

Teacher Background Information

A World of Waste

What is solid waste? Also referred to as trash, rubbish, refuse, or garbage, solid waste means waste material that is not liquid or gas. These lessons focus on municipal solid waste (MSW), which includes household, commercial and institutional waste, but not wastes from mining, agriculture, silviculture, demolition debris, and a variety of sludges. The term “waste” has interesting connotations. It can refer to something leftover or something not used wisely. Much that is considered waste could actually be used wisely.

Solid waste is a serious issue in the United States. The U.S. leads the world in the production of municipal solid waste. Even compared to other wealthy industrialized nations such as Japan or countries in Europe, we generate twice as much solid waste per capita. The average American produces about 4.4 pounds of garbage each day! In 1960, that figure was 2.6 pounds. This is expected to increase to 4.8 pounds per person per day by the year 2010.

Recycling has been growing steadily for over 20 years. From 1980 to 1990, the U.S. almost doubled its recycling rate from 9 percent to 17 percent. In 1995, our country’s average recycling rate was over 25 percent, and by 2000, it was 30 percent. Tucson is way below average. At Tucson’s Los Reales landfill, more than 1,500 tons of garbage arrive every day, much of it recyclable. The City of Tucson spends money to bury material it could be selling to recycling companies. The good news is that the *Tucson Recycles* program (once-a-week trash and recycling collection) diverts more of our waste from the landfill. Eligible households have a 60 or 90 gallon blue barrel for recycling, the types of recyclables accepted has increased,

and all recyclables are collected together, then sorted at a local facility. Tucson’s recycling rate has increased from 9% to 23% since the *Tucson Recycles* program was implemented in 2002. Recycling is much more than an alternate means of waste disposal. Recycling is about conserving natural resources, reducing our use of energy and materials, minimizing pollution, and more.

What are the “Three Rs”?

In a waste reduction context, the “Three Rs” refer to reduce, reuse, and recycle. These are the three most basic, important ways to reduce waste, conserve natural resources, and decrease our impacts on the natural world. Reducing, reusing, and recycling often save money, too.

It is important to recognize that the order cited—reduce, reuse, recycle—is *not* arbitrary. Some people tend to think of recycling as a central focus and of reducing and reusing as less important, but this is not a correct understanding. Reducing is actually the most efficient way to conserve resources. Reusing is second in efficiency. Recycling is important, but is not as efficient as reducing and reusing. Recycling of course involves a cycle. For recycling to be successful, we need to complete the cycle, or “close the loop,” by buying recycled goods. Although confusing, it’s important to learn to distinguish between the “made from recycled” symbol, which is a trio of light chasing arrows on a dark circle background, from the “recyclable” symbol, which is a simple trio of chasing arrows, with no dark background. A “made from recycled” product is actually made from materials that have been used before.



REDUCE

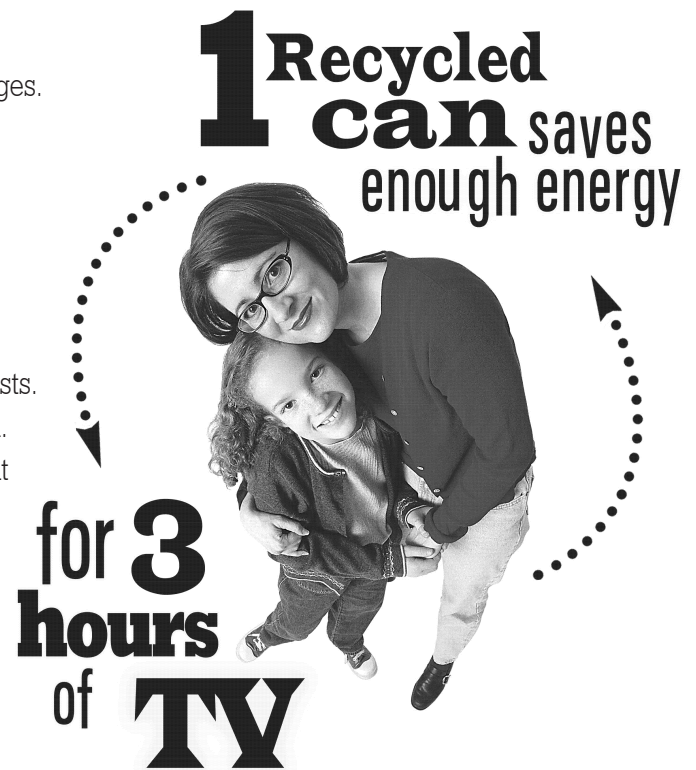
- Prevent waste; buy only what you really need.
- Purchase products you use regularly in large packages.
- Purchase products in less packaging.
- Purchase concentrates and bulk goods.
- Buy products in refillable packaging.
- Borrow, loan, rent, lease, or share when possible (books, tools, etc.).
- Use both sides of paper.
- Take action to get your name deleted from mailing lists.
- Repair instead of replace something broken or worn.
- Buy good quality, durable products fabricated so that they can be repaired.
- Take good care of your things so that they last.

REUSE

- Choose reusable rather than disposable goods (napkins, mugs, razors, sponges, etc.).
- Purchase used goods (furniture, books, music, toys, clothes, etc.).
- Sell or give away goods you no longer want or need.
- Use the back of old paper as scratch paper.
- Use glass jars, plastic tubs, water bottles, lunch bags, etc. again and again.
- Use leftover materials to make something different (scrap lumber to build a bat house or doll house).

RECYCLE

- Recycle as much as possible through community collection programs, either curbside or at drop-off locations.
- Adjust your purchasing habits to buy items in packages that are recyclable in your area.
- Keep an eye out for other special recycling programs, such as opportunities to recycle copier or computer printer cartridges through an office supply, Christmas tree collection programs, and so on.
- Remember to buy recycled! Look for products and packaging with recycled content.
- Help "nature's recycling" by composting kitchen and yard waste.

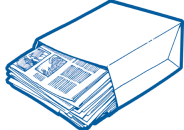
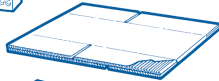
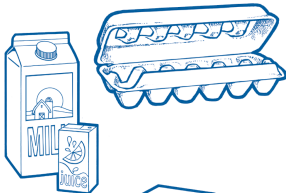
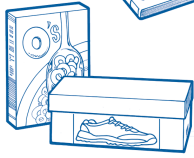
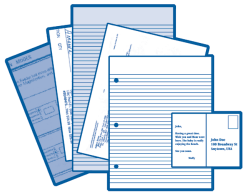


What Can We Recycle?

The *Tucson Recycles* program means that we can recycle a lot in Tucson!
See the list below.

Detailed Blue Barrel Recyclables List:

All these items also accepted at City's 16 neighborhood recycling centers.



- **Paper:** (no need to remove staples or labels)
 - White and colored, coated and non-coated paper
 - Open mail (with non-paper items removed; window envelopes and labels OK)
 - Adding machine tape, accounting ledgers, tabulating and time cards
 - Pamphlets, brochures, advertising flyers, posters
 - Booklets and magazines and catalogs (less than 1/2" thick)
 - Carbonless multi-forms (i.e., NCR paper)
 - Paper from legal, steno, note and message pads; sticky (Post-It) notes
 - Fax and telex sheets, computer and copy paper
 - Manila or pastel file folders (no brown, dark green or neon)
 - Shredded paper in a secured, clear plastic bag (please put white paper in a separate bag if possible; this is the only time plastic bags should go in the recycling container).

- **Paperboard/chipboard**

(like cereal or stationery boxes. Exception: no paperboard with metallic and wax coating)

- **Phonebooks**

- **Fiberboard**

(like paper egg cartons and some packing material)

- **Milk and juice cartons and drink boxes**

(coating is OK because these are very high quality paper)

- **Newspaper and brown bags**

- **Corrugated cardboard**

(flatten and cut as needed to fit in container)

- **#1 and #2 plastic bottles & jugs**

with necks or screw-on lids (no tubs, pails or other plastics)

- **Steel and tin cans**

(including non-hazardous product aerosol cans)

- **Aluminum cans**

- **Glass food and beverage containers**

Reminder:

If it is **not on the list**, or if it takes **too much water to clean**, it goes in the garbage!

The success of *Tucson Recycles* depends on two factors:

- Quality of the recycled materials, and
- Efficiency of the collection.

It is the responsibility of each homeowner to follow these recommendations which allow for the best separation and eventual use of the recycled materials.

Tips:

- Make sure materials are clean, empty and dry and have no food or beverage residue.
- Lightly rinse—throw very dirty items in the garbage.
- All recycling goes into container together—no sorting.
- Do not flatten cans, jugs or bottles; leave labels on.
- Bottle caps can be recycled on or off.
- Put items in container individually, not inside of boxes, plastic bags, etc.
- Please do not overfill container (there is no charge for a second blue recycling barrel).
- Set out the Blue Barrel for collection when it is more than half full. Having the truck stop for nearly-empty containers increases fuel consumption and air pollution.

Do NOT Recycle:

- tissue paper; paper towels; carbon paper; photographic paper; paper plates and cups; paper ream wrappers; blueprints; glued binders
- plastic bags or packaging; plastic chairs, blinds, gutters, toys, etc.
- newspapers with twine, straps or rubber bands
- electronics, computers, rechargeable batteries
- auto parts
- light bulbs, window glass, mirrors, ceramics or crystal
- medical supplies or containers
- construction and finishing materials and products
- herbicide, pesticide, automotive, chemical or other hazardous product containers
- green (yard) waste
- food waste
- pet food bags with plastic lining

