

# Where Does My Food Waste Go?

**Estimated time for activity ~45 minutes**

## Objective

Students will complete a card sorting activity to explore the different journeys food waste can take, and how these different possibilities can affect our planet in different ways. This activity encourages students to begin thinking about what they can do with the food they don't want to eat in order to protect the planet and minimize hunger.

## Essential Questions

- Where does food waste go after it is thrown away?
- How does food waste contribute to our changing climate?
- What steps can we take to reduce food waste in our daily lives?

## Materials

- Card sorting handouts (enough for each small group of 3-5 students)
- Scissors

## Background

Approximately 90 billion pounds of edible food is discarded each year, making it the single largest category of material being placed in our landfills. This is equivalent to an area of agricultural land the size of California and New York combined! As this food decomposes in these sites, it emits methane, a potent greenhouse gas that contributes to climate change. Throwing away food also squanders the resources that were used to produce, package, and transport it from the farm to our plates. By reducing food waste, we can conserve these valuable resources, make a difference in our communities, and promote a circular economy. Schools play a crucial role by not only reducing, recovering, and recycling uneaten food, but also teaching students about the importance of this issue.

## Vocabulary

- Landfill, waste, compost, climate change, methane

### GRADE LEVEL



PRE-K - 12TH  
GRADE

### CONNECTIONS TO THE BIG IDEAS OF SUSTAINABILITY



Systems



Ability to Make  
A Difference



Community



Long-Term  
Effects

### CURRICULAR CONNECTIONS



SCIENCE  
Ask questions based  
on observations



SCIENCE  
Cause & Effect



ELA  
Listening &  
Speaking



SEL  
Teamwork



## Activity

1. Distribute card sorting sheets to each group of 3-5 students.
2. Students brainstorm what happens to food waste after it is thrown away in a bin.
3. Students will then work in small groups to sort a set of images that reflect what happens to food waste in the scenario presented in the cards.
4. Walk around the class and ask students questions like:
  - Why did you put this card here?
  - What made you decide to put this card next in the order/sequence?
  - Is there more than one way to sort the cards?
5. Then, as a class, come to an agreement of the order the cards should be in.
6. *Repeat steps 3-5 for "What happens to the apple at the landfill?"*
7. *Invite students to discuss what they might do differently with food they don't want to eat instead of putting in the landfill bin.*
8. *Explain that students will now explore how they can share food that can still be eaten by others through another card sort.*
9. *Repeat steps 3-5 for "How can sharing food help us reduce food waste?" card sort handout.*
10. *Now that students have explored how they might share food they don't with others who want it, explain that some food waste can not be safely eaten. How can we handle food waste that can't be shared with others?*
11. *Introduce the next card sort by explaining that students will be thinking about how nature handles "waste". Repeat steps 3-5 for What happens to the apple if we leave it alone?" card sort handout.*
12. *Invite students to consider how humans can act more like nature when handling food waste that can't be shared with others, Repeat steps 3-5 for "How is compost made?" card sort handout.*

## Reflection Questions

*Adapt to age level; these questions spur inquiry and can lead to other questions while motivating creativity and critical-thinking.*

- What are some of the reasons food gets thrown away in your cafeteria?
- How does food waste impact the environment?
- What actions could you take to minimize food waste at your school?
- Why is it important to share (untouched) leftover food with others?
- How might you share untouched food with other people? What do these paths look like?
- What happens to food we can't share with others?

# What happens to food waste?



**Cut and arrange the cards in the order that you think represents the steps food waste goes through.**

Waste is put into garbage truck



Garbage gets sorted to remove some items



Waste goes to the landfill and gets packed and covered with earth



Waste is put in the dumpster



Uneaten food leftover is thrown away



Food is leftover after lunch



# What happens to the apple at the landfill?



Cut and arrange the cards in the order that you think represents what happens to an apple and other food waste once they end up at the landfill.



The buried apple can take a long time to rot



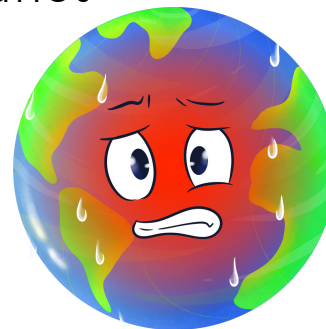
The apple gets packed and buried in a landfill



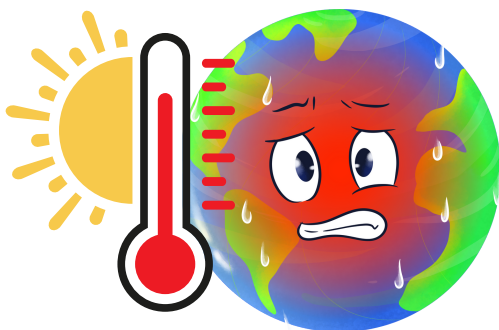
The rotting apple produces a gas called methane



Methane acts like a blanket for our planet



Our Earth can get warmer, faster



Garbage truck takes food to landfill



# How can sharing food help us reduce food waste?



**Cut and arrange the cards in the order that you think represents the steps that schools can take to share leftover food that is still good enough to eat.**



Students can take food from the share table during school mealtimes.



Food and beverages are leftover at lunch.



Leftover foods are organized into bins at the share table in the cafeteria.



Food leftover from the share table can be donated to a food bank.



Cafeteria worker double checks to make sure the items in the bin are safe to eat.



Food Bank provides food to community organizations like soup kitchens, food pantries, churches, etc.



# How can sharing food help us reduce food waste (cont)?



Meal programs, food pantries, churches, soup kitchens, etc provide food to community members in need.



Food is not wasted and community members in need are fed and not left hungry.



Less food ends up in the landfill bin.



Less food waste in the landfill means less methane is made, helping keep our planet healthy.



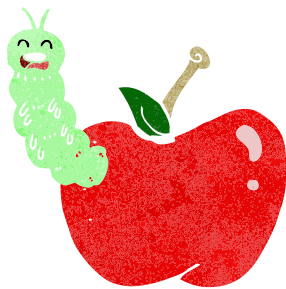
# What happens to the apple if we leave it alone?



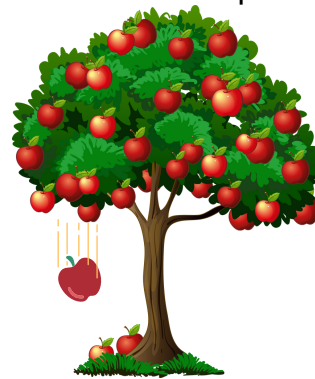
**Cut and arrange the cards in the order that you think represents what happens to an apple that humans never touch.**



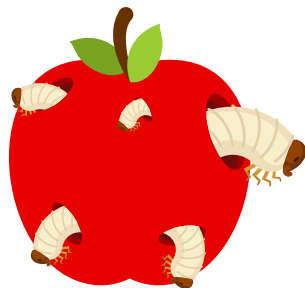
Bugs and other tiny life forms called microbes eat the apple slowly.



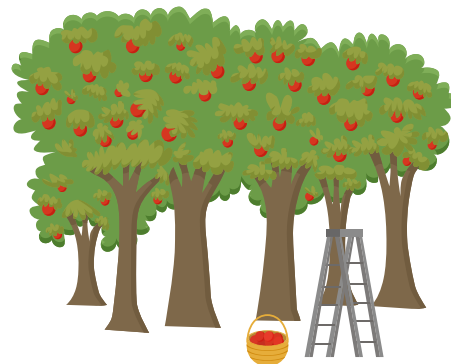
The apple falls off the tree when it is ripe.



Time passes and more bugs and microbes eat the apple.



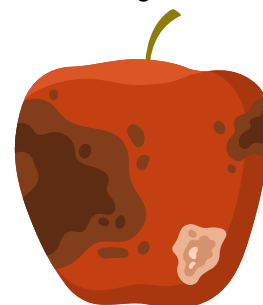
More life can grow from healthy soil.



The apple becomes part of the soil.



The apple becomes brown and mushy.



# How is compost made?



After the last card series, think about how humans can act more like nature when handling our food waste by composting. Cut and arrange the cards in the order that you think represents the steps of turning food scraps into healthy soil by composting.

Food scraps ,  
or “greens”  
are collected  
in a bin or  
container.



Food scraps are  
leftover after eating or  
making food. These are  
called “greens.”



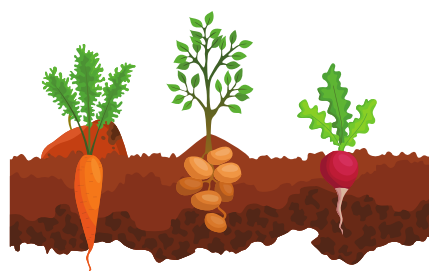
The compost pile is  
mixed regularly to  
combine with air and  
moisture.



Time passes, and  
nature’s elements  
turn the compost  
into healthy soil.



Healthy soil can  
be used to grow  
healthy food!



Food scraps, or  
“greens”, are mixed  
with “browns” like  
leaves in a compost  
pile.

