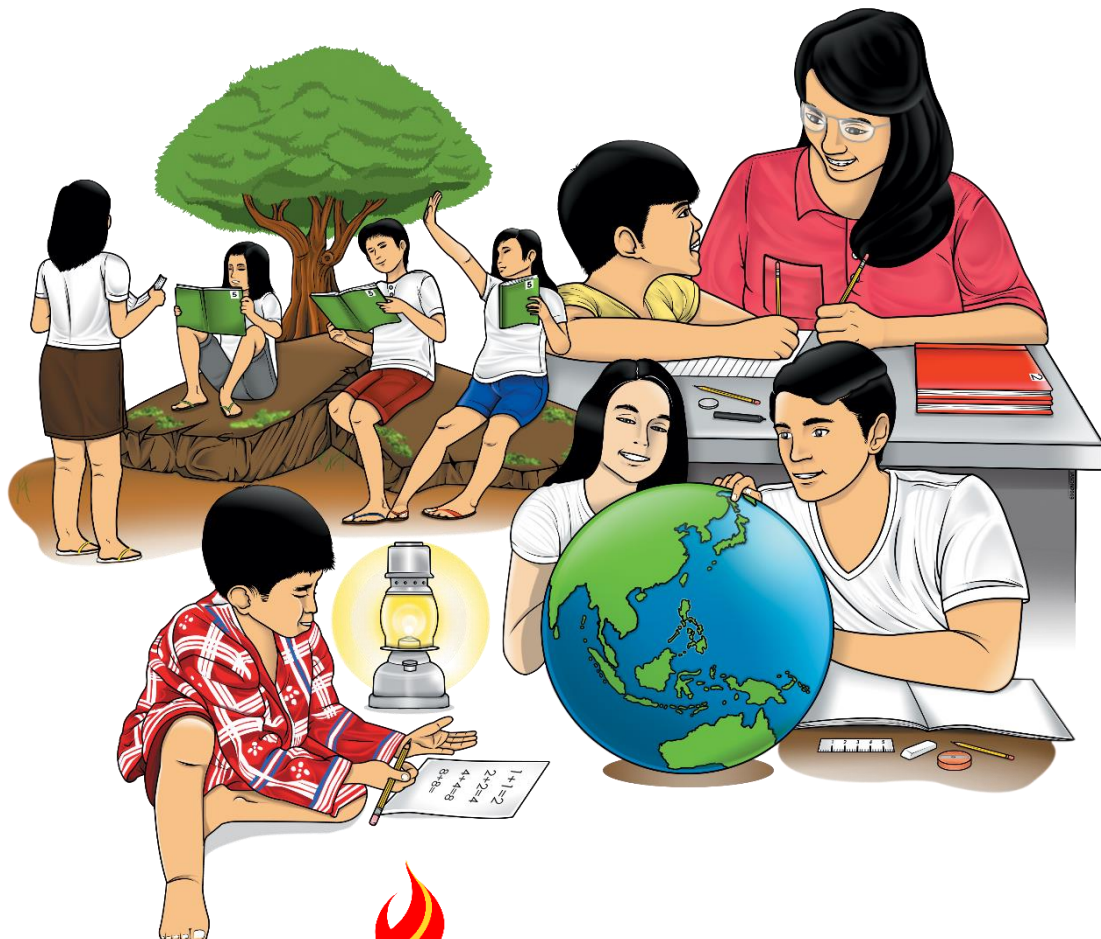


Science

Quarter 1 – Module 1

Lesson 2: Importance of Labels in Identifying Useful and Harmful Materials



Science – Grade 5
Alternative Delivery Mode
Quarter 1 – Module 1 Lesson 2: Importance of Labels in Identifying Useful and Harmful Materials
First Edition, 2020

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Science

Quarter 1 – Module 1

**Lesson 2: Importance of Labels
in Identifying Useful and
Harmful Materials**

Introductory Message

For the facilitator:

Welcome to the **Science Grade 5** Alternative Delivery Mode (ADM) **Module on Importance of Labels in Identifying Useful and Harmful Materials!**

This module was collaboratively designed, developed and reviewed by educators both from public and private institutions to assist you, the teacher or facilitator in helping the learners to meet the standards set by the K to 12 Curriculum while overcoming their personal, social, and economic constraints in schooling.

This learning resource hopes to engage the learners into guided and independent learning activities at their own pace and time. Furthermore, this also aims to help learners acquire the needed 21st century skills while taking into consideration their needs and circumstances.

As a facilitator, you are expected to orient the learners on how to use this module. You also need to keep track of the learners' progress while allowing them to manage their own learning. Furthermore, you are expected to encourage and assist the learners as they do the tasks included in the module.

For the learner:

Welcome to the **Science 5** Alternative Delivery Mode (ADM) **Module on Importance of Labels in Identifying Useful and Harmful Materials!**

This module was designed to provide you with fun and meaningful opportunities for guided and independent learning at your own pace and time. You will be enabled to process the contents of the learning resource while being an active learner.

This module has the following parts and corresponding icons:



What I Need to Know

This will give you an idea of the skills or competencies you are expected to learn in the module.



What I Know

This part is composed of a 10-item activity in order to check what you already know about the lesson to take. If you get all the answers correct (100%) you may decide to skip this module.



What's In

This is a brief drill or review to help you link the current lesson with the previous one.



What's New

In this portion, the new lesson will be introduced to you in various ways; a story, a song, a poem, a problem opener, an activity or a situation.



What is It

This section provides a brief discussion of the lesson. This aims to help you discover and understand new concepts and skills.



What's More

This comprises activities for independent practice to solidify your understanding and skills of the topic. You may check the answers to the exercises using the Answer Key at the end of the module.



What I Have Learned

This includes questions or fill on the blank sentence/paragraph to process what you learned from the lesson.



What I Can Do

This section provides an activity which will help you transfer your new knowledge or skill into real life situations or concerns.



Assessment

This is another 10-item task which aims to evaluate your level of mastery in achieving the learning competency.



Additional Activities

In this portion, another activity will be given to you to enrich your knowledge or skill of the lesson the learned.



Answer Key

This contains answers to all activities in the module.

At the end of this module you will also find:

References

This is a list of all sources used in developing this module.

The following are some reminders in using this module:

1. Use the module with care. Do not put unnecessary mark/s on any part of the module. Use a separate sheet of paper in answering the exercises.
2. Don't forget to answer *What I Know* before moving on to the other activities included in the module.
3. Read the instruction carefully before doing each task.
4. Observe honesty and integrity in doing the tasks and checking your answers.
5. Finish the task at hand before proceeding to the next.
6. Return this module to your teacher/facilitator once you are through with it.

If you encounter any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator. Always bear in mind that you are not alone.

We hope that through this material, you will experience meaningful learning and gain deep understanding of the relevant competencies. You can do it!



What I Need to Know

There are different materials found at home. These are important because they are used in our daily activities such as cooking tool, cleaning our houses, treating ailments, for personal hygiene, and many more. It is important to know their different properties so that we can identify whether a certain material is harmful or useful.

In this module, you will be able to explain the importance of labels in identifying useful and harmful materials.

Note: Please provide a separate sheet of paper for all your answers in this module.



What I Know

Directions: Classify each household product according to its use. Write **P**, for personal care, **F** for food product, **M** for medicine, **C** for cleaning product and **PE** for pesticides.

1. bleach
2. canned goods
3. face powder
4. paracetamol
5. shampoo
6. insecticide spray
7. toothpaste
8. bread
9. cough syrup
10. dishwashing liquid

Lesson

2

Importance of Labels in Identifying Useful and Harmful Materials



What's In

Identify the following whether the material is useful or harmful. Write **U** for useful, or **H** for harmful.

1. drained batteries
2. old newspapers
3. fruit peelings
4. shattered glass
5. expired medicine



What's New

I. Directions: Study the pictures below and match the common product labels to its corresponding product.

Product Labels

A



<https://www.needpix.com/photo/21783/inflammable-signs-danger-warning-flammable-caution-hazardous-flammability-materials>

B



<https://www.needpix.com/photo/21773/safety-signs-corrosion-alkali-acids-corrosives-logo-hazard-warning>

C

<https://www.needpix.com/photo/1303936/recycle-sign-green-background-shadow>

D

https://commons.wikimedia.org/wiki/File:WHMIS_Class_D-1.svg

E

<https://www.vectorstock.com/royalty-free-vector/halal-sign-and-symbol-logo-vector-21843073>

Products

1. Plastic bottles
2. Muriatic Acid
3. Commercial Fertilizer
4. Alcohol
5. Food products

II. Directions: Write **True** if the statement is correct, or **False** if wrong.




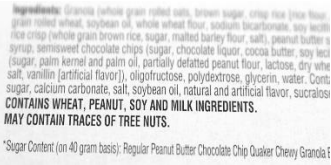




1. Consumers must read product labels when buying grocery items.
2. Place fertilizers in containers and label them as poisonous.
3. Throw away plastic bottles after using them.
4. Labels are not important in classifying materials as to useful or harmful
5. Food allergen warnings are helpful for those who have allergies



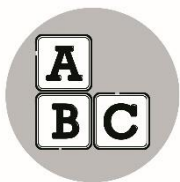
What is It

Various household products are found in our homes. These are composed of different materials with different properties. It is therefore important for consumers to read product labels. Through product labels, consumers become aware of whether the product is harmful or not. Useful materials are those that can be used for other purposes, can be recycled, can be dumped straight into a landfill and something can be recovered from it. Harmful materials, on the other hand, are toxic to us, can cause injury, cannot be dumped straight into a landfill, can pollute the environment, and take too much time to decompose. Expiration dates and hazardous signs are some of the most important elements in a product label. Some products are flammable such as paints and therefore must be stored away from open flames. Others are corrosive like muriatic acid so it is advisable to keep it away from children's reach. Pesticides, fertilizers, and muriatic acid are poisonous if not handled properly. Reading product labels can help you identify whether the product is useful or

harmful. These simple symbols in labels give ideas on how to use and store the product properly, and in order to help prevent accidents from happening and therefore save lives. The following are common signs in product labels which can help consumers decide whether the product is useful or harmful:

Symbol	Meaning	Example
Useful Product Labels		
 <p>https://www.vectorstock.com/royalty-free-vector/halal-sign-and-symbol-logo-vector-21843073</p>	<p style="text-align: center;">Halal</p> <p>-product is certified as safe for consumption (for Muslims)</p>	 <p>https://commons.wikimedia.org/wiki/File:05349jfPhilippine_foods_cusinesvf_17.jpg</p>
 <p>https://commons.wikimedia.org/wiki/File:Ale_rgias.png</p>	<p style="text-align: center;">Food Allergen Warning</p> <p>-warns consumers of ingredients in the product that may cause allergy</p>	 <p>https://commons.wikimedia.org/wiki/File:US_Allergen_Information_Example.jpg</p>
 <p>https://www.needpix.com/photo/1303936/recycle-sign-green-background-shadow</p>	<p style="text-align: center;">Recyclable</p> <p>-products can be recycled</p>	 <p>https://commons.wikimedia.org/wiki/File:Recycling_codes_on_products.jpg</p>
Symbol	Meaning	Example
Harmful Product Labels		
 <p>https://www.needpix.com/photo/21783/inflammable-signs-danger-warning-flammable-caution-hazardous-flammability-materials</p>	<p style="text-align: center;">Flammable</p> <p>-can easily catch fire</p>	 <p>https://commons.wikimedia.org/wiki/Category:Kerosene#/media/File:Kerosene_bottle.jpg</p>

 <p>https://commons.wikimedia.org/wiki/File:WHMIS_C lass_D-1.svg</p>	<p>Poisonous</p> <p>-harmful to the body; may cause death</p>	 <p>https://pxhere.com/en/photo/598652</p>
 <p>https://www.needpix.com/photo/21773/safety-signs-corrosion-alkali-acids-corrosives-logo-hazard-warning</p>	<p>Corrosive</p> <p>- can cause severe burns</p>	 <p>https://commons.wikimedia.org/wiki/File: Battery_fluid,_plastic_bottle.jpg</p>



What's More

I. Directions: Classify the different materials found in the word pool below as useful or harmful. Use the following table as a guide and answer the follow-up question.

Useful Material	Harmful Material
empty disinfectant bottle candy wrappers vegetable scraps fruit peelings	old newspaper paint cans broken glassware scratch paper

Explain how you classified the materials in column 2 as harmful products. Why is it important to read labels?

II. Directions: Copy and complete the table below. Identify whether the household material is useful or harmful, then determine the product label that would help you identify its category. The first one is done for you.

Household Material	Useful	Harmful	Product Label
1. Muriatic acid		/	Corrosive/poisonous
2. LPG			
3. paper cups			
4. empty plastic bottles			
5. insecticides			



What I Have Learned

How do you classify the materials at home? What is your basis in grouping the different materials? Are product labels important? Why?



What I Can Do

What do you think will happen to us if we will not read product labels? What harm can it bring to us?



Assessment

A. Put a check (/) mark if the statement is correct, an (X) mark if not.

1. Halal certified food can be consumed by Muslims.
2. Keep pesticides in areas away from children's reach.
3. All household materials are useful.
4. Muriatic acid can be labeled as corrosive and poisonous.
5. Recyclable materials such as empty mineral bottles are harmful.

B. Read each situation below and choose the best answer. Write the letter only.

1. Your aunt gave you chocolates as birthday presents. You were very excited to share it with your younger brother who loves chocolates but when you read the label, you noticed a food allergen warning. Some of these contain peanuts. What will you do?
 - A. I will still give him the chocolates and ignore the effects.
 - B. I will choose the ones without peanuts and give it to him.
 - C. He will not be given any chocolate because he has an allergy.
 - D. I will go to the grocery store and buy candies for my brother.
2. Father came home from work. Upon entering the gate, he disinfects his hands by using 70% alcohol. However, Mother was carrying a lighted candle and about to approach Father. What is the best thing to do?
 - A. Mother may bring a kerosene lamp instead of a candle.
 - B. Let her continue to approach Father with a lighted candle.
 - C. Tell Mother to put out the flame before going to the gate.
 - D. Bring more bottles of alcohol for Father.
3. Your best friend bought a cough syrup from the pharmacy. You noticed that the medicine is expired already. What are you going to say to her?
 - A. Continue to take medicine.
 - B. Do not take the cough syrup.
 - C. Mix it with new medicine.
 - D. Scold the pharmacist for giving expired medicine.
4. Mang Lito is a farmer. He used commercial pesticides in controlling pests in his rice field. Where can he store this poisonous product?
 - A. at the kitchen sink
 - B. on top of the dining table
 - C. in a closed and secured cabinet
 - D. under the table

5. Your Muslim friend visited your home. After some time, you decided to prepare food for lunch. What food products are you going to serve?
- A. meat products
 - B. any available food
 - C. Halal certified food
 - D. dairy products



Additional Activities

Directions: Visit your kitchen and list down 10 household materials. Read each product labels and classify the materials as useful or harmful using the table below. The first one is done for you.

Household Material	Useful	Harmful
Expired medicine		/
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		



Answer Key

What I Know:
1. C 6. PE
2. F 7. P
3. P 8. F
4. M 9. M
5. P 10. C

What's In:
1. H
2. U
3. U
4. H
5. H

What's New:
I.1.C
2.B/D
3.D
4.A
5.E
II.
1.True
2.True
3.False
4.False
5.True

Assessment A
1./
2./
3.X
4./
5.X

Assessment B
1.B
2.C
3.B
4.C
5.C

Additional Activities
(Answers may vary)

Harmful materials are toxic to us, can cause injury, cannot be dumped straight into a landfill, can pollute the environment and take too much time to decompose.

Reading the product label can also help us classify materials. Expiration dates and hazardous signs are some of the most important elements in a product label.

Useful Material	Candy wrappers Vegetable scraps Fruit peelings Scratch paper Old newspaper
Harmful Material	Empty disinfectant bottle Paint cans Broken glassware

What's More (I)

Household material	Useful	Harmful	Warning Sign in Product Label (for harmful materials)
1. Muriatic acid		/	corrosive
2. LPG		/	flammable
3. scratch papers	/		recyclable
4. empty plastic bottles	/		recyclable
5. insecticides		/	poisonous

What's More (II)

What I Have Learned: Materials at home can be classified as useful and harmful. Product labels can help us identify which products are useful or harmful. Product labels are important because these can warn the consumers of the possible harm from a certain product.

What Can I Do: If we do not read product labels we will be exposed to danger. For example, if we do not put proper label to poisonous products, these can cause great danger because toxic components from these products can kill humans.

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