

Subjects/Target Grades
Science and Social Studies
Grades 5-9

Duration/ Location
10 minutes
Outdoor schoolyard setting

Materials
Per class

- Bucket of water

Per small group or student

- Cup for water (125 - 250 mL or 4 - 8 oz.)

Lesson One Engage: Watersheds & Nonpoint Source Pollution- page 11 from Lesson 1

Activity Overview

Students actively investigate the where water flows in their schoolyard using a cup of water and inquiry.

Lesson Procedure

- 1) Fill a bucket with water and obtain enough cups for small groups or pairs of students. Take your students outdoors to an area where there is a slope, grass, and concrete.
- 2) Provide a cup of water to each group or pair and instruct to students to pour water on different surfaces noting their observations. Lead a discussion about where the water went and relate this to the water cycle.
- 3) Pose these questions to students:
 - What did the water in the cup represent?* [precipitation-rain]
 - What happened to the water that was poured on grass? dirt? pavement?* [It soaks into the ground to become groundwater.]
 - If there was a puddle of water on the concrete, where does that water go?* [Some may soak into the concrete; some will evaporate.]
 - Where does the water flow on a slope?* [Some flows downhill due to gravity. The steepness of the slope makes a difference.]
 - Where would the water flow if there was a big rainstorm?* [Answers will vary based on the topography; encourage answers that use the terms pervious and impervious surfaces as they describe the surface runoff - water that runs off land into a body of water.]
 - Did you see any storm drains and downspouts in the schoolyard?* [Answers will vary.]

Vocabulary Terms

Pervious surface – water can pass through or seep into this type of surface.

Impervious surface – water does not pass through or seep into this type of surface.