

Litter Is Waste Out of Place

Grades: K - 5

Objectives: Students will pick up litter and discuss what it is, why it is where it is, where it comes from, and suggest some methods to control it. Litter is a waste material that escaped from the waste handling system. Litter is man-made or man-used material.

Subjects: Social Studies, Science, Math, Home Economics

Methods: There are seven main places in our community where waste materials are most apt to escape:

1. Home garbage cans
2. Business and commercial garbage cans and dumpsters
3. Trucks with loads improperly tied down or covered
4. Construction or demolition sites
5. Loading docks and commercial storage areas
6. Materials thrown, dropped, or blown from cars
7. Materials thrown or dropped by pedestrians

Most people think of litter as coming from motorists and pedestrians. Many people are too quick to blame children and young adults for all litter problems, but the problem can come from many places in our community.

Procedure:

1. Discuss where litter comes from. Ask: What is litter? Why is there litter? Where might you find litter? How can you and your family help prevent litter?
2. Bring in examples of different types of litter, identifying the location where the litter was found.
3. Have the children save their lunch sacks or bring a grocery sack from home. Take the children for a walk around the playground and the neighborhood, picking up human-made litter. Teachers record items and where they were found. On returning to the classroom, have the children empty their trash collections onto pieces of newspaper. Have each child talk about where each piece was found. Ask: What might have caused litter in that place? Why? How? Make a list of responses on the chalkboard. Have the children categorize the litter according to types of material and discuss whether it can be reused or recycled.
4. Have the children make a list of who, besides themselves, can prevent litter in their neighborhood and school. Students may want to make a map of the neighborhood, including the school grounds, indicating where the litter receptacles are located. After discussion, the children could indicate on their maps where they think litter receptacles should be located.

5. Many communities are recognizing the sources of litter and are developing program and educational material to teach people how to keep waste materials from escaping and becoming litter.

Home garbage - Use only trash containers with tight fitting lids. Paper or plastic bags can be opened by animals. Trash cans without lids or with loose lids can be knocked over by animals and the wind can move the trash several blocks, or even miles.

Business trash - Tight, closed lids and even locks are sometimes needed.

Truck loads - If loads are not tied down, many dangerous materials fall or are blown from the truck. Air pressures increase as trucks drive faster. Loose material is blown out of truck beds. Many people don't think about putting on tarps and some don't know that they are accidentally losing their load. Roads to the dumps are easy to follow because of all the litter along the roadway.

Construction and demolition sites - Fences around construction sites keep materials from blowing out into the neighborhood. Putting waste materials into proper containers and tarping truck loads keep construction sites clean and construction and demolition materials off our roads.

Loading docks - Keeping storage bins or dumpster tops closed and the area clean keep this material in place and away from the rest of the neighborhood.

Motorists - Car litter bags and litter containers at rest areas, gas stations, and fast food stores are both important to controlling auto littering.

Pedestrians - Sidewalk litter receptacles and good habits help control this source of litter.

With all of the above sources of litter, the two most important things are:

- (1) People knowing that they can be part of the problem or part of the solution,
- (2) People caring for the community's public health and quality of their environment.

Ask: How can we prevent litter at school and in our community?

Pre & Post Test Questions:

What is litter?

Who causes litter?

How and where do waste materials escape to become litter?

In what ways does litter affect public health and the environment?

Where might you find litter? How can litter be prevented?

From Alabama PALS Litter Education Activity Guide.

Litter Literature

Grade K - 2

Objectives: Students will be able to: 1) describe the effects of littering; 2) realize that cleaning up provides many benefits; and 3) simulate the roles of characters from a story. Students will discuss and describe the characters in the story *The Wartville Wizard*.

Method: Students listen to a story, discuss, and then portray the roles of the citizens in the story.

Materials: The book: *The Wartville Wizard* by Don Madden (Aladdin Books, Macmillan Publishing Company, 1993); writing materials. Available by order at most book stores ISBN 0-689-71667-2 or on line from: www.amazon.com, www.Wal-mart.com, www.Barnes&Nobel.com.

Vocabulary: environment, litter, non-point source pollution, trash, waste

Procedure:

1. Introduce the term ENVIRONMENT. The environment is everything around us. Our environment at school is different than our environment at home. Ask students to name objects from their home and school environments.
2. Discuss the importance of keeping the environment clean. Ask students what happens when the environment is not clean. Introduce the terms LITTER and WASTE. Explain that litter is waste put in the wrong place (e.g., on the ground, on the road, etc.). Ask the students, "What happens to some litter when it rains?" Explain that when litter ends-up going down a storm drain, it is one type of non-point source pollution.
3. Read aloud the book *The Wartville Wizard*. This story takes place in the town of Wartville. Wartville citizens are illegally dumping their trash and litter: soda bottles under flowers, juice cans by mailboxes, and candy wrappers and papers on the road side. Every day the trash pile continues to grow. One man continues to clean the town litter, and one day, he realizes he has the power to get rid of all the litter forever. He magically sends each piece of litter back to the person who dropped it. The town has a meeting to decide how to handle the problem.
4. Discuss the book as a class:
 - Describe the man's home. How was the inside of his home different from the outside?
 - Where was all of the litter that the old man found coming from?
 - How did he feel about all the litter? How would you feel if the town was your home?
 - What did the old man do with the litter?
 - What happens after the old man got power over the litter?

- How would you feel if you had power over the litter?
- How would you feel if the litter stuck to you?
- What did the people of Wartville finally do?
- What would you have done if you had been a citizen of Wartville?
- How did the people of Wartville discover that the old man had power over the litter?
- How did the townspeople solve their litter problem?
- What is litter?
- What can you do to help prevent other people from littering?
- What does litter do to our environment?
- Where have you seen litter in your community?

5. Ask the class to identify the main characters in the book *The Wartville Wizard* (an old man, Barbette Swartley, the driver, Harvey Bender, Mr. Fullerton K. Hardboard, Mrs. Mabel Botts, Dr. Melvin Splint, Wartville citizens, Jimmy VanSlammer, the sheriff).

6. Ask the student volunteers to pantomime the various people in the book. Read the story again as the students pantomime.

Assessment: Have students describe the effects of littering and suggest ways it can be prevented.

Enrichment Have the students create costumes and write the script for a play of the book *The Wartville Wizard*.

Enrichment: Plan a litter art fair. To enter the fair, students must design a litter character using trash or litter. Display the litter characters at school, a public library, or a local shopping mall.

From “Waste in Place,” Keep America Beautiful, Inc.

Dumping is Un-Natural

Grades K-5:

Objective: Students will understand the negative impact illegal dumping has on the natural beauty of our state.

Subject Areas: Science, Social Studies, Language Arts

Vocabulary:

Illegal dumping - the disposal of waste at any location that does not have a permit from the Arkansas Department of Environmental Quality (ADEQ).

Reuse - the use of a product more than once in its same form for the same purpose or for different purposes.

Recycle - the process of collecting materials from the waste stream and separating them by type, remaking them into new products, and marketing and reusing the materials as new products.

Compost - the decomposition of organic matter into a product used to enrich or improve consistency of soil for growing plants.

Materials: bags of garbage collected specifically for this activity, gloves, trash bags

Procedure:

1. Plan an outdoor activity (picnic, nature walk, outdoor story-time, etc.) at a nearby park, nature trail, or on the school grounds.
2. Before students arrive, have the garbage placed near picnic tables, play areas, or in other visible areas. Take some out of the bags, spill it around the grounds.
3. Make sure students have to walk, play, and sit down to eat near the unsightly garbage.
4. Note student reactions to the garbage. Explain that it is illegal dumping. If they don't want to eat or play in an area that is strewn with illegally dumped wastes, neither will others. This could deter tourists or other visitors from the area, as well as discouraging new industry from coming into the area, and diminish property values.
5. Ask: Where should waste go? Waste should ultimately end up in a permitted sanitary landfill. However, the waste may first go from the household, school or business to a transfer station and then on to a landfill. Many counties in Arkansas do not have a landfill, so the waste may have to travel some distance to its final destination in a landfill.

6. Ask: What can be done to make our natural areas that have garbage illegally dumped on them become cleaner, safer places to visit?

- (1) Clean up the area - with adult supervision and using gloves, pick up all the “illegally dumped” waste.
- (2) Separate waste into different piles of plastics, paper, metals, etc.
- (3) Can any of these items be reused? If so, how?
- (4) Can any of these items be recycled? If so, how and where?
- (5) Is there fruit and vegetable wastes that could be composted?
- (6) Dispose of any remaining wastes properly.

7. Explain that this situation was “set up”, but there are many real illegal dumps sites along our roadsides, in our parks, and near our rivers and streams,

8. Ask: what can be done to eliminate these real illegal dump sites?

- (1) Organized cleanups like the Pick Up Arkansas! Campaign set for April 1998.
- (2) Make signs and posters to place in natural areas to discourage illegal dumping.
- (3) See if local government or sponsors can provide receptacles for trash and recyclables.
- (4) Write letters to local media providing education on proper disposal/recycling techniques.
- (5) Write letters to local officials asking for more enforcement action against illegal dumpers.
- (6) Help educate the people/citizens of your community about the dangers of improper and proper waste disposal.

Evaluation Questions:

1. What is illegal dumping?
2. How does illegal dumping spoil the natural beauty of Arkansas, the Natural state?
3. How does illegal dumping affect tourism and developing industry in Arkansas?
4. What is the proper way to dispose of wastes?
5. What can you do to help eliminate illegal dumping?

Additional Reading:

“It Zwibble & The Greatest Cleanup Ever”

by Were Ross & Wer Enko & Lisa Verenko, 1991
Published by Scholastic, ISBN-0-590-44840-4
730 Broadway, NY, NY 10003

“Katherine & The Garbage Dump”

by Martha Morris
Published by Second Story Press, ISBN 0-929005-39-2
760 Bathurst Street
Toronto, Canada M5S 2R6

Developed by Phyllis Mooney, formerly Northwest Arkansas Recycling Coordinator, ADPC&E; now Environmental Coordinator with the Ft. Smith-Sebastian County.