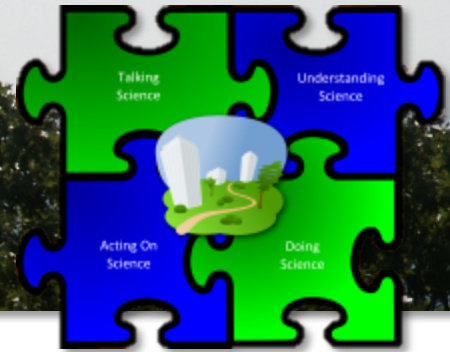


Urban EcoLab Curriculum



Reduce, Reuse and Recycle



<http://commons.wikimedia.org/wiki/File:Recycling.png>

Module 4 Lesson 9



This material is based on work supported by the National Science Foundation ("NSF") under Grant No. 0607010. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.

Reduce

According to the US EPA:

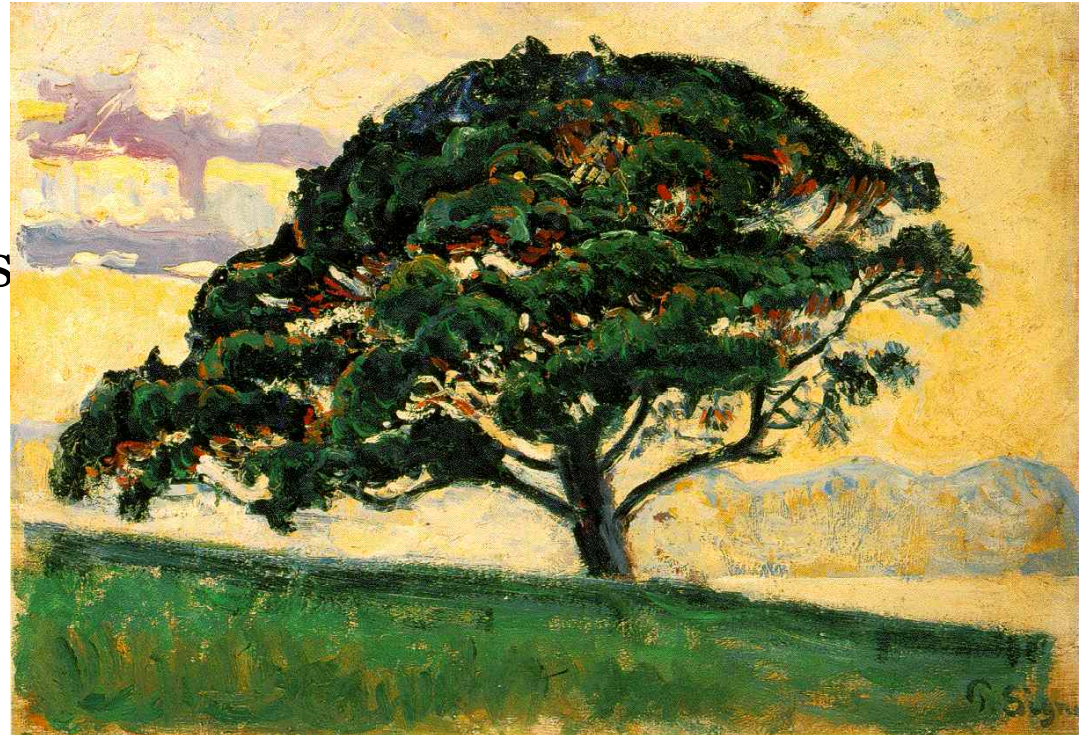
- Waste prevention, or "source reduction," means consuming and throwing away less.
- It includes:
 - purchasing durable, long-lasting goods;
 - seeking products and packaging that are as free of toxics as possible;
 - redesigning products to use less raw material in production, have a longer life, or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

Source reduction actually decreases the generation of waste in the first place, so it is the most preferred method of waste management and goes a long way toward protecting the environment.

Reuse

Reusing items -- by repairing them, donating them to charity and community groups, or selling them -- also reduces waste.

Reusing products, when possible and safe, is even better than recycling because the item does not need to be reprocessed before it can be used again.



http://commons.wikimedia.org/wiki/File:Paul_Signac_Le_Pin_Saint_Tropez.jpg

Recycle

- Recycling takes materials that would otherwise become waste and remanufactures them into valuable resources. In addition, it generates a host of environmental, financial, and social benefits. Materials like glass, metal, plastics, and paper are collected, separated and sent to facilities that can process them into new materials or products.
- Recycling is one of the best environmental success stories of the late 20th century. Recycling, including composting, diverted 82 million tons of material away from landfills and incinerators in 2006, up from 34 million tons in 1990.

Compost

- Compost is organic material that can be used as a soil amendment or as a medium to grow plants. Mature compost is a stable material with a content called humus that is dark brown or black and has a soil-like, earthy smell.
- It is created by: combining organic wastes (e.g., yard trimmings, food wastes, manures) in proper ratios into piles, rows, or vessels; adding bulking agents (e.g., wood chips) as necessary to accelerate the breakdown of organic materials; and allowing the finished material to fully stabilize and mature through a curing process.

Benefits of Composting

Reduces the need for chemical fertilizers.

Promotes higher yields of agricultural crops.

Facilitates reforestation, and wetlands restoration efforts by improving compacted and marginal soils.

Cost-effectively remediates soils contaminated by hazardous waste.

Removes solids, oil, grease, and heavy metals from stormwater runoff.

Provides cost savings of at least 50 percent over conventional soil, water, and air pollution remediation technologies, where applicable.



http://www.flickr.com/photos/_sjg_/5472660657/