Reading Assignment

(Place this sheet followed by your answers in your lab book.)

A. What's in Polluted Water p. 280

- 1. What is a physical contaminant? Give 2 examples.
- 2. What are 3 methods to remove physical contaminants, and what do they remove?
- 3. What is a biological contaminant?
- 4. What happened in Walkerton? How could it have been averted?
- 5. Why is chlorine added to drinking water? What are 2 ways it can be removed?
- 6. What is a chemical contaminant? Give 4 examples.
- 7. Explain the role of the following on the safety of our drinking water:
 - a. provinces
 - b. municipalities
 - c. federal
 - d. plant operator
 - e. lab technicians
- 8. What is the main job of a water treatment plant operator? (p. 285)
 - a. What are the 3 components of their job?
 - b. What education do they need?

B. Water Disinfection Methods p. 288

- 9. Create a table with 3 columns. In the first column, list 4 water purification methods. In the second column, list the advantages of each method. In the third column, list the disadvantages of each method.
- 10. What method does this article say is the best method?

C. Case Study p. 290

- 11. What are the 3 main goals of the Great Lakes Action Plan?
- 12. List the 7 specific objectives intended to be implemented to meet the goals.
- 13. What is an "area of concern" (AOC)? How many AOCs have been identified in the Great Lakes Basin? How many are Canadian?
- 14. What is a "Remedial Action Plan" (RAP) designed to do? How does it do this? Whose involvement is crucial?
- 15. Describe the problems in Hamilton Harbour over the last century.
- 16. Describe 2 examples of evidence of the successful restoration of Hamilton Harbour.
- 17. Identify and explain one reason for the success of the RAP for Hamilton Harbour.
- 18. How has human health benefited from the restoration of the Harbour?