

L1 Types of Waste

Lesson 1 of 3

Big Question: What are the different types of waste in the world?

Set the Stage:

We will be exploring waste and how it impacts the world around us. I love seeing the different ways we can reduce and reuse waste instead of throwing it away! There are so many different things we can do with trash.

Resources: Play this 4 minute and 28 seconds video from [Sid the Science Kid](#) on types of waste.



Activity:

Procedure: After the intro video – Engage

- Ask your child to tell you what they saw happen throughout the video.
- Have them draw images of what they saw.
- Use the trash in your own home or relative's home to sort into the three bins described in the Materials section.

Note to Parents:

Your community's trash handler likely has a facility where demonstrations of trash sorting can be seen.



Reflection:

- To communicate their observation: "I saw..."
- To reflect on their predictions: "I thought...but then..."
- To demonstrate science community skills: "I liked..." or "I loved..."

Enrichment:

- Watch this episode of [Citizen Science in Cyberspace](#), 3 minutes
- Go on a walk as a family and pick up trash. Sort it to reuse, recycle, and throw away.



Materials:

- 3 bins or containers to sort trash – one for Reuse, one for recycle, and one for trash
- Waste/Trash -paper, cardboard, glass, cans, plastic

Standards:

Standards addressed by this activity - BSB – The Do Place: NGSS-ESSA; NS F/P; 4C/E2; 5C/E1; 5D/E2; 5D/E5; NE SC2C.31.C; SC5.3.3.B

L2 Composting Waste

Lesson 2 of 3

Big Question: What is composting and why should we do it?

Set the Stage:

[Composting for Kids](#), 2 minute, 13 seconds

Resources: Can we make our own composter? Click here to watch [Homemade Composter](#), a 2 minute, 52 second video. It will show your child the steps needed to follow to make his/her own composter!



Activity:

Procedure: After the intro video – Engage

- In the prepared (cleaned, cut off top, and push pinned bottom) have your child(ren) add shredded newspaper, dried leaves, and dirt
- Now add fresh food scraps from the list.
- Use the spray bottle to add water.
- Set in the sunlight
- Over time, light and water will help decompose the items added.
- Whenever new food gets added, stir up the contents to mix the new scraps in with the base layer.
- Observe the composter for a week and watch the decomposing the new dirt; within a few days, the material will break down significantly into nutrient-rich fertilizer ready for any garden.



Reflection:

Have your child(dren) share at dinner the steps to making a composter and tell why this is a good thing to do for our planet. The best way to know if a lesson “sticks” is if kids can teach the topic to another person!

Enrichment:

Using the “Composting Basics” sheet (next lesson), have your child(ren) create their own Composting Basics that would fit your home. Encourage your child to share this information with other relatives and even neighbors if possible.

Standards:

Standards addressed by this activity - BSB – The Do Place: NGSS-ESSA; NS F/P; 4C/E2; 5C/E1; 5D/E2; 5D/E5; NE SC2C.31.C; SC5.3.3.B



Materials:

- 2-Liter Plastic Bottle, top removed
- Scissors or Knife
- Push Pin
- Spray Bottle
- Plastic Plate or Tray
- Shredded Newspaper
- Dirt (not potting soil)
- Dried leaves
- Fresh Plant Scraps



L3 Reduce Waste

Lesson 3 of 3

Big Question: Can our family reduce its waste?

Set the Stage:

Ask your child(ren) how much garbage their family throws out each week. One bag? Ten? Tell students that they are going to watch a video about a boy named Oliver and a big pile of garbage.

Resources: Play [Loop Scoops](#) video, 1 minute and 48 seconds



Activity:

Procedure: After the intro video – Ask your child to guess how many bags of garbage Oliver had at the beginning of the video, and how many at the end. Did Oliver’s garbage remind them of their own? What could we do at home to reduce the number of bags of garbage we throw out?

- Get comfortable on the floor
- Have your child determine which pieces of trash go into which bag.
- In the end, weigh and take pictures of your final products.



Reflection:

At end of activity–have your child(ren) share their thoughts and ideas about how they might be able to reduce waste at school home and in the community. Can they teach a relative how to reduce waste by sorting, composting, and recycling?

Note to Parents:

It might be a fun activity to share with your local waste management company how your family has learned to reduce waste. They might have an outlet for you and your family to share your experiences.



Materials:

- Gather trash and 3 bags then designate one for landfill, one for recycling, and one for compost.
- Scale and camera
- Protective gloves

Standards:

Standards addressed by this activity - BSB – The Do Place: NGSS-ESSA; NS F/P; 4C/E2; 5C/E1; 5D/E2; 5D/E5; NE SC2C.31.C; SC5.3.3.B