

# A Trashy Mystery

## Objectives

The student will be able to:

- ➔ define the words littering and biodegradable,
- ➔ understand that all waste can be put in its place (trash bins, trash cans, etc.),
- ➔ understand that littering is unacceptable and dangerous,
- ➔ understand that we can all do our part to keep our environment free from litter, and
- ➔ understand that littering is a behavior that can be changed.

## Method

Students will identify littering and what is wrong with throwing trash on the ground.

## Materials

- A detective hat, or something similar to a hat that a police officer would wear
- play eyeglasses
- Student chairs
- Small paper sacks,
- Crayons, markers, stickers, and other items used for decorating
- banana, paper, soda can, and similar items
- trash can
- optional: *The Three R's*

## Time

30 - 45 minutes

## Vocabulary

- littering
- biodegradable



## Background

Litter is solid waste that is discarded in an inappropriate place (e.g., streets, playgrounds, streams, etc.), or improperly stored waste which has escaped from its container or vehicle. While litter is the actual item found, the behavior called "littering" is what Keep America Beautiful attempts to change. The combined use of education, ordinances, enforcement and resources and tools will result in behavior change. Litter has environmental consequences. Wind and weather, traffic, and animals may move litter into gutters, lawns, landscaped areas, alleyways, and parking structures. Litter near storm drains and beach debris are also likely to wash into local waterways, with potential for environmental contamination.

Keep America Beautiful conducted a visible litter study in 2009 that concluded that at least 51.2 billion pieces of litter are left on roadways in the U.S. The most frequently counted littered items were tobacco products (37.7%), which were predominantly cigarette butts, followed by paper (21.9%), plastic (19.3%), metal (5.8%), glass (4.5%), organic (4.2%), construction & vehicle (4.1%), other (2.5%). Packaging litter comprises 18% of all litter, with beverage containers at approximately 3%.

## Procedure

1. The educator puts on a detective hat and eye glasses and asks the class to accompany the educator on an imaginary tour of their home and/or actual community tour of the school to investigate the different places that trash/waste is placed. The educator requests students to close their eyes and imagine their homes. When they are done imagining, the educator can tell them to open their eyes. The tour could consist of:
  - Home (trash can)
  - Kitchen (trash can)
  - Garage/Workroom (trash can, bin for soda cans, and bin for paper)
  - Bathroom (trash can)
  - Community (large trash can) in parks or school playground
2. When the students return to the classroom, discuss what they observed and record on the board or on a large tablet.
3. Discuss what would happen if everyone just disposed of their trash everywhere when finished with it. What would the environment look like? Home? Community?
4. The educator will role play walking down the street.
  - While walking, educator is eating a banana. The educator throws the banana peel on the ground. The educator continues walking more and then throws paper on the ground. (The educator can throw other items like a soda can, candy wrapper, etc.).
  - Ask the students if they see anything wrong with what they are observing. Discuss their answers.
  - Ask what would happen if everyone littered and threw trash on the ground or on the playground, home, etc. (elevated crime, unhealthy, etc.)
  - Finally, ask for proper ways to dispose of trash.
  - Resume walking (role play again). The educator models putting the banana peel in a trash can, paper in the trash can, etc.
  - Ask the students what they see different and if this is the behavior that should be encouraged.
  - Ask the students to role play how to properly dispose of trash and not litter.

5. Read the book, *The Three Rs: Reuse, Reduce, Recycle* by Nuria Roca (2007) from Barron's Educational Series. (This story describes the ways in which kids and their families can avoid waste and be environmentally conscious).
6. Provide small paper sacks for students to decorate (crayons, markers, stickers, etc. The sack will become their litter bag. They can then tell others about putting litter in its place.

## Assessment

Remind the students of their tour around their "homes" and "community." Ask what would happen if the people in those places threw their trash on the floor/ground.

What would you see? Would you like it? What can we do to help?

Ask the students where they will place their bags. Why? How will they encourage others to put waste in its place?

## Technology Connections

- Research the impact of litter at the Keep America Beautiful website: [www.kab.org](http://www.kab.org)
- Suggested website: *Oscar's Trash Collection*, a game where students have to separate trash. [http://pbskids.org/sesame/games/oscar\\_trash\\_collection.html](http://pbskids.org/sesame/games/oscar_trash_collection.html)

## Enrichment

Teach the students the rap, *Trash on the Ground*.

Ask the students to role play the words to the rap.