



How Long Does It Last? - Teaching Environmental Awareness

Grades 4- 6

Arkansas Science Curriculum Frameworks: ESS.8.4.2, ESS.8.4.3, ESS.8.4.4, LS.4.6.1, LS.4.5.16.

Objectives:

- Introduce the *Leave No Trace* Outdoor Ethics program
- Enhance environmental awareness through participation in an activity of the REI/*Leave No Trace* PEAK (Promoting Environmental Awareness in Kids) Program Day Pack
- Foster stewardship of public lands such as Hot Springs National Park

Group Size: Any size

Time Requirement: 45 minutes

Materials Provided for loan by Hot Springs National Park:

National Park Service *Leave No Trace* video or DVD
REI/*Leave No Trace* PEAK Program Day Pack activity entitled “How Long Does It Last?”
CD with PowerPoint illustrations
40 *Leave No Trace* plastic reference cards (kid’s version)

Equipment/Materials Needed by School:

VCR or DVD player
Television
Digital projector and screen for PowerPoint program on CD

Park Contact: Ranger Jeff Heitzman—jeff_heitzman@nps.gov or 501- 620- 6707

Introduction:

Leave No Trace (LNT) is a non- profit public education program with a mission to promote and inspire responsible outdoor recreation through education, research, and partnerships. The LNT program builds awareness, appreciation, and respect for the outdoors. It challenges individuals to act upon their abiding respect for the land and to become active stewards in its preservation by applying minimum- impact techniques in all recreational pursuits.

The National Park Service is a federal agency partner of LNT. The principles of LNT are an extension of the National Park Service mission to preserve a vast system of natural, cultural, and historic treasures “unimpaired for the enjoyment of future generations.” Hot Springs National Park is just one of 390 units of the National Park System- www.nps.gov.

REI is an outdoor retail co- op and corporate partner of LNT. The PEAK (Promoting Environmental Awareness in Kids) Program Day Pack is a joint program of REI and LNT.

Overview:

This interactive activity demonstrates how important it is to “trash your trash” by illustrating how long it takes for specific items to decompose.

- Show National Park Service *Leave No Trace* video or DVD.
- Pass out *Leave No Trace* plastic reference cards and briefly discuss the seven principles. Focus especially on “trash your trash.”
- Project illustrations of trash, one at a time, on the screen and invite students to guess how long it takes for each item to decompose.
- Reveal the actual time frames and discuss each item. Spend more time on the items for which guesses were most inaccurate.
- End by stressing the importance of the “trash your trash” principle.

Discussion:

The National Park Service *Leave No Trace* film is very upbeat and readily captures the attention of a young audience. It should easily invoke questions and discussion.

Ask: “Having now watched the film, what does *Leave No Trace* mean to you?” (leave everything just as you find it)

“What are ethics?” (good and bad, values, duty, the way we should live our lives)

“What are outdoor ethics?” (the way we should act outdoors)

“How many principles or guidelines were mentioned in the film?” (seven)

Pass out the *Leave No Trace* plastic reference cards. Mention that these are “kids” cards so the principles are written more simply than those in the film. Have different students read each principle and the guidelines listed with it:

Know Before You Go
Choose The Right Path
Trash Your Trash
Leave What You Find
Be Careful With Fire
Respect Wildlife
Be Kind To Other Visitors

Return to “trash your trash.”

Ask:

“What does ‘pack it in, pack it out’ mean?” (carry out all trash, leave nothing but footprints, leave it better than you found it)

“Who has found litter at your favorite park or trail or beach?”

“How did that litter make you feel?”

“If someone doesn’t pick up litter, how long will it be there?”

Project the first trash image on the screen.

Ask: “How long will it take this item to decompose?”

“What does decompose mean?” (to break down organic matter from a complex to a simpler form, mainly through the action of fungi, bacteria, or solar radiation)

The students will probably under guess at first and be surprised at how long trash remains. Try to compare each time span to something the students can easily relate to; for instance, a cigarette butt thrown down while they’re in first grade could still be there as they enter fifth grade.

Continue with each item of trash:

Paper:	2 – 4 weeks
Orange or Banana Peel:	Up to 2 years
Cigarette Butts:	1 – 5 years
Wool Socks:	1 – 5 years
Disposable Diaper:	10 – 20 years
Plastic Bag:	10 – 20 years
Leather Boot:	Up to 50 years
Aluminum Can:	80 – 100 years
Plastic 6- Pack Holder:	100 years

End the discussion by stressing the importance of the “trash your trash” principle. Remind students that when they’re at a park, at the beach, or in the woods, they’re visitors. Just as they wouldn’t litter when visiting a friend’s home, they shouldn’t litter when visiting in the outdoors.

Lesson Evaluation

Please complete and return this evaluation with the lesson materials. Your comments will help improve the curriculum and are appreciated.

Grade Level: _____

School: _____

City: _____

Please use the following scale to rate your experience using this lesson plan:

5) very good 4) good 3) average 2) poor 1) very poor

Overall, how would you evaluate the quality of this curriculum in your classroom? _____

Was the curriculum on target (subject matter) for the grade level you teach? _____

How well did the curriculum fit into the units that you teach? _____

Were you able to actively engage your students with the curriculum? _____

Did the curriculum enhance your own knowledge? _____

Would you be interested in more information about *Leave No Trace*? Yes No