

## **Lesson Title: Prospect Park Water Analysis**

### **Objectives:** SWBAT...

Utilize a water testing kit. Understand what the different parameters mean to the health of a body of water. Think analytically to compare various sampling sites

**Lesson duration:** 5 days

**Aim:** How healthy are the water systems in Prospect Park?

**Do Now:** Prepare water testing materials for going to Prospect Park

### **Materials:**

- Student data collection sheets and graph paper
- LaMotte water testing kits
- pipets, bucket, discard jar, thermometer, timers

### **Procedure:**

1. Utilizing the map of Prospect Park, there are a total of 8 sites (plus one extra in case of surplus time), with 2 sites to be tested each week (time permitting). Choose 2 sites in close proximity to each other so as to facilitate transport.
2. Divide class into groups. Each group is provided La Motte tests for pH, chlorine, nitrate, dissolved oxygen, as well as a thermometer. Data is recorded on the data sheet provided, making sure to note weather conditions on day of sampling.
3. On the conclusion of the 4<sup>th</sup> sampling day, discuss trends and disparities between the sites.
4. The 5<sup>th</sup> lesson will be in class, and allow students the opportunity to design their graphs and synthesize their group projects.

**Homework:** Completion of lab reports in scientific format (including the graph) for submission the following week.

## Prospect Park Water Quality Data Table BASE High School Friday Field Study

Date	Site Name	Water Temp. (degrees C)	pH	Chlorine (ppm)	Nitrate (ppm)	Dissolved Oxygen (ppm)
	1. Lullwater					
	2. Binnen Falls					
	3. Dog Beach					
	4. Fallkill Falls					
	5. West Side of Lake					
	6. East Side of Lake					
	7. Japanese Pond					
	8. West End Botanic Gardens					
	9. Vale of Cashmere					

