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13.' 14.	1. 2. 3. 4. 5.	/hat's More
14.	_	

What Can I Do (Answers may Vary)





What I have Learned		
1.		
2.		
3.		
4.		
5.		