JANUARY
Makugihon

FEBRUARY
Mahigugmaon

MARCH
Matinabangon

APRIL
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MAY
Mahapsay og Malimpyo

JUNE
Maabtik og Musunod sa Insaktong Oras

JULY
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AUGUST
Maginhunahunaon para sa Uban

SEPTEMBER
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DECEMBER
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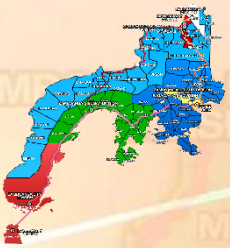

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Technology and Livelihood Education

Quarter 4 – Module 7-8:

Identify and Classify Of Recyclable Materials

Name of Learner: _____

Grade & Section: _____

Name of School: _____

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What I Need to Know

This module was designed and written with you in mind. It is here to help you to find out how to identify and classify recyclable materials made of wood, metal, paper, plastics, and others. The scope of this module permits it to be used in many different learning situations. The language used recognizes the diverse vocabulary level of students. The lessons are arranged to follow the standard sequence of the course.

This lesson will expand your knowledge in how to identify and classify recyclable materials.

After going through this module, you are expected to:

a) Identifies recyclable products/waste materials made of wood, metal, paper, plastic, and others.
b) Explains the process and the importance of recycling
c) Recycle the identified products/waste material into functional items (binding of used paper into notebook or memo pad; bottled plastics into lampshades, flowers, plants; etc.)

What I Know

Direction: Encircle the letter of the correct answer.

1. Which of the following cannot be recycled?
   a. Milk cartoons
   b. Plastics water bottle
   c. Glass container
   d. Napkin
2. What is the importance of recycling?
   a. Recycling conserves natural resources.
   b. Recycling is fun
   c. Recycling makes people busy
   d. Both A and B
3. How can one recycle glass/plastic bottle or a milk/juice cartoon?
   a. Remove the cap before recycling.
   b. Smash it down as much as possible before recycling.
   c. Shred before recycling
   d. None of the above
4. What is important to keep in mind when recycling a container that once contained food or beverage?
   a. Make sure that containers are closed tightly so no residue will leak out.
   b. Absolute nothing
   c. Rinse out any excess residue before recycling .
   d. Both b and c
5. In classifying waste materials what are the things we have to consider?
   a. The physical appearance of the materials.
   b. The common characteristics of the materials.
   c. The color of the materials.
   d. The size of the materials

Lesson 1 Identify and Classify of Recyclable Materials

There are plenty of facts out there on why recycling is important. The world population is growing, not shrinking, and currently each human being add significant waste to the planet over his or her lifetime.

The frustrating thing is, in most countries it's not all too difficult to make a difference. Every day, large quantities of waste are produced throughout the world. In order to treat this waste, it must be classified so that it can directed toward the appropriate treatment facilities.

What's In

Recycling can preevent the waste of potentially useful materials and reduced the consumption of fresh raw materials, thereby reducing: energy usage, air pollution and water pollution.

Recycling is a key component of modern waste reduction and is the third component of the "Reduce, Reuse, and Recycle".

Which Materials can you Recycle?

Many charitable and non profit organiation operate drop-off points for textiles like clothes and shoes you usualy find these sites in supermarket parking Recycling, one of the three Rs of environmentalism, is a way to convert descarded items into new goods. Not everthing can be recycled (yet), but you should ba able to find recycling facilities for these five main categories of household waste:

1. **Glass**
   Most household glass can be recycled over and over again; just rinse or wash out the container and recycle.

2. **Metals**
   Metal food and drink cans made from aluminum or steel are recyclable, and aluminum cans in particular are very valuable. You can even recycle used aluminum foil; just be sure cans and foil are clean.

3. **Organics/wood**
   Some recyclers incude this organic materials, such us yard and kitchen waste, in thier regular services, whereas others offer seasonal organics recycling, such us Christmas tree drop-off locations after the holiday season.

4. **Paper**

Nearly every paper items is recyclable, though you should check with your local recycling service provider before you bring in your milk and juice cartons. These cartoons are made of cardboard sandwiched between very thin layers of plastic, so not all the material is recyclable and not all centers accept them.

5. **Plastics**

Each plastics product has a plastics Identification Code-a triangle with a number from 1 to 7 inside – usaully on the bottom.

What's new

How can I get started with recycling?

Recycling is easy! To get started, here are ten tips for recycling at home:

1. Identifying recyclable items around the house is simple if you remember these five materials: if it's made from (1) paper, (2) cardboard, (3) firm plastic, (4) metal (aluminium and steel) or (5) glass, it can be put in your recycling bin at home.

2. You can safely dispose of all empty aerosol cans and containers that used to hold household chemicals in your recycling bin.

3. Do your best to decide if an item can be recycled, but don't worry if you get it wrong – the recycling facility uses smart technology to remove non-recyclables.

4. Make collecting your recyclables at home easier by placing a bin for recyclables in your kitchen, bathroom and laundry.

5. Sorting your recyclables at the point of disposal will help you to recycle more.

6. Containers don't need to be rinsed before being placed in your recycling bin. Although rinsing does reduce bin odours, not rinsing won't ruin the whole load of recycling or stop the individual item from being recycled.

7. Don't put your recyclables in plastic bags – for safety reasons, these cannot be opened at the recycling facility, so all the goods inside are sent to landfill. Instead place loose items in your recycling bin.

8. Don't forget that every little bit counts. Even making the effort to recycle one or two extra items each week – such as the junk mail from the letterbox or the empty air freshener can from the bathroom – helps to conserve precious resources from going to landfill.

9. Remove the lids from containers and bottles before you place them in the recycling bin. This will save space in your bin and ensure that each material type is recycled.

10. Only glass jars and bottles are suitable for recycling. Drinking glasses, ceramics and heat-proof glass (e.g. Pyrex) melt at a different temperature and cannot be recycled. Put these items in your rubbish bin at home.

What Is It

Recycling is the process of converting waste materials into new materials and objects. It is an alternative to "conventional" waste disposal that can save material and help lower greenhouse gas emissions (compared to plastic production for example).

Recyclable materials include many kinds of glass, paper, and cardboard, metal, plastics, tires, textiles, and electrons.

Everyday, large quantities of waste are produced throughout the world. In order to treat this waste, it must be classified so that it it can directed toward the appropriate treatment facility.

What's More

Directions: Write whether the following materials are recyclable and not-recyclable?

1. Paper towel and toilet paper roll
2. Colored paper
3. Napkins
4. Aluminum can
5. Plastics bottle
6. Wrapping paper
7. Window
8. Drinking glass
9. Paperplate
10. Food container

What I Have Learned

1. Why do we need to classify waste material?

_____
_____
_____
_____
_____

2. How do we recycle waste material affects our daily lives?

_____
_____
_____
_____
_____

What I Can Do

Practical Activity:

Now let's try to make a DIY Plastic Bottle Planter

Cat planters from plastic bottles. Spark your DIY spirit with a simple project that turns 1.5-liters or 2-liters into a useful and appealing indoor planter.

Here are some simple step-by-step instructions to make a DIY plastic bottle planter

1. Cut the bottom third of a liter of a 1.5-liter bottle.
2. Paint the bottle white or the color of your choice.
3. Use parts of the rest of the bottle to cut out ears.
4. Draw a face and other features on the bottle.
5. Fill the bottle with seeds and soil.

Assessment

Let's see how much you learned today!

Direction: Encircle the correct answer

1. What is the most serious problems that needs immediate action nowadays?

a. Waste disposal
b. Kidnapping
c. Selling of goods
d. Buying of cars

2. What process is used to convert waste materials into reusable items to prevent waste of potentially useful materials?

a. Reducing
b. Reusing
c. Recycling
d. Both b and c

3. If you apply the 3Rs symbols at home, to lessen the waste materials, what is the easier for you to do?

a. Recycling
b. Reducing
c. Reusing
d. None of the above

4. Your teacher asked you to bring reusable materials like old clothes, shoes, toys etc.to give them to the victims of fire, what process did she used?

a. Recycling
b. Reusing
c. Reducing
d. None of the above

5. Why is it recycling important?

a. Because it helps to lessen the garbage.
b. Because it makes the surrounding beautiful.
c. Because it supports the needs of the family
d. Because it makes people busy.

Additional Activities

Direction: Encircle the letter of the correct answer.

1. Dan collects used straws from the canteen's garbage bags every morning. What could possibly be John's plan with his collection?
   a. He will make colorful hat/bag from used straws for his grandmother.
   b. He will throw the straws somewhere in school
   c. He just wants to fill their house with used straws.
   d. He does not like to see straws in the garbage bags.

2. Why is recycling is important?
   a. Because it helps to lessen the garbage
   b. Because it makes the surrounding beautiful
   c. Because it supports the needs of the family
   d. Because it makes people busy

3. How can one recycle a glass/plastics bottle or a milk/juice cartoon?
   a. Remove the cap before recycling
   b. Shred before recycling
   c. Smash it down as much as possible before recycling
   d. None of the above

4. What useful materials can you produce out of empty plastic bottles?
   a. Doormat
   b. Broomstick
   c. Pillow
   d. Plants and flowers

5. Which is not made from recyclable materials?
   a. Soil
   b. A bag
   c. A flower vase
   d. A bamboo coin bank

Answer Key

What I know
1. D
2. A
3. B
4. A
5. B

What's More
1. Not recyclable
2. Not recyclable
3. Not recyclable
4. Recyclable
5. Recyclable
6. Recyclable
7. Recyclable
8. Recyclable
9. Not recyclable
10. Recyclable

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

Additional Activities
1. A
2. A
3. C
4. D
5. A

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