
6. MEASURING TEMPERATURE

Overview: This activity will give students an opportunity to measure water temperature at varying depths of the pond.

Objective: Students will measure pond temperatures at varying depths to determine if water temperature may be influenced water depth.

Time needed: 60-80 minutes

Group Size: 2-3 students

Age appropriateness: 3rd Grade and up

Site: several locations around the YCG pond

Background: Water depth can create various temperature variations as well as foliage that may shade the water. Pond temperatures may also be influenced by the refill pipe from local canal water.

Materials:

Provided at the Garden

Thermometers

Clipboards

Meter sticks

Provided by the classroom teacher

Map copies

Graph paper

Paper and pencil

Preparation: Run copies of the pond map to help keep track of collected data.

Pre Activity: Students should be familiar with collecting and recording temperature data and displaying the information in a graph.

Procedure:

1. Divide class into groups and distribute materials.
2. Attach a thermometer to the end of a meter stick.
3. Demonstrate to students the procedure you desire them to follow when measuring water temperature.

Remind students of the need to work safely around water.

4. Students should go around the pond and at predetermined places marked on the map, measure and record the temperature of the pond water. A surface temperature should be taken as well as other consistent depths as directed.
5. Students should then convert table data to a graph.
6. Class discussion should follow with groups sharing their findings.

Modifications: Fewer or more sites can be measured. If there is concern about student safety around the water, an adult could take the measurements with the students recording the data.

Extensions: Have students create and test a hypothesis for any temperature variations that may have been observed.

Reference List:

Time of Year: any