Water Quality Testing Lab

At each station there is equipment to test for different things. Station one has chlorine testing equipment, station two has pH testing equipment and station three has dissolved oxygen testing equipment. You and your group will conduct tests on your water samples at each station during class. Write down your findings in the chart below.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Chlorine Content</th>
<th>Dissolved Oxygen Level</th>
<th>pH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newtown Creek</td>
<td></td>
<td></td>
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<tr>
<td>Brooklyn Tap Water</td>
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<td></td>
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<tr>
<td>Gowanus Canal Water</td>
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<tr>
<td>Coney Island Beach Water</td>
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<td></td>
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<tr>
<td>Bottled Water</td>
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</tbody>
</table>

1. Which sample had the most chlorine?
2. Which sample has the least chlorine?
3. Which sample had the most dissolved oxygen?
4. Which sample had the least dissolved oxygen?
5. Which sample had the highest (most basic) pH?
6. Which sample had the lowest (most acidic pH)?
7. Which sample is best for marine life to live in?
8. Which sample is safest for you to drink (don't drink the water)?
Water Quality Testing Lab
Class Size: Up to 32 students
Time: 45 minutes

Objectives: To familiarize students with water testing equipment which they will utilize in the field in the next class.

SWBAT:
1. Use testing equipment for Chlorine, dissolved oxygen and pH
2. Verbally and/or in writing draw conclusions about the water quality from the tests and other observations

Set-Up:
Students should have already been introduced to the importance of each test in a prior class.

Class should be set-up in stations, one station for dissolved oxygen, one station for pH and one station for chlorine testing.

Materials:
Multiple water samples from different sources
testing equipment

Introduction:
Reflect as a class on the prior lesson about each test and what they are used to determine. Also reflect on ORPED lesson on scientific method and the importance of reducing variables in testing hypothesis.

Activity:
Have students conduct tests at each station for their water samples in small groups and verbally answer questions on worksheet – the worksheet will be utilized in the field in a following lesson.

Conclusion:
Discuss as a class the students findings and the type of information given by the results of the testers.