

A-MAZING WATER PRE-VISIT ACTIVITIES

Vocabulary:

Storm drain Non-point source pollution Point source Pollution runoff
Contaminants Sewer Storm water discharge

Lesson Learning Summary: Students guide a drop of water through a maze of drainage pipes to learn how actions in the home affect a water quality

Lesson Objectives:

Students will:

- Describe urban forms of pollution and ways to treat urban runoff
- Provide reasons why people should monitor what they put on their lawns or in streets.

Skills Practiced:

Organizing Manipulating materials Interpreting Identifying cause and effect
Applying Designing

Helping Students Make Connections:

Most students have washed family cars, seen litter on the sidewalk, or walked a dog. In urban settings, car wash detergent, litter, animal waste, paint, and oil all wash into the street and down storm drains. Investigating what happens to these materials after they enter drainage systems helps students understand how these materials can affect water supplies and aquatic plants and animals.

Background Information:

Removing water quickly and efficiently from city streets, parking lots and schoolyards following rain and snowmelt is an important task for municipal governments. Water diverted to storm water systems receives little or no treatment before flowing into a stream body of water. Water flowing off lawns, sidewalks, driveways, parking lots, and streets carries significant amounts of pollutants. These pollutants include fertilizers, motor oil, litter, pesticides, animal wastes and other contaminants. Receiving waters are degraded and aquatic plants and animals are affected. Homeowners can help by not disposing of household wastes in the street and for communities to develop wetlands.

Warm Up:

Show students a can or bottle labeled “chemicals” or “oil” that you need to dispose of and plan to dispose of them in the sewer in front of the school. Ask the students if they think this is a good idea. Have them describe what they think will happen to the