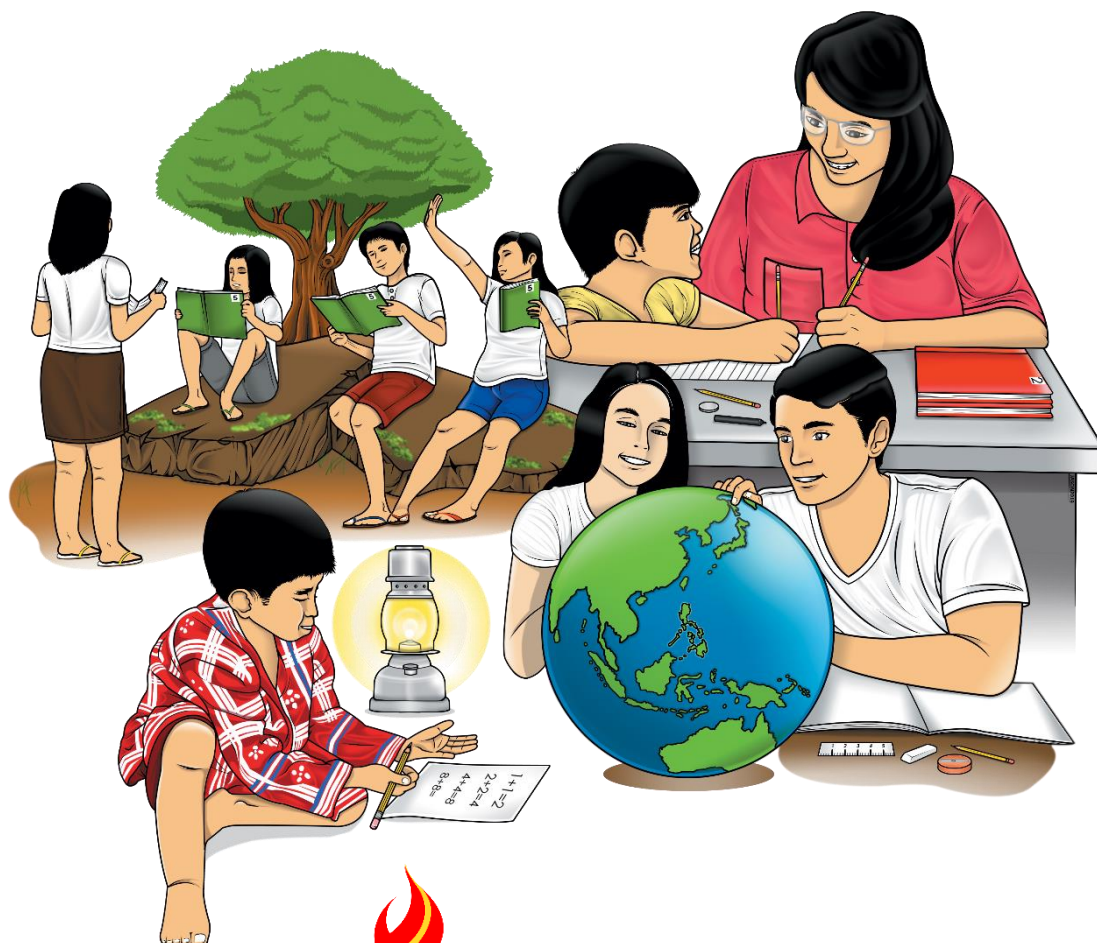


5

Science

Quarter 1 – Module 3

Lesson 2: Importance of Practicing the 5Rs



Science – Grade 5
Alternative Delivery Mode
Quarter 1 – Module 3 Lesson 2: Importance of Practicing the 5Rs
First Edition, 2020

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5

Science

Quarter 1 – Module 3

**Lesson 2: Importance of
Practicing the 5Rs**

Introductory Message

For the facilitator:

Welcome to the **Science Grade 5** Alternative Delivery Mode (ADM) Module on **Importance of Practicing the 5Rs!**

This module was collaboratively designed, developed and reviewed by educators from both 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 Grade 5** Alternative Delivery Mode (ADM) Module on **Importance of Practicing the 5Rs!**

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 question or fill in 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 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

People have increased their demand and have changed their consumption patterns. The increase in population has led to the increase in waste production. Waste has a huge, negative impact on our natural environment. How can you help in managing waste? Recycling is one, very important way. It helps us preserve our natural resources for the future generations and makes us earn money out of recyclable materials.

This module will help you recognize the importance of reduce, reuse, recycle, repair, and recover in waste management. It will also help you design products out of recyclable solid or liquid materials.

Note: Please provide a separate sheet for your answers.



What I Know

Directions: Analyze and classify each statement below if they show any of the 5Rs of waste management. Pick out your answer from the box and write it in your paper.

Reduce	Reuse	Recycle	Repair	Recover
---------------	--------------	----------------	---------------	----------------

1. Rhellian found her old dolls and gave them to her baby sister.
2. Instead of buying a new bag for the coming school days, Julia washed and fixed her old one.
3. Simon used few big bags in the grocery instead of many small ones.
4. Mr. Lumapas collected the chicken manure in his poultry farm and used it as fertilizer.
5. Thea's school teacher always collects old newspapers to be used as scrap papers.
6. During Christmas, Ynah and her friends make a Christmas lantern made purely of mussel shells and candy wrappers.
7. Genelyn only bought vegetables enough for her one-day meal.
8. May opens a garage sale in her place to sell her old furniture.
9. Zach always brings his water tumbler every time he buys juice from the canteen.
10. Instead of throwing away all the soft drink cans, Gemma used them as pots for the plants.

Lesson

2

Importance of Practicing the 5Rs



What's In

Directions: Write USEFUL if the material serves a particular purpose or HARMFUL if it brings damage to us or the environment.

1. Empty bottles
2. Fruit peelings
3. Broken glass
4. Emptied candy wrappers
5. Expired medicines



What's New

Directions: Study the pictures below and answer the questions that follow.



<https://www.pickpik.com/garbage-waste-container-waste-waste-bins-waste-disposal-environmental-protection-43474>



https://commons.wikimedia.org/wiki/File:Garbage_on_a_roadside.JPG

1. What can you say about the pictures?
2. What waste materials are commonly found?
3. Are those materials found in your community, too?
4. What do you think are the effects of excessive production of waste materials in your community?
5. What can you do to decrease the volume of waste materials in your community?



What is It

Wastes refer to used or consumed products or materials. A very good example of this is garbage. Garbage emits foul odor and makes us sick.

Waste management refers to the practice of proper waste disposal. A kind of waste management we follow nowadays is the **Reduce, Reuse, Recycle, Repair and Recover** or the **5Rs** of waste management. This 5Rs aims to promote a clean and healthy environment, to transform garbage into something useful, and to make the earth “zero waste” or free of any garbage or waste material.

The following is the definition of each R:

Reduce - it simply means reducing or lessening the amount of possible waste materials.

Example: Saving packaging, colored paper and other items for arts, and crafts projects.

Reuse - it means to use again for the same purpose the materials as much as possible.

Example: Using old hand-me-down clothes.

Recycle - it means processing waste materials to make another product.

Example: Making old papers into paper charcoal.

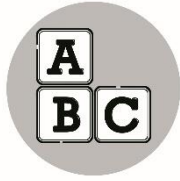
Repair - is fixing or restoring broken items so that these will be used again.

Example: Repainting tables and chairs.

Recover - it means taking energy or materials from wastes to be converted into new resources.

Example: Making animal manure into fertilizer for plants.

Designing a product out of local recyclable solid or liquid materials in making useful products is an application of the 5Rs of waste management.



What's More

Activity 1

Directions: Put a checkmark (✓) if the statement shows an application of the 5Rs or a wrong mark (X) if otherwise. Afterward, answer the follow-up questions.

1. Renee has started to compost her food scraps and leaves/yard trimmings. When it all breaks down into soil, she'll use it for her garden.
2. Serena has grown older, so her mother decided to donate her used clothes to the victims of the typhoon in Samar.
3. The Grade 5 pupils are fond of throwing paper garbage in the trash can.
4. Tenten is collecting used empty plastic bottles for his Science project. He plans to make a lantern out of these bottles.
5. My older sister kept on throwing away used cooking oil.

- ❖ What can compost food scraps and dried leaves do to our plants?
- ❖ What waste management is shown by Serena's mother?
- ❖ What should you do to your scratch papers? Plastic bottles?
- ❖ How will you recycle used cooking oil at home?

Activity 2

Directions: Study the pictures and identify what waste management practice is shown. Write Reduce, Reuse, Recycle, Repair, or Recover. Afterward, answer the follow-up questions.

1.



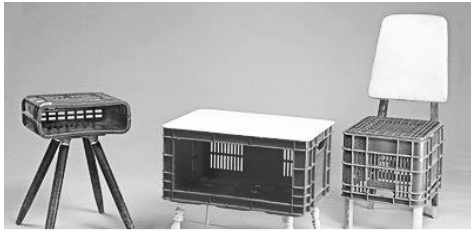
https://en.wikipedia.org/wiki/File:Eco_bag_IH.jpg

2.



<https://www.wallpaperflare.com/six-full-clear-glass-jars-on-white-surface-food-snack-plant-wallpaper-egncm>

3.



<https://www.flickr.com/photos/27620885@N02/2706553128>

4.



<https://www.flickr.com/photos/frostis/8645947048/>

5.



<https://www.flickr.com/photos/terriem/6788436159>

- ❖ What will you do to reduce, reuse, recycle, repair, and recover waste materials?
- ❖ Why is the 5Rs in waste management important?

Activity 3

Directions: Study the pictures of the common practices observed in our place. Which of the following importance of the 5Rs is a direct result of the given practice? Choose the letter of the best answer.

- A. promote a clean and healthy environment
- B. transform garbage into something useful
- C. make the earth “zero waste” or free of any garbage or waste material

1.



https://commons.wikimedia.org/wiki/File:Car_tires_as_seats_in_Thailand.JPG

3.



<https://pixabay.com/photos/zero-waste-plastic-free-minimalism-4221633/>

2.



https://commons.wikimedia.org/wiki/File:Colorful_Recycling_Containers_for_Trash.jpg

4.



https://commons.wikimedia.org/wiki/File:Boracay_Cleanup_EMB_DENR_R6.jpg



What I Have Learned

Directions: Supply the statements with a word/phrase to complete the paragraph. Follow the numbering in the paragraph in writing your answers.

(1)_____ refers to the practice of waste disposal. (2)_____ refer to used or consumed products or materials. The (3)_____ of waste management is the modern way of organizing garbage and waste materials. (4)_____ means reusing all materials as much as possible. (5)_____ means taking energy or materials from wastes to be converted into new resources. (6)_____ means processing the waste materials to make another product. (7)_____ simply means reducing or lessening the amount of possible waste materials. (8)_____ is fixing or restoring broken items to be used again. The focus of 5Rs waste management is to promote a (9)_____ environment, transform garbage into something (10)_____ and make the earth free of any garbage or waste material.



What I Can Do

Directions: Reflect on what you have learned and answer the following questions on how you can apply waste management at your level.

- ❖ How can you help practice proper waste disposal at home? In school? In the community? At home?
- ❖ What will you do to help other pupils be aware of the importance of proper waste disposal?
- ❖ Do you believe in the saying, “There is cash in every trash (*May pera sa basura*)?” Why or why not?



Assessment

A. Directions: Study the pictures. Match the 5Rs of waste management in Column A with the pictures in Column B. Write the letter of your answer.

A

1. Repair

2. Reduce

3. Recycle

4. Recover

5. Reuse

B

A.



<https://publicdomainvectors.org/de/kostenlose-vektografiken/Bio-Kraftstoffe-Vektor-Bild/69637.html>

B.



https://commons.wikimedia.org/wiki/File:Ampolles_d%27aigua_reutilitzables_de_materials_diversos.jpg

C.



<https://www.incirlik.af.mil/News/Article-Display/Article/905545/usafe-airmen-integrate-coordinate-continuing-39th-abw-missions/>

D.



<https://en.wikipedia.org/wiki/Upcycling>

E.



https://www.freepik.com/premium-vector/say-no-plastic-bags-sign-logo_4152418.htm

B. Directions: Read each situation on practicing the 5Rs. Choose only the letter of the correct answer.

6. What is the best benefit a person could get if he/she composts dried leaves found in his/her backyard?
- A. He/she could save money by making it a substitute fertilizer.
 - B. He/she could make the house look greener.
 - C. He/she could earn income by selling it.
 - D. He/she could make a new decoration for his/her house.
7. What could be the worst environmental consequence if we do not manage waste materials?
- A. It could lead to spending more money.
 - B. It could lead to the death of plants and animals.
 - C. It could provide no income to the family.
 - D. It could make the house disorganized.
8. Which of the following is not a consequence of not practicing 5Rs?
- A. Disease
 - B. Low Water Quality
 - C. Clean Household
 - D. Death of Animals
9. Who among the students did not show the importance of practicing 5Rs?
- I. Ana is using her sisters' old bags in going to school.
 - II. Jack is using a new plastic bottle for his drinking water every day.
 - III. John is restoring the worn shoes by applying an adhesive.
 - IV. Seth is making a wallet from plastic wrappers.
- A. Seth B. John C. Jack D. Ana
10. "All waste materials can be recycled." Is this statement acceptable?
- A. Yes, because waste can be made into new products
 - B. No, because all waste materials are dirty.
 - C. Yes, because recycling is important to protect the environment.
 - D. No, because some materials may be hazardous for recycling.



Additional Activities

Directions: Match the waste materials in Column A with its recycled products in Column B. Write the letter only.

A

B

1. Plastic containers

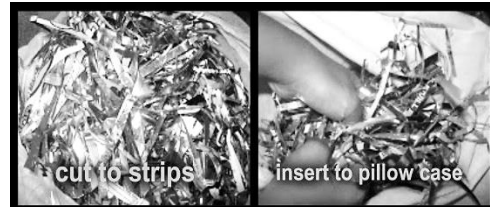
A



<https://www.pinterest.ph/pin/540150549042512282/>

2. Glass bottles

B



<https://diycraftarts.blogspot.com/2011/11/how-to-recycle-junk-food-wrappers-to.html>

3. Disposable spoons

C



<http://juliasanderl.com/category/student-work/magazines/>

4. Wrappers

D



<https://www.thebetterindia.com/58509/reuse-plastic-bottles-reduce-pollution-waste/>

5. Old magazines

E



<http://justsimplyme.com/glass-bottle/>



Answer Key

<p>What I Know</p> <ol style="list-style-type: none"> 1. Reuse 2. Repair 3. Reduce 4. Recover 5. Recycle 6. Recycle 7. Reduce 8. Reuse 9. Reduce 10. Recycle 	<p>What's More</p> <p>Activity 1</p> <ol style="list-style-type: none"> 1. ✓ 2. ✓ 3. X 4. ✓ 5. X <p>Activity 2</p> <ol style="list-style-type: none"> 1. Reduce 2. Reuse 3. Recycle 4. Repair 5. Recover <p>Activity 3</p> <ol style="list-style-type: none"> 1. B 2. A 3. C 4. A 	<p>What's In</p> <ol style="list-style-type: none"> 1. Useful 2. Useful 3. Harmful 4. Useful 5. Harmful
<p>What's New</p> <ol style="list-style-type: none"> 1. Waste materials 2. Plastic bottles, papers, cans, glasses, etc. 3. Yes 4. It can cause air & water pollution 5. Yes we can by using the 5Rs of waste management 	<p>What I Have Learned</p> <ol style="list-style-type: none"> 1. Waste management 2. Wastes 3. 5Rs 4. Reuse 5. Recover 6. Recycle 7. Reduce 8. Repair 9. Clean and Healthy 10. Useful 	<p>Assessment</p> <p>A. 1. C 2. E 3. D 4. A 5. B</p> <p>B. 6. A 7. B 8. C 9. C 10. D</p> <p>Additional Activity</p> <ol style="list-style-type: none"> 1. D 2. E 3. A 4. B 5. C

References

- Larisma, Evelyn T, Jan Jason M Mariano, and Nenita A Apolinario. 2015. *The New Science Links Worktext in Science and Technology*. Manila Philippines: Rex Publishing Inc.
- Sarte, Evelyn T, Ednaliza R Garcia, Mary Jean Dela Cruz, and Harold Arrdaza. 2016. *Science Beyond Borders*. Quezon City: Vibal Group Inc.
2020. <https://pixabay.com/photos/zero-waste-plastic-free-minimalism-4221633/>.
- "20 Awesome Recycled Glass Bottle Projects to Make - Just Simply Me". 2020. *Just Simply Me*. <http://justsimplyme.com/glass-bottle/>.
- "Bio-Kraftstoffe-Vektor-Bild | Public Domain Vektoren". 2020. *Publicdomainvectors.Org*. <https://publicdomainvectors.org/de/kostenlose-vektorgrafiken/Bio-Kraftstoffe-Vektor-Bild/69637.html>.
- "Compost Pit". 2020. Flickr. <https://www.flickr.com/photos/terriem/6788436159>.
- "Design Blog Sociale - 4 August 2008 - Milk Crates Furniture B". 2020. Flickr. <https://www.flickr.com/photos/27620885@N02/2706553128>.
- Display, Article. 2020. "USAFE Airmen Integrate, Coordinate Continuing 39Th ABW Missions". *Incirlik Air Base*. <https://www.incirlik.af.mil/News/Article-Display/Article/905545/usafe-airmen-integrate-coordinate-continuing-39th-abw-missions/>.
- "Eco Bag IH.Jpg". 2020. *En.Wikipedia.Org*. https://en.wikipedia.org/wiki/File:Eco_bag_IH.jpg.
- "File: Ampolles D'aigua Reutilitzables De Materials Diversos.Jpg - Wikimedia Commons". 2020. *Commons.Wikimedia.Org*. https://commons.wikimedia.org/wiki/File:Ampolles_d%27aigua_reutilitzables_de_materials_diversos.jpg.
- "Flickr". 2020. Flickr. <https://www.flickr.com/photos/frostis/8645947048/>.
- "HD Wallpaper: Six Full Clear Glass Jars On White Surface, Food, Snack, Plant | Wallpaper Flare". 2020. *Wallpaperflare.Com*. <https://www.wallpaperflare.com/six-full-clear-glass-jars-on-white-surface-food-snack-plant-wallpaper-egncm>.
- "Magazines – Julia Sanderl". 2020. *Juliasanderl.Com*. <http://juliasanderl.com/category/student-work/magazines/>.
- Pal, Sanchari. 2020. "Green Living: 20 Ingenious Ways to Reuse Plastic Bottles Instead Of Trashing Them". *The Better India*. <https://www.thebetterindia.com/58509/reuse-plastic-bottles-reduce-pollution-waste/>.
- "Plastic Spoon Craft Ideas - Recycled Home Decor - Youtube (With Images) | Plastic Spoon Crafts, Recycled Home Decor, Plastic Spoons". 2020. *Pinterest*. <https://www.pinterest.ph/pin/540150549042512282/>.

- Profile, View. 2020. "DIY Craft and Arts". *Diycraftarts.Blogspot.Com*.
<https://diycraftarts.blogspot.com/2011/11/how-to-recycle-junk-food-wrappers-to.html>.
- "Royalty-Free Photo: Garbage in The Middle of Green Grass | Pickpik". 2020.
Pickpik.Com. <https://www.pickpik.com/garbage-waste-container-waste-waste-bins-waste-disposal-environmental-protection-43474>.
- "Say No To Plastic Bags Sign Logo". 2020. *Freepik*.
https://www.freepik.com/premium-vector/say-no-plastic-bags-sign-logo_4152418.htm.
- "Upcycling". 2020. *En.Wikipedia.Org*. <https://en.wikipedia.org/wiki/Upcycling>.

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