

STEM CAREER Urban Planner: Transforming Landfills

Adventure Description:

In this adventure, you will think like an urban planner and turn an old landfill into a place for people to visit.

Activity

Step One: Background on Landfills and Urban Planners (5 minutes)

- Show Handout: Landfills. Explain to students that landfills can be very big and cover a whole mile of land. They hold all types of trash, like plastic bottles, left-over food, and even dirty diapers.
- Next, explain that urban planners are people who design what cities look like. For example, they decide where streets and buildings will go.
- Next, explain that some urban planners have an idea. What if they could turn a landfill into an attraction? An attraction is a place people would want to visit, like a zoo or a park.
- As a class, create a list of pros and cons to turning a landfill into an attraction. Show Handout: Pros and Cons for a list of ideas for pros and cons.

Step Two: Building A Model of a Landfill (15-20 minutes)

- Explain to students that they will now create a model of a landfill! A model is a small example of what something looks like.
- Provide each student with a paper or plastic plate. Explain to students that the plate will be the ground.
- Next, lay out an assortment of items for students to choose from. Explain that the items will represent trash the they will put on their plate. The trash will be piled up so it becomes a landfill.
- Examples of materials that students can choose from:
 - Art supplies and building materials:
 - Pom pom balls
 - Popsicle sticks

Please contact Allison Bischoff, Director of Teacher Support, at allison@rozzylearningcompany.com or 314-272-2560 with questions.



Urban Planner: Transforming Landfills

- Egg cartons
- Pieces of construction paper or cardboard
- Miscellaneous items:
 - Bandaid (new and clean, of course)
 - Tissue crumpled up
 - Old pencil that is small
 - Wrapper to a snack bottle
 - Caps to water bottles
- Have students select items to create their landfill. Provide students with tape so they can tape their landfill together so it doesn't fall apart.
- Optional: Give students rulers and have them measure their landfills. Tell students their landfills must be 6 inches tall!
- Optional: Have students fill out Handout: Items in My Landfill. Students can write or draw 10 items that are in their landfill (e.g., food, trash, toilet paper).

Step Three: Turning Your Landfill Into an Attraction! (15+ minutes)

- Explain to students that they will now decide what they want to turn their landfill into.
- Show Handout: Options for Attractions. As a class, discuss the different attractions students can choose from.
- Have students decide what attraction they want to put on their landfill.
- Next, provide students with a piece of computer paper or construction paper.
- Have students draw a picture of what their attraction will look like.
- When students are finished, have them tape their attraction on the top of their landfill.
- If time permits, have students use clay to build 3-dimensional people and animals to put on their attraction.

Please contact Allison Bischoff, Director of Teacher Support at allison@rozzylearningcompany.com or 314-272-2560 with questions.



Urban Planner: Transforming Landfills

Materials List

Provided online:

- Handout: Landfills
- Handout: Pros and Cons
- Handout: Items in My Landfill
- Handout: Options for Attractions

Not provided (each student or group needs):

- Art supplies/building materials
 - ex: pom pom balls, popsicle sticks, egg cartons, pieces of construction paper or cardboard, etc.
- Miscellaneous items:
 - bandaid (new and clean, of course), tissue
 crumpled up, old pencil that is small, wrapper to a
 snack bottle, caps to water bottles, etc.

Please contact Allison Bischoff, Director of Teacher Support at allison@rozzylearningcompany.com or 314-272-2560 with questions.