Centre County Recycling & Refuse Authority

WPSU Virtual Field Trip Teacher Guide



For Grades: 1st – 6th

Duration: 3 class sessions

Objectives:

- Describe the process of how materials are recycled.
- Identify what types of materials can be recycled.

Contents:

Plan Your Trip
Classroom Extensions
At-home Extensions
PBS LearningMedia Resources
Standards Alignment
Career Readiness Artifact
KWL Chart

Explore the Centre County
Recycling & Refuse Authority to
learn about how our recycling gets
sorted and processed. Through
videos and photos of inside the
plant you and your students will
get front row seats to the
recycling process without having
to make the trip!



Plan Your Trip!

KWL Chart [Assessment]: Use the included KWL chart to help students assess what they "Already Know" and "What they Wonder" about recycling. Use their answers to help guide a discussion prior to the Field Trip and identify areas that, as a class, you'll have to research to find out.

Guiding Questions:

- o Do they recycle at home?
- o Discuss and define the terms upcycle and reuse.

Recycled Journals [Activity]:

Once you're ready for your "trip" get your students excited for their visit by having them

create their own journals from recycled materials. Ask them to bring in junk mail from home or have your class gather recycled paper from other classrooms in your school.

As a class, read the <u>Nature Journals</u> <u>instructions</u> and then have students make their journals using the materials listed to the right.

Materials needed:

A large piece of thin cardboard (like a cereal box) for each student

An assortment of recycled paper Scissors or a hole punch

Long pieces of string, yarn, or ribbon

Decorations for the journal cover (optional)

It's Field Trip day! Start your trip by watching the video. Have your students take notes and draw observations in their *Recycled Journals*. Encourage discussion by starting and stopping the video and asking questions included below.

Discussion:

- Discuss some of the recycled materials that were used to create the Interpretative Center and how they think those were repurposed.
- Review with your students the materials that can be recycled at the Recycling Center.
- Ask your students what the steps are in the process at the plant.

Reflection: Journal Prompts

- o What surprised you?
- o What questions do you still have?

Following the video, click on the numbered icons to learn more about the Recycling Center. Go over with your students what the different locations are and have them predict what they will see.

DU RING

Plan Your Trip!

Activity [KWL Chart]: Complete the KWL chart you began before the trip by having students fill-in the "What I Learned" column.

- Discuss as a class what new things they learned about recycling.
- Discuss if there was anything that they thought they knew before the field trip that was not quite correct and how the field trip helped to clear up the misconceptions.
- Discuss any questions that students may still have.

Classroom Extensions

Exploration: Identify your local recycling center. See if they offer any engagement activities for students. Find out if they have a different process or recycle different materials.

Expert: Contact Centre County Recycling & Refuse Authority to schedule a live virtual Q&A session with their Education Coordinator.

Amy Schirf, Education Coordinator ASchirf@centrecountyrecycles.org 814-238-7005

Experience: Register with WPSU to request your **FREE Paper Making Classroom Activity Kit** to extend the Field Trip experience.

Activity [Recycling System] Create a classroom recycling system. Involve your custodial staff in developing a system to encourage students to sort their recycling.

- Label recycled boxes or unused bins with images of different materials. Have your students identify what materials should go in each bin.
- Are there extra lockers in your school? Put labels on the outside and bins on the inside for all students in your school to sort their recycling.

Activity [Vocabulary Practice] Create signs for the corners of your room from scrap paper or print the signs provided. Reduce, Reuse, Recycle, Landfill

- Give students different situations and ask them to stand near the sign they think applies to that sign. Examples include:
 - 1. Reuse: Using your own water bottle
 - 2. Recycle: Putting your cans in a special bin
 - 3. Reduce: Using bar soap instead of liquid
 - 4. Landfill: Greasy pizza box

Classroom Extensions

Distance learning alternative: Have students create their own situations on cards and play the game, "I have _____. Who has _____?"

- 1. Have students count off 1 4. Assign each number to Reuse, Recycle, Reduce, and Landfill.
- 2. Students should write an "I have" situation that relates to their assigned number and choose different category for their "Who has". For example, a student assigned number 1 would say, "I have a water bottle I refill every day, who has Recycle?" And that student would choose someone who raises their hand to share their card.

At-Home Extensions

Activity [Watch & Create] Join Laura from WPSU to learn how to create upcycled art.

- Reuse items (like keys, bottle tops, and buttons!) to create <u>jewelry</u>.
- Create <u>creature friends</u>, like a dragonfly from a milk jug and a salamander from a toilet paper roll.
- Turn water bottles into <u>bubble</u>
 <u>blowers</u> (Watch section 0:00 8:52).

Activity [Sorting Recyclables] Learn how to sort Your Recycling with Kate from WPSU.

 Once you have a full recycling bit at home, see what you to do with it next (Watch section 9:07 – 13:04).

Additional Resources

Grades K-5

- Cyberchase "Reduce, Reuse, Recycle" [Video]: Learn how we can reduce a significant amount of trash and our impact on landfills by practicing "reduce, reuse, and recycle."
- <u>Recycling!</u> [Interactive Lesson]: Play recycling games, read secret 'snail trail' messages, and learn why we
 must reduce our landfills.
- The Cat in the Hat Knows a Lot About That "Super Cleaner Upper" [Game]
- Melted Plastic Cup Ornaments [Art Activity]: Upcycle hard to recycle plastics.

Grades 6-8

- Compost Worms [Media Gallery]: Learn about composting techniques.
- Chihuly-Inspired Cups Project [Art Activity]: Upcycle hard to recycle plastics.

Grades 9-12

 Getting to Zero Waste [Audio]: After twenty years of curbside recycling and, more recently, composting programs, Californians produce more waste than ever. Learn why recycling can only take us so far.

Standards Alignment

PA STEELS Standards

- 3.3 Earth & Space Systems Human Impact on Earth Systems
- 3.4 Environmental Literacy & Sustainability Environment and Society
- 3.4 Environmental Literacy & Sustainability Investigating Environmental Issues
- 3.4 Environmental Literacy & Sustainability Environmental Stewardship
- 3.5 Technology & Engineering Applying, Maintaining, & Assessing Technological Products and Systems
 - 3.5.3-5.F Classify resources used to create technologies as either renewable or nonrenewable.
- 3.5 Technology & Engineering Influence of Society on Technological Development
 - o 3.5.3-5.L Demonstrate how tools and machines extend human capabilities, such as holding, lifting, carrying, fastening, separating, and computing.

Career Education and Work:

- •13.1. Career Awareness and Preparation (A, B, E, & H)
 - Ex: 13.1.3.E Describe the work done by school personnel and other individuals in the community.

Feedback



We would greatly appreciate your feedback as we continue to develop and improve upon this program. Please consider taking this short survey.

Thank you!

https://wpsumm.wufoo.com/forms/qakrwaf 11gjht7/







Career Readiness Portfolio Artifact

Name		Grade
Teacher	School	
Virtual Field Trip Taken:		
Which Career Education and Wor (Check all that apply)	rk Standard did the Field Trip or related act	tivity align with?
☐ Career Awareness and Prep	paration (learning about a new skill or type o	of work or career)
☐ Career Acquisition (learning	skills to attain a career)	
☐ Career Retention and Advar new idea to solve a problem	ncement (learning how to run a business, man)	arket, and/or create a
☐ Entrepreneurship (learning h	how to run a business, advertise, and have a	a new idea)
What did you learn or find interes	sting on this field trip?	
Something I want to learn more a	about:	
This field trip was: D Awesomel	D Somewhat interesting D N	lot the hest





WPSU Virtual Field Trip KWL Chart



Name Date

What I <u>Wonder</u>	What I <u>Learned</u>
	What I Wonder