

5-8 Pollution Activity

Pollution Extension

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Focus Questions

How do we affect pollution in waters? How can we work together as a group to avoid further polluting waters? How does cooperation within a competitive game relate to how we cooperate outside of a game?

Activity Synopsis

In a relay style activity, students will scoop water without getting pollutants. It's perfect for a field day!

Time Frame

30 minutes

Objectives

The learner will be able to:

- Utilize teamwork and cooperation on their team towards a completed task
- Improve on sportsmanship to achieve a goal

Materials

- 2 barrels (big trash cans work well)
- 5 Styrofoam egg cartons (broken into pieces)
- 30 sheets of paper (cut into pieces at 8 pieces per sheet)
- 2 jars of cherries
- 1 bag of lemons
- 1 bag of red apples
- 1 bag green apples
- 1 bag oranges
- 1 hose (or water access to fill containers with water)
- 2 small buckets (sand pails or gallon milk jugs poked with holes work well)
- 2 holding receptacles for water (coolers or trash cans work well)

Procedure

Pre-Activity

1. Purchase all items
2. Poke, cut small holes in "carrying" pails, buckets so carrying water is more challenging!

Activity

1. Fill large trashcans with water about $\frac{3}{4}$ full.
2. Place all 'pollution' items in water (foam, paper and fruit).
3. Divide class into two teams.
4. Ask the class if they have ever seen a river, lake or other body of water with litter in it. Ask if there are pollutants that could be in the water that they could not see. Tell the students that their goal in this activity is to get as much drinking water as they can without any pollutants in it.
5. Both teams should stand behind start line in a single-file line.
6. Small buckets with holes and holding receptacles are both at start line.
7. Trash cans with 'pollution' are 30 feet away straight in front of each team.
8. At signal, students will run down to their trash can with carrying buckets, scoop as much water as possible without getting pollutants.

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9. After they scoop, they will return to start line and dump what is left in bucket into water holding receptacle, tag the next person and hand them the carrying pail.
10. Continue game until water is gone.

Rules

- 1 person (per team) goes at a time
- Must dump water before passing carrying bucket
- After, he/she will return to the end of the line
- Game will end when trash can has no water left

Assessment

- Discuss the result of water and pollutants in their water container
- Compare results and discuss why there are pollutants and how we can control the amount of pollution by being careful.

Rubric for determining winning group:

Water levels

- 10 Points: No pollutants, with higher level of water
- 8 Points: No pollutants, with lower level of water
- 6 Points: Pollutants, with higher level of water
- 4 Points: Pollutants, with lower level of water

Highest Score Wins

Reference

<http://www.state.sc.us/sde/educator/standard/phised>