

## LESSON: How Long Does That Trash Last?

GRADE: 5

### OBJECTIVES:

#### Reading Informational Texts

##### Key Ideas & Details-

- **RI.5.3.** Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.

### MATERIALS & RESOURCES:

- Aluminum can (soda pop can)
- Banana
- Cigarette butt
- Cotton rag
- Glass bottle
- Leather boot
- Paper bag
- Plastic 6-pack rings
- Plastic jug
- Rubber sole of the leather boot (above)
- Styrofoam cup
- Tin can (soup or vegetable can)
- Wool sock
- Additional litter items found around schoolyard, playground, etc.
- Access to [Education World-  
http://www.educationworld.com/a\\_lesson/03/lp308-04.shtml](http://www.educationworld.com/a_lesson/03/lp308-04.shtml)

### PRESENTATION:

This lesson is adapted from Education World (see link in material list) to help students understand the impact of trash on the earth.

*When you throw household items into your garbage can at home, it is carried away by the trash collector and becomes 'out of sight, out of mind'. What happens? It might end up in a landfill. What about the trash you see around your neighborhood, along the highways, and in rivers? Some of what you see decomposes, but does it all? Find out how long your trash lasts.*

**DIRECTIONS:**

1. Set up table with materials listed above. Have students explore the materials.
2. Ask, “*What do you see here that you have at home? Have you ever thrown away these materials or seen them on the road/at the park/by a river? If they end up in a landfill, what happens to them?*”
3. Divide students into small groups.  
Have students discuss these questions in their groups and report to the class. (See additional discussion questions in the original lesson plan, see link)
4. Individually, students should write down the materials provided on a piece of paper. They should think about what would happen to each of these items in a landfill.
5. Ask students to organize the materials by how long each item would last in a landfill (shortest time in landfill to longest time spent in landfill).
6. After the students have decided if the items will decompose, degrade, or last forever and have organized them in a timeline, students return to their small groups. Discuss why these items were placed in that order. The group should write a comprehensive list together.
7. Have one student from each group write the list on a board where all students can see each other’s list.
8. Another student from each group presents the group’s list and discuss their conclusions.
  - *Why is one item above another?*
  - *Why is the last item at the end of the list?*
9. When the students have ordered the items correctly, ask the groups to decide how long each item will take to degrade.
  - *Knowing how long these items last, how long do you think your trash sits in a landfill?*
  - *How much do YOU contribute to landfills?*
  - *What does this information tell you about landfills?*
  - *What would you expect landfills to look like in 10 years? 50? 100?*
10. List alternatives to throwing trash away for each of the items on the material list.
  - *What is the importance of recycling?*
11. Have the students wrap up by writing about their experience from this lesson. Include, their trash habits before, how they felt learning the lifespan of trash, what they think their trash habits will be now, how our trash habits should change collectively to impact what spends time in landfills.

**TIME:****60 min**