

Gathering Water Quality Data

Testing for pH

Test the pH of each item listed below. Then, use the pH Ranges that Support Aquatic Animal and Plant Life chart to see which plants and animals might live in this pH. Use the Quick Reference Guide to Aquatic Invertebrates cards to see how tolerant specific animals are to pollution.

1. The pH of lemon juice is: _____

Which aquatic animals, invertebrates, and plants can live in this pH?

How tolerant of pollution are the aquatic invertebrates you listed?

Tolerant Somewhat tolerant Not tolerant

2. The pH of baking soda is: _____

Which aquatic animals, invertebrates, and plants can live in this pH?

How tolerant of pollution are the aquatic invertebrates you listed?

Tolerant Somewhat tolerant Not tolerant

3. The pH of the water sample is: _____

Which aquatic animals, invertebrates, and plants can live in this pH?

How tolerant of pollution are the aquatic invertebrates you listed?

Tolerant Somewhat tolerant Not tolerant

Testing for dissolved oxygen

4. Test the dissolved oxygen (DO) level of the water sample. The DO is _____ ppm.

On the Quick Reference Guide to Aquatic Invertebrates cards, look at "Why I'm Special" to see which animals might be found in water with this level of oxygen.

5. How might you change the DO level of the sample? Discuss some methods with your leader. Try some of the methods. Record your method and the results on a sheet of notebook paper.

6. You are a scientist studying a pond. The water samples you collected have tested 9 for pH and 4 ppm for DO. There are many midge larvae in the invertebrate sample. How healthy is this pond? How do you know? How might these water quality results be changed? Record your results on a sheet of notebook paper.