

K-12 IYS Activity



Summary

Much of our waste in urban areas can be used to make compost. Compost helps restore soils and can even be used to make new soil. Food scraps, yard waste and municipal biosolids (the solids from treating our wastewater) are all excellent feedstocks for making soil. To understand just how much of this material we generate, the first step is measuring how much food waste is generated at lunch each day. This can also be taken one step further by actually starting a compost bin in your school, home or office. Participants at the lowest level will quantify how much food waste they generate and how much soil this could make. At the highest level, the participants will start a compost pile in their home, school or workplace and actually turn the food waste into soil.

Learning Objective

- That their food wastes are building blocks for soils
- That people generate a significant amount of food waste every day
- What compost is and how it forms

Materials Needed

- A scale
- See links for materials to build a compost bin

Making Soil

Ages

K-12

Where could you offer this?

Local school, library, or home

What type of room do you need?

Classroom seating, lab/work benches, or depending on size of group: bin in a home, larger structure in outdoor area

Type of Lesson

Hands-on (participants touch the stuff)

Outdoor

Indoor

Can be done as a single-day activity (measure classroom or home food waste per day) or upscaled into making compost

Time Needed

One day to measure food waste & time to calculate or discuss

Can turn into a regular activity of making compost

Method

1. Measure the amount of food waste that is generated at lunch each day—in the classroom for younger kids, in the cafeteria for older kids, or at home. This can be done every day for a week.
2. Calculate the total weight of the food waste. Divide this by three to determine the amount of compost that would be generated if the food waste was diverted from garbage to a composting facility or bin.
3. This can be taken one step further by actually starting a compost bin in the school or facility.

Celebrating the



2015

International
Year of Soils

soils.org/IYS

Making Soil

Connections to websites that show how to compost:

- Washington Organic Recycling Council, information, training, events. Download this “how to compost” guide: <http://www.compostwashington.org/images/Forms/compostguide.pdf>
- The Art and Science of Composting, Univ. Wisconsin-Madison. Download the guide here: <http://www.cias.wisc.edu/wp-content/uploads/2008/07/artofcompost.pdf>
- Cornell Composting, educational materials, programs, links. <http://compost.css.cornell.edu/>
- U.S. Compost Council, education materials, testing information, links. <http://compostingcouncil.org/>
- BioCycle, published since 1960 (originally as Compost Science); archives accessible electronically starting in 2004 at www.biocycle.net

Specific guidance for making compost at school:

- http://www.epa.gov/osw/education/teach_comp.htm
- http://www.ct.gov/deep/lib/deep/compost/compost_pdf/schmanual.pdf
- http://unicycler.com/go_green/schools/how_to_start_a_compost_program

Additional Resources

www.soils4teachers.org



Soil Science Society of America
www.soils.org