

# Recycling – Chemistry Can!

from **Celebrating Chemistry**



Chemists Celebrate Earth Day

**R**ecycling is a process in which new items are made from products that have been used before. Materials are collected, separated, and then treated based on their physical or chemical properties. The recycled material can be used to make more of the same or different items. Sometimes these new items, like plastic lumber, may even last longer than the original item and cost less to make.

What do you do with the aluminum soda can or the plastic juice bottle when you finish drinking from it? Do you place it in the trash, or put it in a recycling container? Putting it in a recycling container is the best choice because it saves our resources and conserves energy. Some states such as Oregon, California, and Michigan even give you money back for bottles and cans.

Energy heats our homes in winter and cools them in summer; it powers our televisions, computers, lights, refrigerators, and many other devices. Did you know that you can power a television for three hours using the energy you save when you recycle one aluminum can?! We waste energy by throwing away materials that we can reuse or recycle instead. Things we throw away often go to a landfill, a large area of land in your community reserved just for trash, where they will sit for a very long time.

If recycling is not an option, many things can be reused instead. You can decorate a container made from a plastic that your community doesn't recycle and use it as a flowerpot or penholder. A T-shirt too stained to wear still works fine as a cleaning cloth. You can also donate your extra items and outgrown clothes to organizations that find other people who need them.

In order for recycled materials to make a difference in our communities, we have to buy the new products that are made from them. Look for the recycle symbol on the item when you are buying products like the ones listed in the chart below.

So remember the three Rs of using Earth's resources:

- **Reduce** – limit the amount thrown away by buying items that can be used more than once, making your own things and choosing items with less packaging.
- **Reuse** – find a new way to use something again.
- **Recycle** – collect unwanted materials and process them to make new materials.

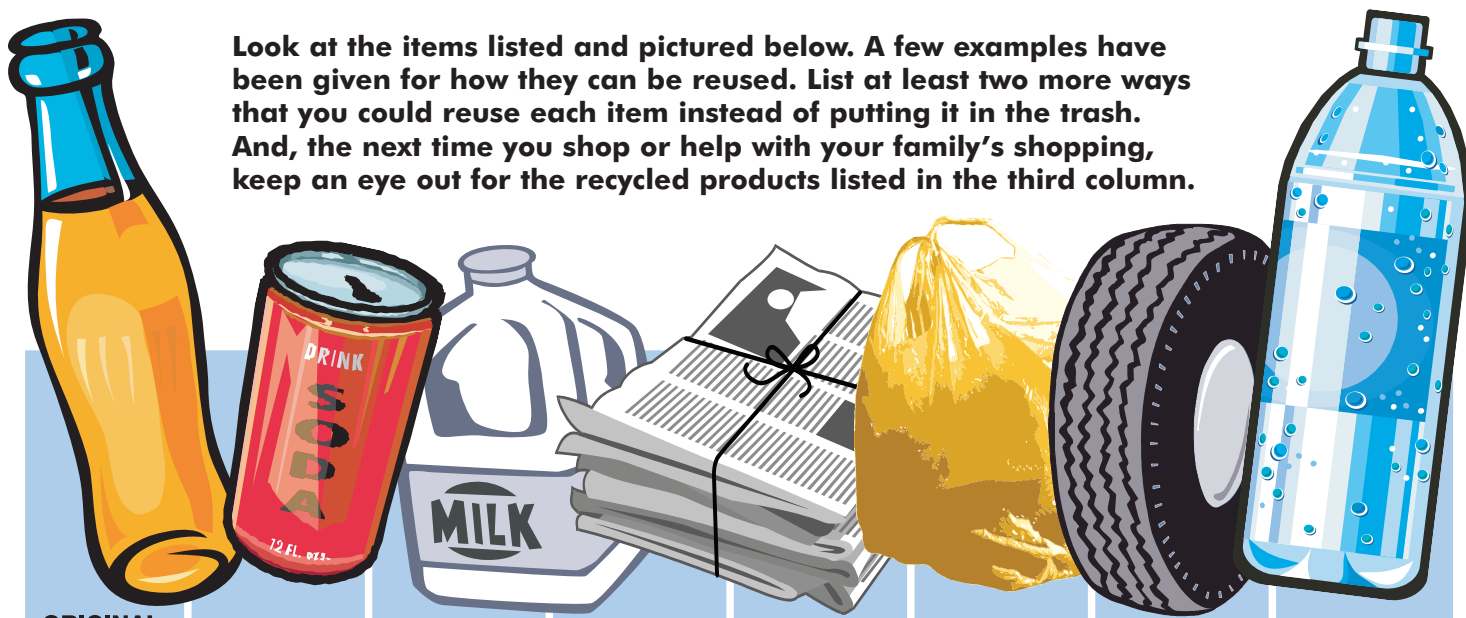
Each "R" saves money, conserves resources, and reduces the problems of trash. In short, it is something you can do **today** to help the environment.



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Originally published 2007.

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Look at the items listed and pictured below. A few examples have been given for how they can be reused. List at least two more ways that you could reuse each item instead of putting it in the trash. And, the next time you shop or help with your family’s shopping, keep an eye out for the recycled products listed in the third column.



ORIGINAL PRODUCT	Glass bottle	Aluminum can	Milk jug	Newspaper	Plastic bag	Tire	Plastic drink bottle
<b>REUSED AS...</b>	Vase	Bank	Watering can, musical instrument	Paper boat	Trash can liner	Swing	Fill with colored sand and use as a doorstep
	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____
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<b>RECYCLED AS...</b>	New bottles, “glasphalt”, kitchen tiles, counter tops, and wall insulation	New aluminum cans, diecasts used by the car industry	Non-food bottles, plastic pipes, gardening products, plastic lumber and car parts	Grocery bags, notebook paper, envelopes, other paper, combined with soybeans and made into a building material	Combined with sawdust and made into new outdoor decks, garden planters, new plastic bags	Flooring products, adhesive, ground up and used instead of sand in sandboxes	Carpet, fleece clothing, strapping, some beverage bottles

