



WHAT'S IN YOUR WATER? GOLFING

TEACHER'S GUIDE

Fertilizer is used on golf courses and lawns to help the grass grow and keep it green. This activity shows how fertilizer in runoff water leads to algae blooms, which use up the oxygen in the water, making it an environment in which fish and other aquatic life cannot live.

Preparation: Cut squares of cheesecloth that are two inches wider than the top of the jars.

MATERIALS NEEDED:

- 2 clear jars
- cheesecloth
- rubber bands
- masking tape
- bottled distilled water*
- measuring cups and spoons
- rubber gloves
- pond water (pond water is best, but water from a lake or slow-moving stream will also work)
- powdered or granular fertilizer, such as Miracle Gro

** Be sure to use distilled water for this experiment. Tap water may contain trace amounts of disinfectants (e.g. chlorine) that keep it safe for drinking, but may interfere with this experiment.*

DIRECTIONS:

1. Label jars 1 and 2 using masking tape. Jar 1 is the control jar.
2. Fill each jar with a mixture of half pond water and half bottled water. Measure to make sure you put the same amount of each kind of water in both jars.
3. Using gloves, add 1 teaspoon fertilizer to Jar 2.
4. Cover both jars with a square of cheesecloth and secure with a rubber band.
5. Have students keep track of what they see in the jars by coloring the jars on the following worksheet.

Name _____

Keep track of what you see in the jars by coloring them in.

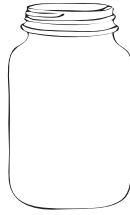
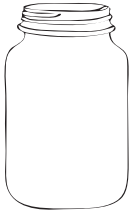
Jar 1

Jar 2

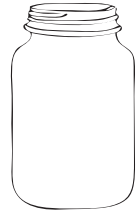
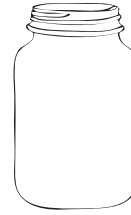
Jar 1

Jar 2

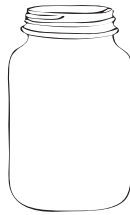
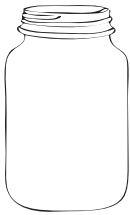
Day 1



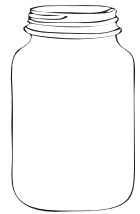
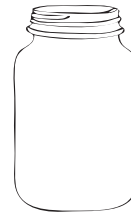
Day 8



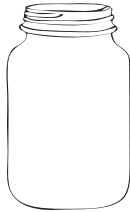
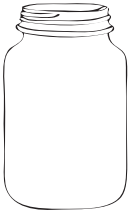
Day 2



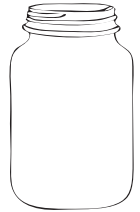
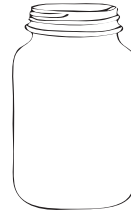
Day 9



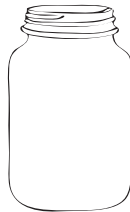
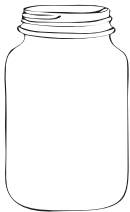
Day 3



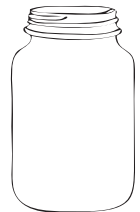
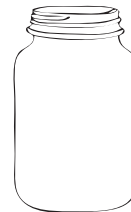
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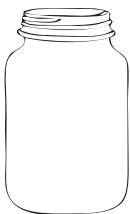
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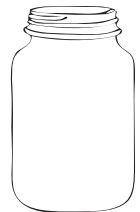
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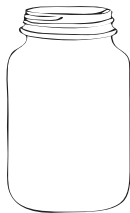
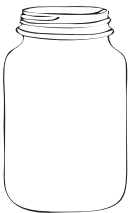
Day 5



Day 12



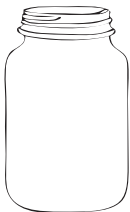
Day 6



Day 13



Day 7



Day 14

