

Ground Water

I like this activity because it gives the children a chance to see how the earth works and why it is important to consider what we pour onto the ground.

The objective is:

- to become aware of how liquids move through the earth
- to understand that different types of soil have different absorbency properties.

Background:	Most children who grow up in the city take their water supply for granted. Everything that is placed on the ground can find its way into our water. Some soils are more absorbent. Liquids can be filtered through them, others have no absorbency – everything flows through, and some are minimally absorbent where liquids tend to run off rather than through.
Skills:	The children should be able to tell time or sense the length to time passing. They should also be able to understand concepts like absorbing, run off and water tables.
Age:	Grades 4 – adult
Material	Three 2-liter bottles in the bottoms removed, three containers of water (about the same amount in each), enough sand, clay, and stones to half-fill each 2-liter bottle. Plenty of towels. Three buckets (optional).
Activity:	<p>Ask for three volunteers. Hand each volunteer one 2-liter bottle. The bottle should be held with the opened end (was the bottom) up and the nozzle pointing down.</p> <p>Show the children the different types of soil and ask them where they might find them. Fill each container half way with one of the soils. Now ask the children which of the three containers would water flow through the fastest.</p> <p>Remove the caps from all the bottles. Hand each child a container of water and, at the same time, let each child pour the water into the container.</p> <p>(It's good to be outside or have buckets under the bottles.)</p>
Discussion:	<p>Why did the water flow fastest through the bottle with the stones? how much longer did it take for the water to flow through the clay?</p> <p>What if this was oil? Where would the oil go? How do contaminants affect our water supply?</p>
Adaptations	Pour the water into one bottle at a time. Use a stop watch to see how long it takes for each.

Brownie	Water, Water Everywhere
Junior Badge:	Water Fun #9