



The Messy Meter

Recommended Ages:
8-14

Estimated Time:
30 minutes

Subject:
**Introduction to
composting**

WHAT YOU'LL NEED

PANTRY STAPLES:

- 2-liter plastic jug or container
- Brown leaves
- Paper shreds
- Yard clippings
- Food waste: vegetable scraps, fruit scraps, coffee grounds
- Spray bottle
- Scissors
- Water
- Notecards
- Pen

Intro to Composting

In this activity, kids will learn how to compost, including the types of items in and around the home that should be composted, and exactly how to do it. They will also learn and discuss the larger environmental impacts of composting.



STEPS

1. Cut the top off of the 2-liter plastic container; at the bottom of the container, poke four holes equidistant from each other (PARENTS SHOULD DO OR CLOSELY MONITOR THIS STEP FOR SAFETY PRECAUTIONS)
2. Make notecards with signs for 'brown' materials, 'green' materials and 'non-compostable' materials.
3. Place the brown, green and non-compostable materials into containers behind their respective label cards.
4. Start composting! Place a layer of 'brown' on the bottom.
5. Spray this brown layer with the spray bottle to make it moist.
6. Next, place a layer of green.
7. Spray this layer with the spray bottle of water to make it moist.
8. Continue alternating brown and green layers, spraying as you go. Make the brown layers thicker than the green (the overall ratio of brown to green should be 3:2)
9. Discuss!



QUESTIONS TO ENGAGE YOUTH

1. What can you do to reduce food waste?
2. What can you do with the byproduct 'humus' fertilizer that will result from compost?
3. Can you compost even if you live in the city (the answer is yes!)?

EXPLANATION

About the activity: One of the ways to reduce food waste in our landfills and the resulting methane gas production is to compost. Composting requires a balance of brown and green materials and the knowledge of those materials that can't biodegrade. This is an exploration of how to compost correctly and the positive benefits that result in its usage.

The differentiation between 'brown' and 'green' materials is vital to composting because brown materials provide carbon for your compost, while the green materials provide nitrogen, and adding water provides moisture -- the combination of these elements are essential to breaking down the organic matter.

About composting: According to the EPA, food scraps and yard clippings make up 30 percent of what we throw away. When these items are put in landfills, they don't break down properly. Instead of turning into nutrient-rich matter that helps vegetation grow, they release methane gas -- a potent greenhouse gas that exacerbates climate change -- into the atmosphere.

Composting at home means those materials won't go to waste and will instead be turned into humus, a natural fertilizer that you can use to help grow and sustain trees, plants and flowers in and around your home

Start a compost bin today, and you can start to see usable humus in two to five weeks. For more about composting, visit epa.gov/recycle/composting-home#basics.

Brought to you by:



Find this and other great STEM activities at Shop4-H.org/STEM