



HOSPITALITY AND TOURISM CLUSTER

LESSON 4

Lesson Plan Title: Trash Timeline		Instructor:
Suggested Total Time for Lesson (minutes): 15-20 minutes		
Content Focus - What will Students Learn? (Content Skill Sets)		
To provide a visual and hands-on method exhibiting how long it takes for trash to decompose. Also ideal for combining a STEM curriculum with Leave No Trace		
Materials and Resources- What do you need to assemble and prepare before the lesson?		
Materials: Trash Timeline Cards from the Activity Materials Packet	Resources: The 7 Principles - Leave No Trace Center for Outdoor Ethics (lnt.org)	
Lesson Outline: What learning activities will your students do?		
Time	Sequence/Description of Learning Activity	
3-5 min	Get Started/Explain: Teacher will distribute each of the pictures, as many to each participant as necessary to distribute all pictures, as evenly as possible. Distribute the time pages in a similar manner. Try to ensure that no person holds both a picture and its associated time page.	
35-45 min	Discover/Engage/Practice: <ul style="list-style-type: none">Students will roam around, trying to figure out which pictures match up with which time periods. As they make their matches, you can comment on their accuracy and have them try to correct any errors.Students will talk to each other and figure out how long each item takes to decompose. When they finish, it would be nice to have them line up in order from shortest to longest time. Variation: <ul style="list-style-type: none">Split your group into teams for a mini competition to see who can most accurately pair the images to their timeline date in the shortest amount of time. Instead of partners, the teams will simply be creating a timeline on the ground using the trash images and date range cards. This will require you to print out and use multiple sets of the Trash Timeline Cards from the Activity Materials packet.	
5 min	Check for Understanding/Summarize/Close: <ul style="list-style-type: none">Consider the following questions:What object's decomposition rate surprised you the most?What are some factors that relate to decomposition? Can we list them? (examples: microbes, soil type, time, moisture, heat, the item itself, size of the item, elevation, slope, aspect, temperature, and season)	

Modifications, Support, and Extensions (for those students with IEP)

Reflection- Did the students learn the content outlined in the lesson focus? Why or why not?

Note: See below for a list of the decomposition rates for common items. The cards do not indicate which item matches up to which time frame. Write this list down or use this page as a reference.

- Orange or Banana Peel-----Up to 2 years
- Cigarette Butts-----1 to 5 years
- Leather-----1 to 5 years
- Wool Socks-----1 to 5 years
- Gum-----5 years
- Plastic-Coated Paper-----5 years

- Plastic Bags-----10 to 20 years
- Nylon Fabric-----30 to 40 years
- Tin Cans-----50 years
- Aluminum Can-----80 to 100 years
- Plastic 6-Pack Holder-----100 years
- Glass Bottles-----1,000,000 years