Where is Away?

Trash has a long journey once it's thrown away. Something thrown away here goes on a different journey than a piece of trash thrown away in another state. We will learn all about that journey today!

GRADE LEVEL: 2nd - 5th | **TIMING: 10-minute video + discussion (10 – 30 minutes)**

Lesson Overview

In this lesson, students will learn about our solid waste management system and where 'away' is when we put something in the trash. We will discuss how the Ramsey/Washington Recycling and Energy Center processes trash from the two counties to be used for fuel, opportunities to make better decisions with our trash, and how each of us plays a role in our local waste system.

MN State Standards | Lesson reinforces these standards:

Social Studies

4.1.1.1 - Describe how consensus building is used to identify and respond to a community problem.
4.1.5.1 - Examine how identity shapes our perspectives about a local issue and describe ways particular community problems are addressed.
4.2.7.1 - Explain how the limited supply of natural resources requires people to make decisions about resource use, and examine a specific resource use decision made in your community.
4.3.13.3 - Ask spatial questions and acquire geographic sources from different perspectives to answer them.
4.3.16.1 - Explain how changes in climate and choices humans make impact environments from local to global scales.
5.3.16.1 - Describe how the choices people make have impacted a physical environment over time.

Science

4E.4.2.1.1 Read and comprehend grade appropriate complex texts and/or other reliable media to describe that energy and fuels are derived from natural resources and their uses affect the environment. (P: 8, CC: 2, CI: ESS_3, ETS_2)
6E.3.2.1.3 Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.* (P: 6, CC: 2, CI: ESS_3, ETS_1)

Learning Objectives | By the end of the lesson:

- Students will be able to define trash and describe the value in the things we dispose of
- Students will be able to describe how trash in our community is processed and where it ultimately goes (there is no away)
- Students will understand that waste disposal is a resource intensive process
- Students will be able to describe how each of us plays a role in our local waste system, and how our choices around waste impact our lives and our communities

Key Terms/Vocabulary

Reduce: The practice of producing less waste, including recyclable waste.
Reuse: The practice of using a material in its original form again and again.
Recycle: The process of collecting and preparing recyclable materials so that the material can be used to make the same or new product.
Repair: The practice of fixing or mending broken/ damaged items rather than throwing them away.
Landfill: A waste facility that is designed for disposing of waste on or in the land.
Refuse Derived Fuel (RDF): Fuel derived from waste (also called refuse).
Waste-to-Energy: Energy created from the combustion of RDF.
Garbage/Trash: A disposable material or collection of disposable materials that is not reusable or recyclable.

Discussion Questions Guidance

The guidance below is meant to be used in conjunction with your own expertise and experience, including awareness of what ideas or concepts will be more relevant to the lived experience of your students. Please adjust or expand on discussion questions or concepts as appropriate. For more information on Waste-to-energy and Landfilling, please see the FAQ document under 'Additional Learning Resources' on page 3.

Discussion Pause #1 (00:37)

- What do you think happens to our trash when we throw it away?
  - *Students may struggle to get past the point of the garbage truck picking it up. Keep asking "but then where?" Generally, in the US, trash either goes to a landfill or to a waste-to-energy facility. In simple terms it is either buried or burned for energy. When we throw things away, there is no away, there is just the next step.*

Discussion Pause #2 (1:30)

- What is trash?
  Things that we throw away that can't be reused, repaired, or recycled. Examples:
  - *Styrofoam lunch trays, cups or to-go boxes*
  - *Single use plastic silverware, paper cups*
  - *Chip bags, snack/candy wrappers, plastic bags*

- How do we know if something is trash or not?
  An item is trash if the answer is no to all of these:
  - *Can I use this again or can someone else use this?*
  - *Can I repair this so it can continue to be used?*
  - *Can this be recycled?*

Discussion Pause #3 (4:13)

- Which part of this process did you find most interesting?
- How is the process at the R&E Center similar/different than trash going to a landfill?

Discussion Pause #4 (4:58)

- Now that you've gone on the journey of trash when we throw it away, can you tell a partner where is 'away'?
- Do you have any ideas of how we could produce less trash?

Discussion Pause #5 (6:27): Look around the room and think about what might happen to some of the things we see once they are at the end of their life.

- Can they be reused, repaired (if broken), or recycled?
- What are some of the options for each item?

Discussion Pause #6 (7:29): Pick something in your classroom.

- What is it made of and where did it come from? How long will it last?
- What are some ways that you already reduce?
- Do you have any new ideas on how you can reduce more?

Discussion Pause #7 (8:26)

- As someone who is now an expert on waste, what changes would you make in your school, your neighborhood, your community to reduce waste?

Lesson expansion opportunities: | Additional resources, field trip opportunities, etc.

Field trip and tour opportunities

- Recycling and Energy Center (Newport)
- Washington County Environmental Center (Woodbury and Forest Lake)
- Ramsey County Environmental Service Center (Roseville)

Improve your schools waste system

- School Engineer – Schedule a time for students to chat with a school engineer on how recyclable and trash materials are handled. Ask how they could use the help of your classroom to make sure waste goes in the right place.

- Apply for funding and assistance - Ramsey and Washington counties have funding, free container labels, and technical support available to help schools start or improve recycling and waste reduction programs:
  - Ramsey County School Recycling Assistance
  - Washington County School Recycling Assistance
- Start a Green Team – organize a group of students to work on projects to help the school and community recycle right. This could include educating classmates, organizing environmental activities such as material swaps, games, and classroom waste sorts, and hosting a book club on environmental topics.

Additional learning resources

- AWAY: A Zero Waste Journey (5 minute video)
- FAQs: Waste-to-Energy and Landfilling

Feedback Form

Provide feedback for R&E to improve this lesson.

Come see for yourself!

Schedule a tour of the R&E Center for your classroom or group.

RecyclingandEnergy.org/Tours

Find more resources at
RecyclingandEnergy.org/Education/k-12-lessons

R&E Lessons | Ramsey/Washington Recycling & Energy views waste as a resource stream and works to extract maximum value from discarded materials. View lesson videos and find helpful resources by scanning the QR code or visiting **RecyclingandEnergy.org/Education/k-12-lessons**