

# Food Waste

## LESSON PLAN

### NEXT GENERATION SCIENCE STANDARDS

K-ESS3-3 Earth and Human Activity: Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.\*

5-LS2-1 Ecosystems: Interactions, Energy, and Dynamics: Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

MS-LS2-3 Ecosystems: Interactions, Energy, and Dynamics: Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.

### OBJECTIVES

The student will be able to learn about how much food is wasted in the United States.

The student will be able to create their own compost jar.

### ACTIVITIES

- The student will watch this video to introduce the issue of food waste:
  - <https://ninenet.pbslearningmedia.org/resource/ee18-sci-foodwst/kids-go-green-reducing-food-waste/>
- With their parents' help, the student will create a compost jar to learn about how compost can break down waste so it doesn't sit in a landfill (complete directions here: <https://www.tomsomaine.com/good-matters/thinking-sustainably/activities-to-teach-composting-for-kids>) under "Craft a Soil-airum"
- The student will collect: a glass jar, soil, newspaper, leaves/grass clippings, a permanent marker, and fruit/vegetable peels and cores.
- The student will combine the materials to make a compost jar according to the directions at the link above.
- The student will keep a journal at least once a week about what they notice happening in their compost jar. This can include writing or drawings or both.
- The student will track the compost's level every two weeks.
- After 12 weeks, the student can help the parents transfer to soil to their yard or garden.

### OPPORTUNITIES FOR DIFFERENTIATION

#### YOUNGER STUDENTS

- Students can have additional adult participation and help in crafting the jar.
- Students can play a composting game rather than, or in addition to, creating their own compost:
  - [http://d3tt741pwxqwm0.cloudfront.net/WGBH/ess05/ess05\\_int\\_compost/index.html](http://d3tt741pwxqwm0.cloudfront.net/WGBH/ess05/ess05_int_compost/index.html)

#### OLDER STUDENTS

- Students can have more autonomy over the project and be responsible for crafting the compost jar themselves.
- Students can research other options for composting and why it's important.
- Students can propose a long-term compost solution that fits the needs of their own household.