

Hennepin County

Recycling & Organics Classroom Presentations

Our classroom presentations provide students with information on the following topics:

- the benefits of diverting waste from landfills and incinerators
- ways to reduce waste
- the importance of sorting recycling and organics correctly at school

There are additional lessons that delve deeper into specific topic areas, such as composting, paper recycling, and packaging. All presentations are meant for individual classes. If you are interested in presentations at your school, contact Kira Berglund, School Recycling Specialist at kira.berglund@hennepin.us or 612-596-1498.

CLASSROOM PRESENTATIONS BY GRADE LEVEL:

Elementary

K – 2 nd Grade	3 rd – 5 th Grade
Taking Care of the Earth Magical Composting Recycling with Ricardo the Raccoon	Forests & Paper Recycling Wise with Waste

Middle & High School

6 th – 8 th Grade	9 th -12 th Grade
Recycling & Composting Processes Forests & Paper Recycling Investigating Packaging	Resources & Recycling Composting & Organics Recycling

Presentation: Taking Care of the Earth

Recommended Grade Range: Pre-K through 2nd

Presentation Length: 30 minutes (Pre K, K), 40 minutes (1st-2nd)

In this presentation, students will learn about the importance of taking care of the things in our life, including our Earth. We'll explore how recycling and composting are ways we can take care of the Earth every day. Pre-K and Kindergarten students will sing a recycling song, while 1st and 2nd grade classes will learn about natural resources. To wrap up, all students will engage in a practice sort to reiterate which items can be recycled, which can be composted and which need to be placed in the trash.

Standards Reinforced

Science: 0.1.2.1.1, 0.2.1.1.1, 1.3.1.3.3, 1.4.2.1.1, 2.1.2.2.3, 2.2.1.1.1, 2.4.2.1.1
Social Studies: 0.1.4.8.1, 0.3.1.1.2, 2.2.3.5.1, 2.3.4.9.1

This lesson requires an easel or other surface for displaying a poster (1st and 2nd grade only)

Presentation: **Magical Composting**

Recommended Grade Range: K-2nd

Presentation Length: 30 minutes

Wendell the Wizard Worm will introduce students to the composting process. Through storytelling and demonstrations, students will learn about the organisms that make up a compost pile food chain and review the types of materials that can be put in the organics composting bin at school. Visuals are used to engage students in this lesson.

Standards Reinforced

Science: 0.1.2.1.1, 0.4.1.1.3, 1.4.1.1.1, 2.4.2.1.1

This lesson requires staff participation.

Presentation: **Recycling with Ricardo the Raccoon**

Recommended Grade Range: 1st-2nd

Presentation Length: 35 minutes

In this presentation, Ricardo the Raccoon (a puppet) will explain where items go when we throw them away. Ricardo will talk about the importance of conserving our natural resources, and he will describe landfills and recycling sorting facilities. He will also suggest ways we can take individual actions to reduce waste.

Standards Reinforced

Science: 1.3.1.3.3, 1.4.2.1.1, 2.1.2.2.3, 2.2.1.1.1, 2.4.3.1.1
Social Studies: 1.1.1.1.1, 2.2.4.5.1, 2.3.4.9.1

This lesson requires staff participation.

Presentation: **Forests & Paper Recycling**

Recommended Grade Range: 3rd-5th

Presentation Length: 35 minutes

Students will learn about the different animals that live in our Minnesota forests and how they depend on trees for shelter, food, protection from predators, shade and oxygen. We'll explore what the impact on the forest community when trees are cut down. To contrast this, we'll look at all the forest products we use on a daily basis, such as paper, building materials and food. Students will brainstorm ways we can balance taking care of our forests while still acquiring the materials we needed, wrapping up with a discussion about reduce, reuse and recycle.

Standards Reinforced

Science: 3.4.1.1.2, 4.1.2.1.1, 5.3.4.1.1, 5.3.4.1.3, 5.4.2.1.1, 5.4.4.1.1
Social Studies: 4.3.4.9.1

This lesson requires some staff participation and a white/Smart board.

*Presentation: **Wise with Waste***

Recommended Grade Range: 3rd- 5th

Presentation Length: 45-50 minutes

In this presentation, students will learn about our solid waste dilemma and the problems associated with landfills and incinerators. As an alternative to these, we'll explore the 3 R's. Students will learn to reduce waste by choosing products with less packaging and share stories about how they've reused items. The benefits of recycling will be explored and we'll discuss closing the loop. Organics recycling will be covered and we'll talk about the composting process. To wrap up, students will engage in a sorting activity to reinforce the ideas of reduce and reuse, and to ensure students know how to fully participate in the school's recycling & organics program.

Standards Reinforced

*Science: 3.1.1.2.4, 4.1.2.1.1,
5.3.4.1.1, 5.3.4.1.2,
5.3.4.1.3, 5.4.4.1.1
Math: 3.1.3.2, 3.4.1.1
Social Studies: 3.2.3.5.1*

This lesson requires a white/Smart board.

*Presentation: **Recycling & Composting Processes***

Recommended Grade Range: 6th-8th

Presentation Length: 45-50 minutes

We'll start out this presentation talking about the problems associated with landfills and incinerators and the other options available for managing our waste. After a quick discussion of reduce and reuse, we'll dive into the recycling process. Using an on-line video, we'll follow the recycling process of paper, glass, metal and plastic from start to finish. To wrap up the recycling process, we'll discuss closing the loop and the importance of creating markets for recycled materials. For each material, we'll review the items that can be recycled and those that can't. Next, we'll follow an apple core through the composting process. Again, we'll review the items that can be collected in the organics bins at school and discuss the problems associated with contamination. If time allows, we'll wrap up with a sorting activity to reinforce the information covered.

Standards Reinforced

*Science: 6.1.2.1.1, 6.1.2.1.3,
6.1.3.1.1, 7.4.2.1.2,
7.4.2.1.3, 7.4.4.1.2,
8.1.3.3.3, 8.3.4.1.1, 8.3.4.1.2
Social Studies: 6.2.3.5.1,
7.2.1.1.1*

This lesson requires a projector, internet access and speakers.

Presentation: Forestry & Paper Recycling

Recommended Grade Range: 6th-8th

Presentation Length: 50 minutes

Several different interactive activities will give students a chance to explore our forest resources. We'll start off discussing the ways living organisms rely on forests. We'll pass around examples of forest products that humans use on a daily basis and emphasize the need for responsible management. Students will break into groups to explore what happens when a renewable resource is not managed in a sustainable way. Student group "town councils" will examine various proposals on how to manage a tract of forest and make a decision based on a series of criteria. To wrap up, we'll explore how recycling is another way we can each take care of our forest resources on a daily basis, both at school and at home.

Standards Reinforced

*Science: 7.4.2.1.1, 7.4.2.1.2,
7.4.2.1.3, 7.4.4.1.2, 8.3.4.1.2*

*Social Studies: 6.1.1.1.1,
6.1.1.1.3, 7.1.1.1.1,
7.2.3.3.1, 8.1.1.1.1, 8.2.1.1.1*

This lesson requires students to work in small groups and a white/Smart board.

Presentation: Investigating Packaging

Recommended Grade Range: 6th-8th

Presentation Length: 45-50 minutes

Students will explore the pros and cons associated with product packaging. They'll determine the reasons certain product have the packaging they do and offer ideas for improvements. Learning trunk materials will be used to display both the difference in waste and cost between minimally packaged and highly packaged products.

Standards Reinforced

*Science: 6.1.2.1.1, 6.1.2.1.2,
6.1.2.1.3, 8.1.3.3.1,
8.1.3.3.3, 8.3.4.1.1*

Social Studies: 7.4.4.20.1

This lesson requires students to work in small groups and a white/Smart board.

Presentation: **Resources & Recycling**

Recommended Grade Range: 9th-12th

Presentation Length: 50-60 minutes

In this lesson, we discuss consumption and waste, and the impact these have on our environment. We'll explore the extraction processes for several different renewable and non-renewable natural resources. Next, we'll move on to the topic of resource disposal through incineration and landfilling. Students will be asked to brainstorm alternative ways of managing our resources, leading into a discussion about the 3 R's. Using an on-line video, we'll follow the recycling process of paper, metal, glass and plastic from start to finish. To wrap up, we'll review how reducing, reusing and recycling, both at school and at home, are actions we can take every day to make an impact on how our precious natural resources are used.

Standards Reinforced:

Science: 9.1.2.1.1,
9.2.4.1.2, 9.3.4.1.2,
9.4.2.1.1, 9.4.4.1.2,
Social Studies: 9.2.4.5.1,
9.2.4.5.2, 9.2.4.5.3,
9.3.4.9.1, 9.3.4.10.1

This lesson requires a projector, internet access and speakers.

Presentation: **Composting & Organics Recycling**

Recommended Grade Range: 9th-12th

Presentation Length: 45-50 minutes

Students will learn about the various ways to handle organic materials, both at home and on a larger scale. The presentation will begin with looking at the issue of food waste, then continue on to composting at home. We'll do an overview of backyard and worm composting. Next, we'll cover ways that organizations can handle their organics, including food donation, food to livestock, and large-scale composting.

Standards Reinforced:

Science: 9.3.4.1.2,
9.4.2.2.2., 9.4.4.1.2,
9.4.4.2.4
Social Studies: 9.3.4.9.1,
9.3.4.10.1

This lesson requires a projector, internet access and speakers.