

Recycle Right

Waste, and what we do with it, affects our environment. We need a healthy environment for our health and happiness. This is why putting our waste in the right place is so important. This lesson will focus specifically on recycling the right way.

Grade Level: 3rd - 5th

Timing: 10-minute video + discussion (10 – 30 minutes)

Materials: Optional – common recyclables found in your classroom/school as examples

Lesson Overview

In this lesson, students will learn why it's important to recycle, how recycling works, what common items are recyclable, how to prepare items so that they are able to be recycled correctly, and how to advocate for recycling and better waste management in their communities. The lesson is interactive with many opportunities to pause for discussion.

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.

Recycling: The process of collecting and preparing recyclable materials so that the material can be used to take the same or new product

Contamination: A material (such as trash or food) that shouldn't go into the recycling bin. If contamination is found in recycling, MRFs may decide to not sort the materials and dispose of it all as trash! Common contaminants in school recycling: food, plastic silverware, plastic straws, plastic bags, and paper food boats

Waste Stream: Waste stream: The journey of waste from the creation of the item to its final disposal (recycled, landfilled, composted, etc.).

Garbage/Trash: A disposable material or collection of disposable materials that is not reusable or recyclable.

Materials Recovery Facility (MRF): Materials recovery facility (MRF): Facility designed for centralized sorting, processing and/or grading of collected recyclable materials for marketing. **Landfill:** A waste facility that is designed for disposing of waste on or in the land

Minnesota waste hierarchy: A ranking of waste management practices in the order they are the preferred: waste reduction, reuse, recycle, compost, waste-to-energy, and landfill.

Learning Objectives | By the end of the lesson, students will be able to:

- Describe the Minnesota waste hierarchy and utilize the hierarchy to explain the preferred ways of managing waste
- Explain the differences between reduce/reuse/recycle and provide examples of each
- Define recycling, including the sorting process
- Describe where recycling goes after it gets picked up and recycling infrastructure in our communities
- Name what items can be made from recycled materials
- Describe environmental, social and human health impacts, benefits, and outcomes of recycling
- Explain what materials are recyclable and what causes recycling contamination
- Identify how to get involved and improve recycling in their home, school, and community

MN State Standards | Lesson reinforces these standards:

Social Studies

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.

4.3.16.1 - 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

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: ESS3, ETS1)



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 questions or concepts as appropriate. Recycling can be confusing! For answers to common questions, see our Recycling FAQ linked under 'Additional Learning Resources' on page 4.

Discussion Pause #1 (00:43)

- Do you recognize anything from this list?
 - *Some students may be able to differentiate between the categories. Let students provide definitions and then compare their definition to the provided definition in the vocabulary section.*
- What things are you already doing?
 - *Allow students to discuss and provide examples. Detailed examples can be explored after each category is defined.*

Discussion Pause #2 (1:36)

- What is one way your family or classmates reduce or reuse?
 - *Give students a head start by providing examples of reduce and reuse in your classroom. Examples can include:*
 - *Using both sides of the paper for reuse*
 - *A table sharing crayons and markers for reduce*
 - *Using a refillable water bottle*
 - *Using school supplies year after year.*
 - *Wearing clothes or using toys or books that friends or siblings have outgrown*

Discussion Pause #3 (2:15)

- What can you recycle at your school?
 - *Not all schools recycle the same types of materials. Center the conversation on what recycling is available to your students.*
- What are the differences between recycling and trash containers at your school?
 - *Students can talk about size, color, design, signage, and even placement of containers*

Discussion Pause #4 (3:35)

- Why is it important to recycle?
 - *Students should have an understanding between recycling and waste reduction. Although reducing and reusing are better options, recycling is also important because sometimes, we are unable to reduce or reuse and recycling provides another option to decrease waste.*
 - *Recycling is good for the environment and our human health. It reduces the need to extract new materials from the earth which can result in habitat destruction, water and energy use, and water and air pollution. Recycling uses less energy than producing new items. Because of this, recycling reduces pollution.*
- What are some things that you've recycled at home or school? What do you think those things were recycled into?
 - *Metal is recycled back into metal, and glass back into glass. Cardboard and paper products are recycled back into paper products like cardboard, paperboard (cereal boxes), notebook paper, toilet paper, tissues, etc.). Plastics may be recycled back into other plastic bottles or jugs, or may be turned into textiles or durable plastics like decking, benches, and playground equipment.*

Discussion Pause #5 (5:10)

- Read through the recyclable items.
 - *If you have any recyclable items to show (see optional materials), now is a great time to discuss each item and if they are recyclable.*
- What items does your school recycle?
 - *Use the list on the screen and personal experience to help identify.*
- What item do you think your school recycles the most?

Discussion Pause #6 (8:00)

- What item do you think you recycle the most at home?
- How do we recycle right?
 - *Recycling "right" means understanding what is recyclable and placing recyclable items in the recycling container and nonrecyclables in the trash container.*
- What is recycling contamination and how can we avoid it?
 - *Contamination is any material (such as trash or food) that shouldn't go into the recycling bin. If contamination is found in recycling, MRFs may decide to not sort the materials and dispose of it all as trash! Contamination can be avoided by only putting things we know are recyclable into recycling bins. Common contaminants in school recycling: food, plastic silverware, plastic straws, plastic bags, and paper food boats.*
- What should you do if you're unsure if something is recyclable?
 - *If students are ever unsure if something is recyclable or not, they can try to find the answer by visiting the county's website or asking an adult. If not, remember, when in doubt, throw it out! Students can also suggest seeking help from an adult, but they should fully understand that when all resources are exhausted, they should throw it out if they are unsure.*

Discussion Pause #7 (8:34)

- What are some things you and your classmates could do to help your school recycle right?
 - *Some ideas include the creation of a green team, creating posters letting people know what is and is not recyclable etc. A variety of answers are possible here and creativity should be encouraged*

Lesson Expansion Opportunities | Additional resources, field trip opportunities, etc.

Field trip and tour opportunities - Recycling Facility (MRF) Tours (linked):

- [Eureka Recycling \(Northeast Minneapolis\)](#)
- [Tennis Sanitation \(St. Paul Park\)](#)
- [Dem-Con \(Shakopee\)](#)

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

- [The Story of a Cereal Box](#)
- [Washington County Disposal Directory](#)
- [Ramsey County A to Z Green Guide](#)
- [Recycling FAQs](#)

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/

