



Trashercise: Trash Heroes in Action

Cleanup + Movement for a Cleaner Sevier (Grades 5–6)

Grade: 5–6

Time: 40–50 minutes

Subjects: Science, Physical Education, Environmental Education, Civic Responsibility

Overview

Students investigate how litter impacts ecosystems in Sevier County, including the Little Pigeon River and the Great Smoky Mountains. They explore cause-and-effect relationships between human behavior and environmental health. Through discussion, local data connections, and an active cleanup activity called *Trashercise*, students combine environmental stewardship with physical activity and teamwork.

Local Connection

In Sevier County, litter does not stay where it is dropped. Stormwater runoff carries trash into roadside ditches, storm drains, creeks, and eventually into the **Little Pigeon River**. From there, pollution can travel downstream, impacting aquatic ecosystems.

Wildlife in the Smoky Mountains—including black bears, raccoons, birds, turtles, and fish—can ingest or become entangled in plastic and other debris. Plastic can break down into **microplastics**, which persist in the environment for decades.

Keep Sevier Beautiful works to:

- Prevent litter through education and outreach
- Organize community cleanups
- Promote recycling and waste reduction
- Protect parks, rivers, and wildlife

Students learn they play an important role in protecting their local environment.

Learning Objectives

Students will:

1. Define litter and explain how it differs from solid waste management.
2. Analyze at least two environmental impacts of litter on ecosystems.
3. Describe how stormwater runoff transports pollution.
4. Identify three prevention strategies (reduce, reuse, recycle, proper disposal).
5. Participate safely in a supervised cleanup activity.
6. Connect physical wellness with environmental stewardship.

Tennessee Standards (Aligned to TN Academic Standards for Science)

5th Grade:

5.ESS3.1 – Use evidence to support that human activities impact Earth’s systems.

5.ETS1.1 – Define a simple design problem reflecting a need or want.

6th Grade:

6.ESS2.2 – Explain how water cycles through Earth’s systems.

6.ESS3.3 – Assess how human activities affect land, water, and air.

(Standards align with human impact, watershed systems, and environmental responsibility.)

Vocabulary

Litter – Improperly discarded waste in the environment

Pollution – Harmful substances introduced into air, water, or land

Stormwater Runoff – Rainwater that flows over surfaces and carries pollutants

Watershed – An area of land where all water drains to a common water body

Microplastics – Very small plastic particles that result from breakdown of larger plastics

Conservation – Protection and responsible management of natural resources

Materials

- Work gloves
- Buckets or bags labeled: Trash / Recycling
- Trash grabbers (optional)
- Cones or boundary markers
- Clipboards and pencils (optional for data tracking)
- Water
- First-aid kit

Background for Instructor

Litter in mountainous areas like Sevier County can quickly enter waterways due to elevation and rainfall patterns. Plastic waste may fragment into microplastics but does not biodegrade. Wildlife may ingest plastics due to smell or resemblance to food.

Older students benefit from understanding systems thinking:

- Individual behavior → Litter accumulation
- Rainfall → Runoff → River pollution
- Pollution → Wildlife impact → Ecosystem imbalance

This lesson builds environmental literacy and civic responsibility.

Lesson Procedure

1. Introduction & Warm-Up (5–7 minutes)

Ask:

- What happens to trash after it leaves your hand?
- Does litter only affect the place where it is dropped?
- How might rain change where trash ends up?

Briefly explain the concept of a **watershed** using a simple diagram if available.

Movement Warm-Up

- 10 jumping jacks if you've seen litter locally.
- 5 squats if you've visited the Smoky Mountains.
- 10-second plank if you think people can reduce pollution.

2. What Happens to Litter? (10 minutes)

Discuss cause and effect:

Stormwater Pathway:

Ground → Storm drain → Creek → Little Pigeon River → Downstream communities

Wildlife Impacts:

- **Black Bears:** Attracted to food waste; can ingest plastic.
- **Birds:** Nesting entanglement; ingestion of microplastics.
- **Fish & Turtles:** Mistake plastic for prey.
- **Aquatic Ecosystems:** Pollution disrupts food chains.

Ask:

- Why is plastic especially harmful?
- How long do you think a plastic bottle lasts in the environment?
- What responsibility do we have as community members?

3. What is Trasherercise? (5 minutes)

Trasherercise is an interactive program inspired by Keep America Beautiful that combines environmental cleanup with physical activity. The concept is simple: each time you collect a piece of litter, you complete a short exercise, such as jumping jacks, lunges, or a plank hold.

This approach transforms a cleanup into an engaging, team-based challenge while reinforcing an important lesson: individual actions have real environmental impact. By removing litter, students help protect local wildlife, prevent pollution in rivers and streams, and care for parks and public spaces.

The Big Idea:

When we take care of our bodies and our environment, we build stronger, healthier, and more beautiful communities.

For every 2–3 pieces of litter collected, students complete a physical challenge.

Movement Options

- 10 jumping jacks
- 5 push-ups
- 10 lunges
- 20-second wall sit
- Bear crawl for 10 seconds
- 15-second plank

Safety Rules

- Walk — do not run.
- Always wear gloves.
- Do not pick up sharp or hazardous objects; notify an adult.
- Stay within marked boundaries.
- Hydrate as needed.

4. Cleanup + Trasherercise Activity (15–20 minutes)

Setup

- Establish a defined and safe cleanup zone.
- Divide into teams with adult supervision.
- Provide labeled Trash and Recycling containers.
- Optional: Have students tally types of litter collected.

Instructions

1. Walk and scan the area.
2. Collect litter safely.
3. Sort into Trash or Recycling.
4. Complete assigned movement challenge.
5. Repeat.

Encourage teamwork and leadership.

Optional Extension:

Have students calculate the total number of items collected and categorize materials.

5. Reflection & Discussion (8–10 minutes)

Ask:

- What types of litter were most common?
- Why do you think those items were there?

- What surprised you?
- How could our community reduce this problem?
- What policies or actions might help prevent litter?

Quick Write Prompt

“Human actions affect the environment because...”

Wrap-Up

Reinforce the Big Idea:

Litter prevention is more effective than cleanup.

Small actions, multiplied across a community, create measurable impact.

Protecting Sevier County protects:

- Wildlife
- Rivers and watersheds
- Tourism and local economy
- Community health

Student Understanding Page

Name: _____ Date: _____

1. Define Litter

In your own words, explain what litter is and how it impacts the environment.

2. Cause & Effect

If trash is left on the ground before a rainstorm, explain what could happen.

If a turtle mistakes plastic for food, what are two possible consequences?

1. _____
2. _____

3. Systems Thinking

Draw and label the path litter might take from a parking lot to a river.

4. Action Plan

List three ways you can help reduce litter in Sevier County:

1. _____
2. _____
3. _____

Trash Hero Pledge

I pledge to take responsibility for my actions, properly dispose of waste, and help protect the wildlife and watersheds of Sevier County.

Signature: _____