
8. TESTING, ONE, TWO, THREE

Overview: This activity will give students an opportunity to explore the water quality of the Yuma Conservation Garden Pond.

Objective: Students will observe the cleanliness of the pond and test the water for pH.

Time needed: 45 minutes to 1 hour

Group Size: 2-4

Age appropriateness: 3rd Grade and up

Site: pond area

Background: The pond is supplied with water from the canal system. Many students are not aware that this source of water has not been treated. Also run-off from the Garden contributes to pond water quality.

Materials:

Provided at the Garden

hand lenses

microscopes

Provided by the classroom teacher

baby food jars

coffee filters

litmus test tabs

color test strips (found at a fish store)

rubber bands

paper and pencil

Preparation: Become acquainted with all materials before doing activity with students.

Pre Activity: Videos, posters, class discussions about water quality. Students should know how to tests for pH before the trip to the Garden.

Procedure:

1. Place a coffee filter over the mouth of a clean, jar pull it tight and secure with a rubber band.
2. Collect and pour a water sample through the filter. Look at the filter and make observations about any particles that may be visible on the filter paper. Observe the paper with a magnifying glass and/or a microscope.
3. Record observations
4. Label the filter and the filtered water sample.
5. Test a water sample for pH.
6. Determine whether the water is acid, base (alkaline), or neutral and record with other observations.
7. After all results have been collected, hold a class discussion and use library resources to help students discover what they found.

Modifications: Other water tests can be done if other testing equipment can be acquired.

Extensions:

1. Do the "Parts Per Million" activity found in this guide.
2. Guest speaker from, or a trip to, the City of Yuma Water Treatment or Sewage Treatment Plant.
3. Guest speaker from, or a trip to, the Desalting Plant.
4. Write a letter to the Clean Water Foundation.

America's Clean Water Foundation
750 First Street, NE Suite 911
Washington D.C. 20002
(202)898-0902

Reference List:

It's A Student's World - The Environment

Time of Year: any

**This activity was adapted from The Environment, Using Nonfiction to Promote Literacy across the Curriculum.