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# Let's Practise 3Rs!



### **Acknowledgement**

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- Bloomsburg Recycling Centre
- Alam Flora Sdn Bhd
- [http://www.cityofmelrose.org/Interns%2007/recycling\\_facts\\_and\\_tips.htm](http://www.cityofmelrose.org/Interns%2007/recycling_facts_and_tips.htm)
- <http://www.recyclingproject.org/did-you-know.htm>
- [http://www.walesenvtrust.org.uk/uploaded\\_documents/148/Plastic\\_8739.pdf](http://www.walesenvtrust.org.uk/uploaded_documents/148/Plastic_8739.pdf) (Wales Environment Trust)
- <http://www.abumama.com.my/recycling-facts.htm>
- <http://www.dublinscrapmetal.com/dublin-recycling-facts.pdf>

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**Malaysian Plastics Manufacturers Association (MPMA)**

37, Jalan 20/14, Paramount Garden

46300 Petaling Jaya, Selangor Darul Ehsan, Malaysia

Tel: 603 7876 3027 Fax: 603 7876 8352

Email: [info@mpma.org.my](mailto:info@mpma.org.my) Url: [www.mpma.org.my](http://www.mpma.org.my)

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# Contents

## CHAPTER 1

**What is 3Rs?**

4-5

**What does an Integrated Waste Management Require?**

4-5

## CHAPTER 2

**How Can I Help?**

6

## CHAPTER 3

**How Do I Start the 3Rs in My Home and School?** 7-9

## CHAPTER 4

**Why Do I Need to Recycle?**

10-11

## CHAPTER 5

**How Recyclables are Recycled?**

12-15

## CHAPTER 6

**Did You Know?**

16

## CHAPTER 7

**Plastics Coding**

17

## CHAPTER 8

**Malaysian Plastics Manufacturers Association  
ExxonMobil Chemical**

18



## What is 3Rs?

**3Rs simply means Reduce, Reuse and Recycle**

There is a need to **reduce** the consumption of natural resources, as well as products that do not meet acceptable environmental standards, increase the **reuse** of materials, avoiding their immediate disposal and finally support the **recycling** of used or post-consumer materials into new raw materials or products, thus reducing the production of waste and saving both energy and non-renewable resources.

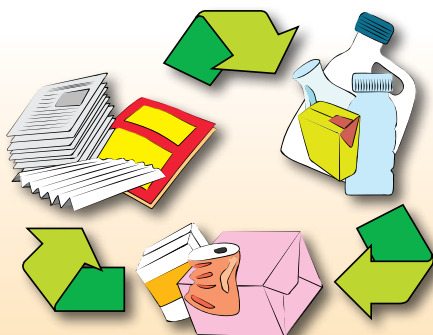
So, the 3Rs are three VERY important ways to manage solid waste. The best approach to effective waste management is one that takes into account all of the waste management options. This is called an integrated approach.

### What does an Integrated Waste Management Require?

In order for an effective 3Rs programme to work, emphasis needs to be given to a cost-effective solid waste management system.

Disposal of household waste is a major concern for all if recyclable materials from our homes, schools and public buildings are not segregated at source (separated according to paper, plastic, glass, aluminium, etc).

So what is the solution? We need a cost effective solid waste management system that takes into account an intermediate treatment and final disposal of solid waste with an emphasis on environmental protection and public health.

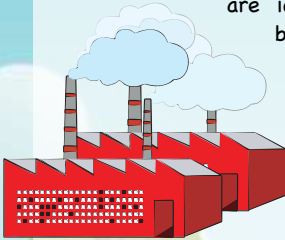


- (i) The setting up of organised efficient and clean waste collection and separation centres or **Material Recovery Facility (MRF)** will assist greatly to minimise the amount of wastes in the country.



This effort will extend the lifespan of landfills, provide source of municipal solid waste for recyclers and recycled resins for fabricators/product manufacturers.

- (ii) Other methods, such as incineration is also important. Plastics, more so than other materials, are ideally suited to **incineration** because they are manufactured from natural oil and gas. Incineration will allow the recovery of some of their energy. This energy can then be used in industrial plants or in municipal heating systems. The whole



**Incineration** process of recovering and reusing energy through combustion is called energy-to-waste.

- (iii) What about **Landfills**? Not all materials can be reduced, recycled or incinerated, which means that once they have served their useful life, they may have to be disposed of in a landfill but this should be as a last resort.

Should all waste after going through the 3Rs process end up in landfills?

No! Landfill is just one part of a bigger solution that takes into account all of the different ways to effectively manage solid waste.



**Landfill**



## How Can I Help?

You can help by **PRACTISING** the 3Rs of waste management: **Reduce, Reuse, and Recycle!**

It is not only important to care for the environment, but it can also be fun too!

The easiest, most direct way for you to make a difference is to watch what you buy and throw away. You can do this by following these basic principles:

- **Reduce** the amount of trash you discard.
- **Reuse** containers and products; repair what is broken; and give items that you no longer need to those who can reuse them.
- **Recycle** as much as possible and buy products with recycled content.

## What Should I Do?

**Reduce**

**Reuse**

**Recycle**

## How Do I Start the 3Rs in My Home and School?



The amount of waste that comes from one neighbourhood on a daily basis is enormous.

We should aim to recycle most of this waste because the more we practise the 3Rs, the more we can cut down the waste generated.

It takes time to cultivate a habit of 3Rs. What you can do to develop this habit is to start small. Here's how...

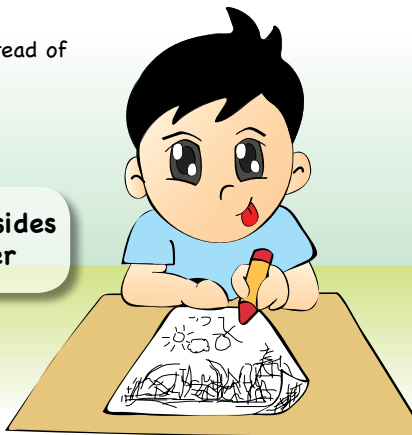
### I. Reduce and Separate your waste

- Reducing waste simply means not producing as much of it in the first place.

There are many simple ways that we can do so every day in our homes and schools.

- Here are some examples:
  - reduce the amount of paper waste you produce by writing on both sides
  - reduce battery waste by using solar powered calculators
  - reduce packaging by using a lunchbox, avoiding over-packaged food at lunchtime
  - Pre plan your meals, buy in bulk, and prepare what you need
  - Rent or borrow instead of purchasing

**Draw on both sides of the paper**



## II. Reuse at least once

Instead of throwing old items away, try to reuse as much of your old things as possible.

**Give away  
old books  
instead of  
throwing  
them away**



- Bring your own bottles and food containers when you take away food. This helps eliminate the need for new containers.
- You could also re-use mineral water containers or soft drink bottles to store drinking water. You may also cut the bottle in half and use as pots.
- Ice cream and other food containers can be reused to store cakes, keys, small toys and others.
- Beautiful and colorful glass or plastic bottles can be reused as vases.
- Empty milk and drink cartons can also be reused creatively in a number of ways around the house and garden. For example, you can use cartons:
  - For growing seedlings
  - As pencil holders
  - For craft activities
- Your old curtains can be cut and used as rags, or donated to charity.

**Reuse  
unwanted  
glass/plastic  
containers as  
vase or pencil  
holder**





### III. Recycle everything that you can

Don't dump electrical items. Instead, send old computer, equipment, mobile phones, etc to identified recycling collection centres.

You can even collect recyclables and sell to the recycling centres and earn money for your school!



Put the recyclables in one bin and other wastes in another.

Your recyclables can then be separated further according to their categories.

It is advisable to clean them properly before handing it out to the relevant collectors.

### Get Your Family in the Act!

The best way to ensure that your recycling programme at home and school is successful is to get EVERYONE involved. Get your family members, neighbours, teachers and school friends in and show them the benefits of practising the 3Rs can help the environment. Once they know the immediate benefits, they will be more than happy to pitch in!



## Why Do I Need to Recycle?

Recycling aluminium cans

saves **95%** of the energy needed to make new ones



According to the Ministry of Housing and Local Government, Malaysians produce over **15,000 tonnes of waste every day** which mostly end up in landfills. It is only a matter of time before we run out of landfill space to dispose the waste.

- Recycling or making new things from recycled ones takes a lot less money, much less energy, and saves a lot of the Earth's natural resources, thereby helping the environment.
- Recycling also saves space in landfills. Instead of your garbage being thrown away and taking up space, it's better to recycle it.
- The energy saved by recycling also results in less pollution.
- Recycling improves cleanliness and quality of life.

Recycling **1 ton** of paper

saves



**17** trees

Recycling **17 x 500ml**

plastic bottles

can make



**1 extra large** T-Shirt

## RECYCLING...

- Conserves our valuable natural resources
- Saves energy
- Saves clean air and clean water
- Saves landfill space
- Saves money and creates jobs

## SAVE YOUR PLANET BY RECYCLING!



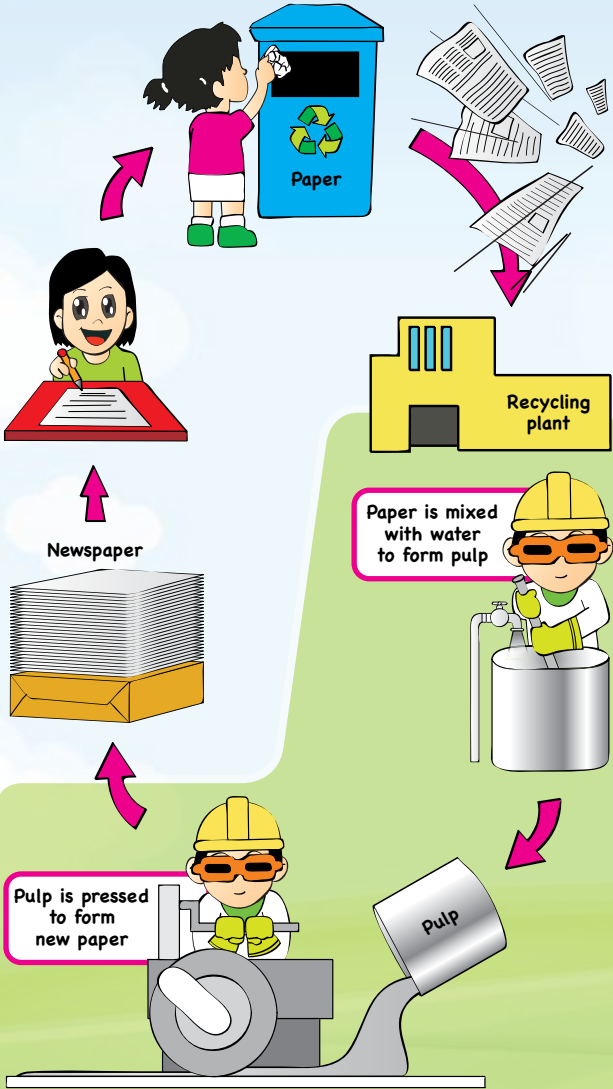
"Be eco-alert and don't throw other waste in the recycling bins which are meant to collect only Paper, Aluminium, Glass and Plastic waste"



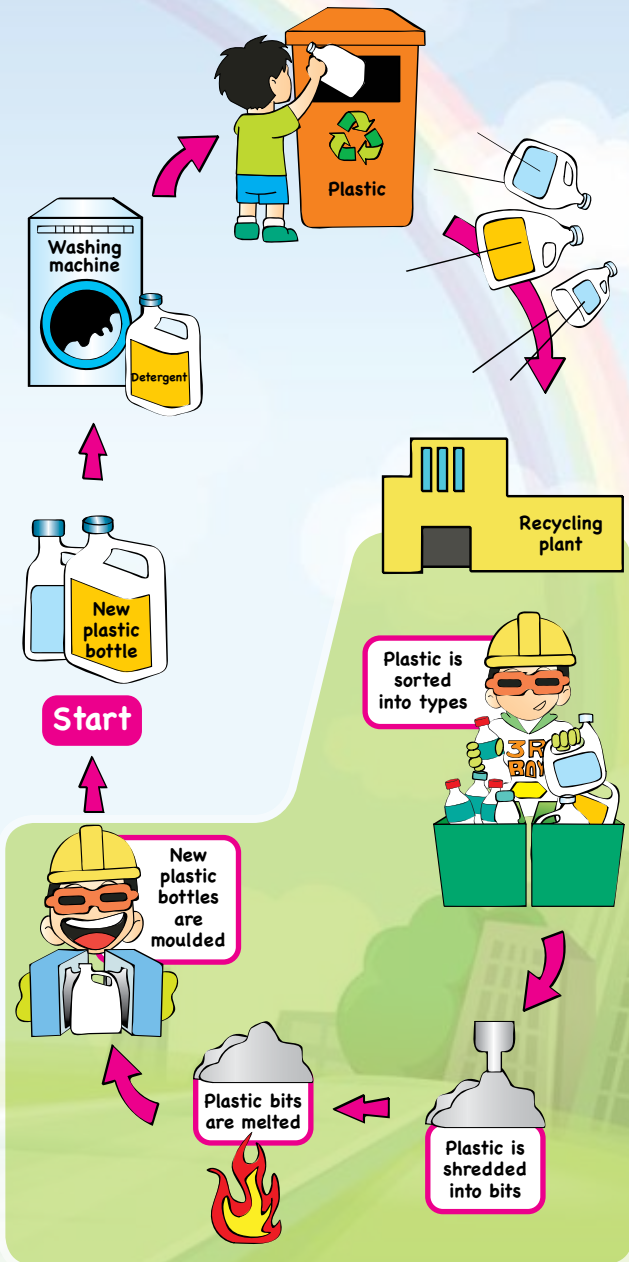


# How Recyclables are Recycled?

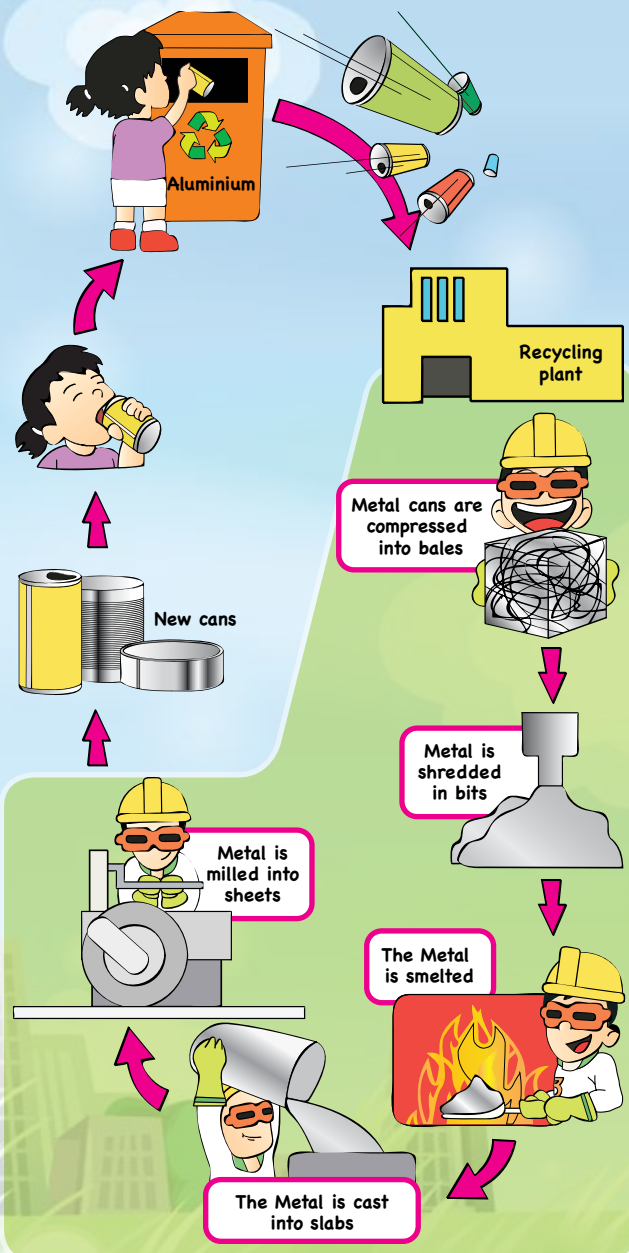
## PAPER



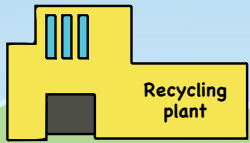
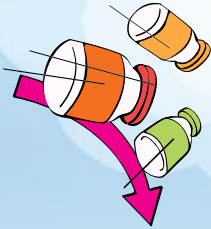
# PLASTIC



# ALUMINIUM



# GLASS



Glass jars and bottles are crushed



New glass bottles and jars



Glass bits are melted



New glass jars and bottles are moulded





# Did You Know?

## DID YOU KNOW?

Did you know...

Lighting consumes about 10% of the power in your home?

Standard light bulbs are not energy efficient: they give off 90% of their energy as heat?



Did you know...

Leaving a 60 WATT light bulb on overnight consumes enough to make up to 24 cups of tea?



Did you know...

After using the video projector in the classroom, it still consumes energy if it is only switched off using the on/off button on the device?



Did you know...

Energy from the sun can be turned into electricity for your home, by using photovoltaic solar panels?



Did you know...

Turning the tap off while brushing your teeth can help you save up to 30 litres of water every time you brush your teeth?





# Plastics Coding

7



Polyethylene terephthalate (PET)



Polyethylene, high density (PE-HD)



Polyvinyl chloride (PVC)



Polyethylene, low density (PE-LD)



Polypropylene (PP)



Polystyrene (PS)



**OTHERS**

The actual acronym of the other types of the resin shall be stated at the bottom of the chasing arrow

Plastics Coding



# MPMA and ExxonMobil Chemical



## Malaysian Plastics Manufacturers Association (MPMA)

The Malaysian Plastics Manufacturers Association (MPMA), established in 1967, is a progressive trade association providing leadership and quality service to its members and the plastics industry.

Besides undertaking activities on the environment, safety and health, MPMA also promotes such activities under the umbrella of the Malaysian Plastics Forum (MPF) which is a joint collaboration between two industry associations, namely the Malaysian Petrochemicals Association-Plastic Resins Producers Group (MPA-PRPG) and MPMA.

MPF's main objectives are to create awareness and education on plastics and to enhance the awareness of the 3Rs concept for plastics which is Reduce, Reuse and Recycle to the Government, Industry, Media as well as the Public.

## ExxonMobil Chemical

### ExxonMobil Chemical

Headquartered in Kuala Lumpur City Center (KLCC), ExxonMobil is the largest US investor and an active participant in Malaysia's business sector and the local communities in which it operates.

As part of its corporate social responsibility, ExxonMobil is committed to maintaining the highest standards of safety, health and environmental care as it believes that a company's commitment and performance in the area of safety, health and environment is indicative of outstanding performance in other aspects of its operations.

ExxonMobil works collaboratively with government and nongovernment bodies and community leaders to identify areas of need and how best to meet them. Whilst education has been the main focus, ExxonMobil also supports projects in the areas of welfare, environment and the arts.

ExxonMobil's goal is to achieve excellent environmental performance in each of its businesses to Protect Tomorrow. Today, ExxonMobil further seeks to reach its objective to operate responsibly everywhere it does business by implementing scientifically sound and practical solutions that consider the social needs of the communities in which it operates. Accordingly, ExxonMobil seeks to communicate with the public on environmental matters and share its experience with others to facilitate improvements in industry performance.

On the aspects of safety and health, ExxonMobil's policy is to, amongst others, include identification and control of potentially adverse health and safety effects as priority considerations in the planning and development of products and identify and evaluate health risks related to its operations that potentially affect its employees, contractors or the public.