

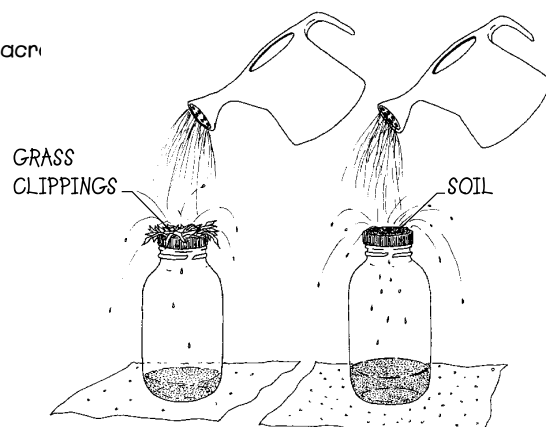
Splish, Splash



Vegetable crops use an average of 650,000 gallons of water per acre

Equipment/Materials

two 1-quart canning jars with perforated lids	water
ice pick or awl	duct tape
1 to 2 cups of soil	flat pan
1/2 cup grass clippings or other mulch	watering can
two white poster boards	



Procedure

1. Use an ice pick or awl to make the same number of holes in the lids of each canning jar. Keep the holes in approximately the same locations.
2. Hold the rings so the lip that is normally on the top of the jar is down. Place the lids in the rings with the sharp ends of the holes down and tape them to the top of each jar with the ring up as a collar.
3. Fill each ring with the same amount and type of soil.
4. Add a thin layer (about a half inch) of grass clippings on top of the soil in one lid.
5. Place each jar in the center of a piece of white poster board. If this activity cannot be done outside, you may want to place a pan under the poster board to catch any stray water.
6. Hold the watering can about 3 feet above each lid and dump the same amount of “rain” on each one. Ideally you should measure the water into the can and dump the entire amount for a good comparison.
7. Observe the amounts of soil visible on each of the poster board pieces. Which jar suffered the most splash erosion (soil carried into the air by impacting water droplets)?
8. Measure the amount of water that was captured in each jar. Which one allowed more water to leach through the soil into the jar (represents deeper soil layers)?
9. Discuss the amount of soil that could be lost during rains through splash erosion.