

Ecology of a Landfill

Phinizy Center for Water Sciences

Rubrics

Level 4

- Students understand that a landfill is a municipal facility and it requires a large amount of resources from the community to operate and maintain.
- Students can list at least 4 ways that their purchasing and disposal choices can lessen solid waste impacts in their homes, local communities, regions, or global environment.
- Students understand that there are both harmful and beneficial microorganisms, and that microorganisms are crucial to the operation of a landfill.
- Students can list at least 3 impacts that landfills can have on the environment and describe how proper landfill engineering and maintenance lessens those impacts.

Level 3

- Students do not have a clear understanding that a landfill is a municipal facility, but understands that it requires a large amount of resources to operate and maintain.
- Students can list at least 3 ways that their purchasing and disposal choices can lessen solid waste impacts in their homes, local communities, regions, or global environment.
- Students understand that microorganisms are crucial to the operation of a landfill, but have a hard time understanding that there are both harmful and beneficial microorganisms.
- Students can list at least 2 impacts that landfills can have on the environment and describe how proper landfill engineering and maintenance lessens those impacts.

Level 2

- Students do not have a clear understanding that a landfill is a municipal facility or that it requires a large amount of resources to operate and maintain a landfill.
- Students have a hard time listing ways that their purchasing and disposal choices can lessen solid waste impacts in their homes, local communities, regions, or global environment.
- Students cannot differentiate between harmful and beneficial microorganisms.
- Students have a hard time listing impacts that landfills can have on the environment and describe how proper landfill engineering and maintenance lessens that impact.

Level 1

- Students do not know who pays for a landfill.
- Students do not understand that their purchasing and disposal choices can lessen solid waste impacts in their homes, local communities, regions, or global environment.
- Students do not understand the roll of microorganisms in the operation of a landfill.
- Students can list 1 impacts that landfills can have on the environment, but cannot explain how engineering a landfill will reduce the impact.