

# Definitions

## Lesson Two: Breaking It Down Definitions

**Reuse:** Consuming and throwing away less. It includes: purchasing durable, long-lasting goods; seeking products and packaging that are as free of toxics as possible; redesigning products to use less raw material in production, have a longer life, or be used again after its original use.

**Recyclable:** Turns materials that would otherwise become trash into valuable resources. A product is broken down and re-manufactured into a new product. This may be the same type of product or may be an entirely new product. Ask them what products they have had or seen that they know have been recycled. Find out what kind of recycling they do at their home. How easy is the recycling; does the city provide pick up for items that they want to recycle? Ask if they have ever seen a playground with ground-up tires on the ground, rather than sand. Why might this use of old tires be an advantage? (both for depletion of trash materials, as well as safety issues) Advantages: Recycling is one of the best environmental success stories of the late 20th century. Recycling, including composting, diverted 72 million tons of material away from landfills and incinerators in 2003, up from 34 million tons in 1990. By 2002, almost 9,000 curbside collection programs served roughly half of the American population. Curbside programs, along with drop-off and buy-back centers, resulted in a diversion of about 30 percent of the nation's solid trash in 2001.

**Composting:** Another form of recycling is composting. Composting is the controlled biological decomposition of organic matter, such as food and yard trash, into humus, a soil-like material. Composting is nature's way of recycling organic trash into new soil, which can be used in vegetable and flower gardens, landscaping, and many other applications. Advantages: keeps organic trash out of landfills, provides nutrients to the soil, increases beneficial soil organisms (e.g., worms and centipedes, suppresses certain plant diseases, reduces the need for fertilizers and pesticides, and protects soils from erosion.

**Combustion:** The process of burning trash materials. Explain that burning materials not only lessens the amount that is discarded, but also creates energy. Problems arise when the



materials produce too much pollution or toxic chemicals when burning. For this reason, not all materials can be burned.

**Landfills:** A landfill is an area for disposing of solid trash on land. Its purpose is to dispose of trash materials in a safe way. Landfills have a special design using several layers of materials and drainage systems to keep the pollutants inside and contain the trash in the most effective way. Advantages: a place to safely store trash materials until they are broken down. Disadvantages: they take a great deal of space and potential accidents could cause the release of toxins. How long does it take for materials to break down in a landfill? (Paper: 2-4 weeks, glass jar: unknown length of time, banana peel: 4-5 weeks, aluminum can: 100 yrs)

