Skill: Science

Objectives
Students will:
• demonstrate how water infiltration can carry pollutants underground.

Procedure
• Divide students into teams of four individuals.
• Have one student hold a slice of bread vertically while a second student adds a drop of food coloring (pollutant) to the crust edge of the bread. See illustration No. 1.
• Then have a third student spray water on the food coloring to simulate precipitation.
• Allow drainage to seep through the crust of the bread. As the polluted water seeps down it spreads out making it difficult to locate where the pollution originated. The water and food coloring will remain together as the water moves.

This illustrates visually how pollutants are carried by water, that pollutants are not filtered out by the ground, and that human activities can affect groundwater.

Discussion and Evaluation
1. Did the pollutant (food coloring) continue through the bread or was it filtered out, leaving only clean water to progress downward?
2. Did the water spread out or go straight down?

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