

Science

Quarter 1 - Module 3B: Proper Waste Disposal According to the Properties of Each Materials



Science – Grade 4
Alternative Delivery Mode
Quarter 1 - Module 3B: Proper Waste Disposal According to the Properties of Each
Materials
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Science

Quarter 1 - Module 3B: Proper Ways Disposal According to the Properties of Each Material

This instructional material was collaboratively developed and reviewed by educators from public schools. 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.

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What This Module is About

Everyone can make wastes. These wastes are harmful to humans and to our environment. To keep the environment clean, waste materials must be disposed properly.

In this module, you will learn how to dispose your wastes properly and observe safety precautions.



Notes to the Teacher

Dear Teacher

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



What I Need to Know

Disposal must be done to avoid harming the environment. You should practice proper waste disposal to avoid harming the environment and practice precautionary measures in handling these materials.

Learning Objectives:

1. Demonstrate proper disposal of waste according to its properties
2. Enumerate safety precautions in disposing waste materials according to its properties

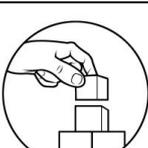
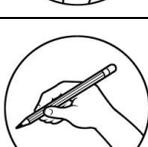
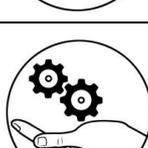
Time Duration: 4 Days

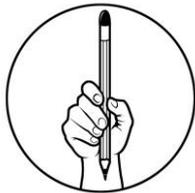
How to Learn from this Module

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
	More Activities	Activities designed to increase the strength of your skills and knowledge gained and tends to induce repetitions of actions / learning



What I Know

Direction: Choose the letter of the correct answer.

1. Which statement is a good practice of disposing waste?
 - A. Throwing away old clothes and broken bags
 - B. Placing medicines in the cabinet with proper labels
 - C. Keeping empty containers for future use
 - D. Sorting biodegradable and non-biodegradable materials in the trash can

2. If you are going to dispose waste materials such as leaves and vegetable peelings, what are you going to do with this?
 - A. Make a compost.
 - B. Throw them in the river.
 - C. Mix them with the non-decaying.
 - D. Keep them in the cabinet and used again.

3. Which of the following show proper waste disposal?
 - A. Scattering waste materials on the road
 - B. Throwing waste materials on a vacant lot
 - C. Putting all the waste materials in one container
 - D. Segregating waste into decaying and non- decaying wastes

4. Why should waste never be disposed down rivers?
 - A. To avoid pollution of water sources
 - B. It will beautify the rivers.
 - C. It will make the water clean.
 - D. It can make the water fresh.

5. Which of the following materials will decay?
 - A. Cellophane
 - B. Banana peelings
 - C. Plates
 - D. Bottle

6. How should non-decaying wastes be disposed?
 - A. By composting
 - B. Reusing
 - C. By recycling
 - D. Both b and c

7. Waste should be segregated into _____ groups.
- A. Decaying and non- decaying
 - B. Bluish and yellowish
 - C. Small and big
 - D. Hard and soft
8. What safety precaution do you need to observe in disposing waste materials?
- A. Use gloves or adequate equipment in handling waste materials to prevent puncture by sharp items.
 - B. Taste and touch waste materials before disposing them.
 - C. Keep the waste materials in your kitchen.
 - D. Expose yourself to the waste materials.
9. How would you distinguish a waste that is recyclable?
- A. Junkshop would buy it.
 - B. Someone may still need it.
 - C. You can change it for another purpose.
 - D. All of the above
10. Why do you have to practice proper waste disposal?
- A. To make the surrounding clean and beautiful
 - B. To lessen the accumulation or piling of waste in landfills.
 - C. To help prevent flooding caused by waste materials that clogged sewers and drainage.
 - D. all of the above

Lesson

1

Proper Waste Disposal According to the Properties of Each Material

Each person creates wastes such as plastic containers, used paper, broken tires, food packages and bottles made of Styrofoam, cardboard, and plastic. Wastes can be harmful to humans and to the environment. To keep the environment clean, waste materials must be disposed properly.

Week 4

Day 1



What's In

Ask the following questions:

1. Where will you place the materials that undergo decay?

2. What are you going to do with the materials that will undergo decay to make it useful?

3. Where will you place the materials that do not decay?



What's New

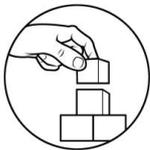
How do you dispose of your materials at home? Below is a checklist. Put a check in the proper column to show how you handle materials.

What I Do	Always	Sometimes	Seldom
1. Throw candy wrappers in the trash can.			
2. Segregate wastes between biodegradable and non-biodegradable.			
3. Keep used plastic spoons, forks, plates, and cups to be used again when needed.			
4. Throw decayed fruits and vegetables in the compost pit.			
5. Sell newspapers, cans, and empty bottles to junk collectors.			
6. Segregate dry and wet wastes.			
7. Donate unexpired canned goods to typhoon victims.			
8. Throw fruit and vegetable peelings in the compost pit.			
9. Bury dead animals.			
10. Recycle plastic bottles.			



What is It

- * Proper disposal of human waste is important to avoid pollution of water sources.
- * Disposal must be done properly to avoid harming the environment and harm to human health.
- * Waste should never be disposed down sinks, drains, lavatories, ditches, near wildlife habitats or ponds.
- * Products for disposal should not be mixed together and containers should be clearly labelled.
- * Separate materials into bio- degradable and non- biodegradable.
- * Recycle some of the non- biodegradable materials.



What's More

Directions: How many recyclable materials can you find?

B	M	T	Y	U	F	V	D	H	N
A	O	F	K	H	J	D	V	G	N
V	S	T	I	R	E	S	Z	C	G
C	C	B	T	A	D	S	G	W	B
D	R	G	P	L	A	S	T	I	C
J	Y	H	G	H	E	J	K	R	D
N	J	E	Z	X	C	V	B	E	N
R	U	B	B	E	R	V	B	N	V

Write your answers in your answer sheet.



What I Have Learned

Complete the statement.

Name: _____

Grade/ Section: _____

Answer: I will dispose my garbage properly so that

Because if I will not _____



What I Can Do

The decay rate of different materials varies as shown in the table below.

Material	Estimated Time of Decay	Material	Estimated Time of Decay
Banana peel	2 months	Steel can	100 years
Notebook paper	2 months	Aluminum soda can	350 years
Comic book	6 months	Plastic bag	400 years
Cardboard milk carton	5 years	Glass bottle	Maybe never

Why is it not wise to use plastic bags?

How can you help solve waste problems in your community?



Answer Key

QUARTER 1- MODULE 3B	
Lesson 1	Proper Waste Disposal According to the Properties of Each Material

What I Know
1. D 6. D
2. A 7. A
3. D 8. A
4. A 9. D
5. B 10. D

What I Have Learned
(Answer may vary)

What's In
(Answers may vary)

What's more (in any order)
Plastic
Wire
Tires
bottle
rubber

What's New
(Answers may vary)

What I Can Do
(Answer may vary)

Lesson
2

**Safety Precautions in
Disposing Waste
Materials**

Waste materials should be handled and disposed properly. Some of these materials can be reused and recycled.

Week 4

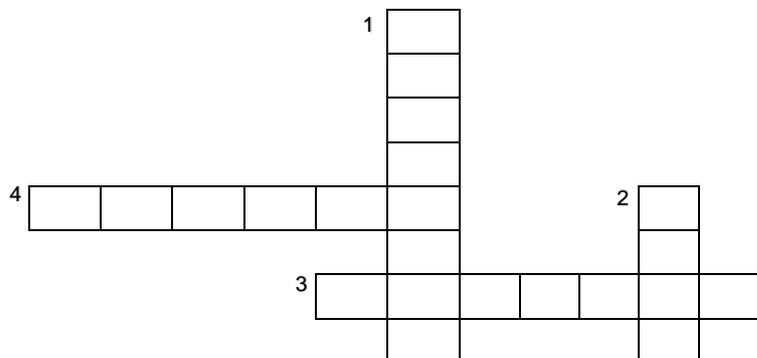
Day 3



What's In

Direction: Fill in the cross word puzzle.

- Down: 1. Place where you sell bottles/ used paper.
 2. You use this to cover your nose and mouth.
- Across 3. You place fruit/ vegetable peelings here.
 4. You wear this to protect your hands.





What's New

Direction: Analogy. Choose how you can dispose the following waste materials.

1. Vegetable peeling: Compost pit
Water bottle: _____
2. Old plastic toys : Recycle
Fish bones: _____
3. Old newspaper: Junkshop
Plastic: _____
4. Meal leftover: compost pit
Carton box: _____
5. Papers: Junkshop
Fruit and vegetable peelings: _____



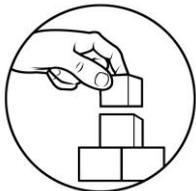
What is It

- * Waste materials should be properly disposed of
- * There are many waste materials found in the home, classrooms, and laboratories.

Below are examples of the waste materials:

Home	Offices	Classrooms	Laboratories
Tubes/ bottles of shampoo and conditioner	Packing materials	Empty boxes	Disposable syringe
Leftover food(fish, meat, rice)	Empty cartridge	cardboard	razor
Plastic containers	Empty boxes	Broken pieces of glass	gloves
Soft drink bottles	Cutter/ blades	Old newspaper	needles

- * Proper segregation of materials should be observed. Do not mix decaying materials with non-decaying materials.
- * The sharp object should be placed in a covered cardboard box or in a sealed box labeled as trash.
- * Never touch waste materials with your bare hands. Use appropriate equipment in sorting waste materials to avoid puncture from sharp objects or use gloves.
- * Recycle non-decaying waste materials such as plastic bottles. They can be made into decorations and pots.
- * Generate income by selling old newspapers, cardboard, cartolinas, manila papers, and bond papers and other waste materials that are not recyclables.
- * Reuse plastic bags.



What's More

Draw a happy face ☺ if the situations shows safety precautions in handling waste materials and a sad face ☹ if it does not.

Situation	
1. Wear gloves in sorting out harmful materials.	
2. The sharp objects should be placed in a sealed box and marked the box as trash.	
3. Never touch waste materials with your bare hands.	
4. Do not recycle non decaying waste.	
5. Wash hands with soap and water after handling waste materials.	



What I Have Learned

Answer the following questions:

1. When do you consider a material as waste?

2. Suggest ways of sorting wastes?

3. Enumerate ways of making use of waste materials.

4. How do you dispose waste materials properly?

Week 4

Day 4



What I Can Do

Paper Recycling

Paper is one of the biggest bulk of household, school, office and industry waste. It is also one of the easiest recyclable wastes. Here are some steps in recycling paper.

1. Tear the used paper into small pieces.
2. Soak the paper in water
3. Form it into balls as big as your fist
4. Dry it under the sun.
5. When it is dry you can use it as replacement of charcoal in cooking.



Answer Key

QUARTER 1- MODULE 3B	
Lesson 2	Proper Waste Disposal According to the Properties of Each Material

What's In
1. Junkshop
2. Mask
3. Compost
4. Gloves

What I Have Learned
(Answer may vary)

What's New
1. Junkshop/ Recycle
2. Compost Pit
3. Junkshop/ Recycle
4. Junkshop/ Recycle
5. Compost Pit

What I can Do
(Answer may vary)

What's More
1. 😊
2. 😊
3. 😊
4. 😊
5. 😊



Post Assessment

Direction: Choose the letter of the correct answer.

1. Which of the following materials will decay?
 - A. Cellophane
 - B. Banana peelings
 - C. Plates
 - D. Bottle

2. Which statement is a good practice of disposing waste?
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 - B. Throw them in the river.
 - C. Mix them with the non-decaying.
 - D. Keep them in the cabinet and used again.

5. Why should waste never be disposed down rivers?
 - A. To avoid pollution of water sources
 - B. It will beautify the rivers.
 - C. It will make the water clean.
 - D. It can make the water fresh.

6. Which of the following show proper waste disposal?
 - A. Throwing garbage to the sea
 - B. Putting all waste materials in one container

- C. Throwing leftover foods in the drainage canal
 - D. Segregating waste into decaying and no- decaying
7. How should non-decaying wastes be disposed?
- A. By composting
 - B. Reusing
 - C. By recycling
 - D. Both B and C
8. Waste should be segregated into _____ groups.
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 - B. Bluish and yellowish
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 - D. all of the above

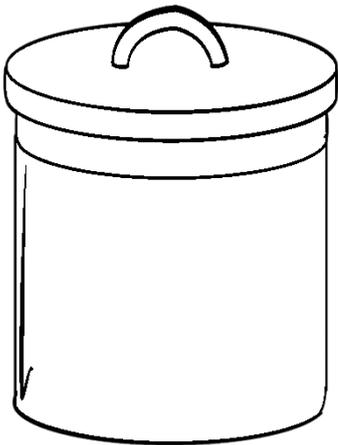


Additional Activities

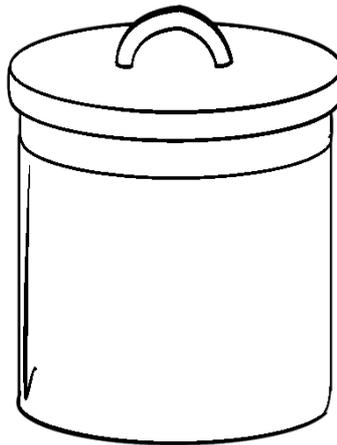
Directions: Below are different waste materials found at home. Segregate these materials in the proper trash bin. Write only the letter that corresponds to your answer.

- | | |
|-----------------------------------|----------------------------|
| A. Worn out rubber slippers | I. Papers / cartons |
| B. Used t-shirts | J. plastic bags |
| C. Old toys made of plastic/ wood | K. bread with molds |
| D. Meal leftovers | L. plastic bottle of water |
| E. Balloons | M. broken pieces of glass |
| F. Empty boxes of medicines | N. vegetable peelings |
| G. Leaves | O. juice wrappers |
| H. Candy wrappers | |

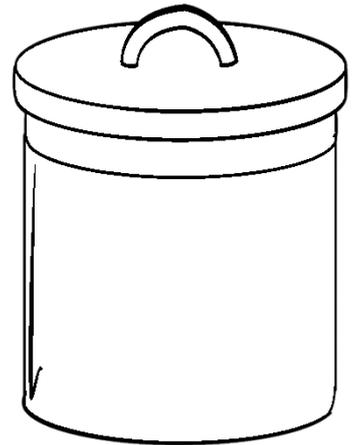
Biodegradable



Non- Biodegradable



Recyclable



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



Answer Key

Post Assessment	1. B
	2. D
	3. D
	4. A
	5. A
	6. D
	7. D
	8. A
	9. A
	10. D

Additional Activities		
Biodegradable	Non-Biodegradable	Recyclable
1. D	A	B
2. G	E	C
3. K	M	F
4. N		H
5.		I
6.		J
7.		L
8.		O

Reference:

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Detailed Lesson Plan, Division of Valencia City (2019)

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QUARTER 1- MODULE 3B

**Lesson
1**

**Proper Waste Disposal According
to the Properties of Each Material**

Name: _____ Grade & Section: _____ Score: _____

Answer Sheet

What I Know	
1.	6.
2.	7.
3.	8.
4.	9.
5.	10

What I Have Learned
(Answer may vary)

What's In
(Answers may vary)

What's more (in any order)

What's New
(Answers may vary)

What I Can Do
(Answer may vary)

QUARTER 1- MODULE 3B

**Lesson
2**

**Proper Waste Disposal According
to the Properties of Each Material**

Name: _____ Grade & Section: _____ Score: _____

Answer Sheet

What's In
1.
2.
3.
4.

What I can Do (Answer may vary)

What's New
1.
2.
3.
4.
5.

What I have learned (Answer may vary)

What's More
6.
7.
8.
9.
10.

QUARTER 1- MODULE 3B

**Lesson
2**

**Post Assessment/
Additional Activities**

Name: _____ Grade & Section: _____ Score: _____

Answer Sheet

Post Assessment
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

Additional Activities		
Biodegradable	Non-Biodegradable	Recyclable
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		