

Student Sheet C3

Inquiry C3

What Is Acid Rain?

Names _____

pH OF SELECTED SOLUTIONS

1. Predict the pH of each of the following solutions. Then use one piece of pH paper to test your prediction. Record the pH of each in the following data table. The pH paper cannot be reused. Be careful to keep used and unused pieces of pH paper separate.

<u>Name of Solution</u>	<u>Predicted pH</u>	<u>Actual pH of Solution</u>
<u>Tap water</u>		
<u>Vinegar</u>		
<u>Soft drink</u>		
<u>Milk</u>		
<u>Lemon juice</u>		
<u>Pond water</u>		

2. Which solution is the strongest acid? _____
3. Which solution is the weakest acid? _____
4. List the solutions in the space below in order, beginning the list with the weakest acid and ending with the strongest acid:

weakest ----->----->----->----->-----> strongest

TESTING ACID RAIN IN YOUR COMMUNITY

5. Record the pH of rain samples collected by you and your classmates in the following table:

Rain Sample Collected By:	Date Collected	pH of Rain Sample

6. Are the pH readings for the rain samples similar? How far apart are the highest and the lowest pH readings?
7. How many of the rain samples have a pH that is lower than 5.6?
8. Why is the number 5.6 an important number to remember for acid rain?
9. What combines with the rain to make it more acidic?
10. Would rain samples taken in Detroit have the same pH as those taken in our community? Why or why not?
11. Would rain samples taken in the forests of Northern Michigan have the same pH as those taken in our community? Why or why not?