

GR. 7 TERM 1: REDUCE, REUSE AND RECYCLE

The difference between reduce, reuse and recycle

The fast growing population, excessive consumption and the effect of pollution on the environment and our health, have led to the following question: **How can we live better to consume less and put less waste into landfills?**

Reduce, reuse and recycle are separate but interconnected concepts that **support the same goal of maintaining a cleaner, healthier world.** Though they sound and appear similar, reduce, reuse and recycle are different elements in the language of resource conservation!

Reduce

To reduce is to use less of a product, or to decide not to use it from the beginning.

The term "reduce" clearly applies to lifestyle – we need to live better!

Some ways we can reduce:

- Before buying something, ask yourself, "Do I really need this?" If the answer is "no", don't buy it.
- Turn lights, appliances and electronics off when they are not in use.
- You can take shorter showers and save water.
- Purchase energy-efficient appliances, e.g. energy saving light bulbs.
- Reducing driving would mean combining trips, carpooling, and walking, biking, and taking public transportation when possible.
- Planting trees and flowers that need less water and grow easily in your area.
- Replacing older, less efficient appliances with 'energy saving appliances'.
- Buy bulk to reduce the packing material that will end up in landfills.. For example, less packaging is used in one large bag of potato chips, versus single serving bags of chips.
- Purchase items that use less packaging, e.g. concentrated washing powder or "stasoft" rather than diluted products.
- Dry your clothes on the washing line instead of using a tumble drier.
- Use less paper by sending emails instead of faxing, reading your newspaper online, receiving your Edgars account per sms instead of in the post.

Reuse

To reuse is to use something again instead of throwing it away or sending it off to a recycling company. Before throwing an item away consider if the item can be used for something else.

Paper plates are an example of a non-reusable product. Cutlery that can be reused prevents waste at the landfill, but it also lowers the amount of energy needed to manufacture new products. Less pollution results, and less natural resources are used.

Some items you can reuse:

- An old torn shirt can be used for a car rag.
- Give clothes that are too small for you to other younger children to wear.
- Re-use empty margarine tubs to store leftovers in the fridge.
- Repair broken products instead of buying new ones.
- When you open a gift, remove the wrapping paper carefully. You can use it again and there is nothing wrong about doing that!
- Magazines can be used to cover your homework books.
- Re-use cloth or canvas shopping bags instead of buying plastic bags every time.



Reusing a cloth shopping bag



Recycling

Recycle

Recycling refers to a process that breaks down items into raw materials that can be used to create a new item again.

Recycling centers melt down cans, bottles and other items to create new materials to manufacture new products. It takes less energy to manufacture products out of recycled materials than it does to manufacture them out of virgin materials. For example, it takes 95 percent less energy to make aluminum cans out of recycled aluminum than it does to use virgin aluminum, according to the Car Manufacturer's Institute.

Goods made from recycled materials:

- Plastic Bottles – converted to clothes, refuse sacks and PVC window and door frames
- aluminum cans – smelted back to aluminum for reuse
- Paper and Cardboard – reprocessed into newspaper and toilet paper.
- Glass – re-melted and made into glass bottles
- Car 12V Batteries - acid and lead is recycled.
- Composting

How to make compost:

- Collect yard waste by raking leaves and grass clippings into a compost pile, adding kitchen waste such as eggshells, teabags and vegetable peels.
- After it ages, this organic matter breaks down to provide nutrients for living plants which gardeners can use.

Question:

Explain how composting are an example of reusing, recycling and reducing (all three resource conservation elements)

- With composting, natural materials (like kitchen waste and leaves) are recycled into a form in which gardeners and landowners can reuse them to feed their plants.
- When using homegrown compost, the need for artificial fertilizers is reduced;
- It also reduces the space taken up in landfills, because these waste materials now fertilize the soil.

<http://homeguides.sfgate.com/difference-between-reuse-reduce-recycle-79303.html>

<http://recycleconserve.blogspot.com/2012/10/difference-between-reduce-reuse-and.html> (see link for a YouTube video)

Advantages when we reduce, reuse and recycle:

- Recycling create jobs.
- All 3 reduce the waste that will end up in landfills.
- Reduce consumption of natural resources like water.
- Save energy.
- Using less new resources will reduce greenhouse gases and slow down earth warming.
- Reduce pollution and we will all be more healthy.

<http://homeguides.sfgate.com/list-recyclable-household-items-78711.html>

The alternatives to landfills are [waste reduction](#) and [recycling](#) strategies.



Photo of a landfill:

http://upload.wikimedia.org/wikipedia/commons/9/98/Landfill_face.JPG

ACTIVITY (Individual activity)

1. Complete the following table by indicating how different waste products can be re-used or recycled instead of throwing it away and sending it to a landfill:

No.	Waste material	How it can be re-used	Example of reuse or recycle?
1.1	Old calendar		
1.2	Plastic bags		
1.3	Empty margarine tubs		
1.4	Empty bottles		
1.5	Old school books		
1.6	Torn t-shirt		
1.7	Empty coffee tins		
1.8	Empty egg containers		
1.9	Old egg shells		
1.10	Used bath water		

2. Define the following words in terms of how this can save our planet:

2.1 reduce

2.2 reuse

2.3 recycle

3. List FIVE advantages of recycling.

4. Explain how home-made compost is a form of both reduce and recycle.

No.	Waste material	How it can be re-used	Example of Reuse or recycle?
1.	Old calendar	<ul style="list-style-type: none"> Thin pages can be used to cover school books or the back of it as poster paper for a project. Sell to a recycle business. 	Reuse Reuse Recycle
2.	Plastic bags	Fold up and re-use when shopping.	Reuse
3.	Empty margarine tubs	<ul style="list-style-type: none"> As containers to freeze left-overs. As containers to store small items. 	Reuse Reuse
4.	Empty bottles	<ul style="list-style-type: none"> Sell to a recycle business. Decorate and use as a flower vase. Refill with clean drink water from a business selling purified water. 	Recycle Reuse Reuse
5.	Old school books	Sell to a recycle business that will use it to manufacture boxes.	Recycle
6.	Torn t-shirt	<ul style="list-style-type: none"> Can be used to wash the kitchen floor or the car. Can be repaired and worn at home. 	Reuse Reuse
7.	Empty coffee tins	<ul style="list-style-type: none"> As containers for coloured pencils or nails in the garage. Sell to a recycle business 	Reuse Recycle
8.	Empty egg containers	Can be used to plant seeds.	Reuse
9.	Old egg shells	As compost to fertilize the garden.	Reuse
10.	Used bath water	Use to water plants in the garden or to flush the toilet.	Reuse

2.1 **Reduce:** To reduce is to use less of a product, or to decide not to use it from the beginning.

2.2 **Reuse:** To reuse is to use something again instead of throwing it away or sending it off to a recycling company.

2.3 **Recycle:** **Recycling** refers to a process that breaks down items into raw materials that can be used to create a new item again.

3. **Advantages:**

- Recycling create jobs.
- Reduce the waste that will end up in landfills.
- Reduce consumption of natural resources like water.
- Save energy.
- Using less new resources will reduce greenhouse gases and slow down earth warming.
- Reduce pollution and we will all be more healthy.

4. It reduces the use of chemical fertilizers and recycle household waste into plant feed.