## **Knowledge-based Learning Outcomes**

Upon completion of *Nutrient Pollution (WB)*, students should be able to:

- 1. Name three types/species of organisms commonly found in lakes and describe the trophic position of each one.
- 2. Explain why nutrients are important to individual organisms and to ecosystems.
- 3. Describe what is meant by "limiting nutrient".
- 4. Define eutrophication.
- 5. Describe how increasing a limiting nutrient in an aquatic system can lead to reduced oxygen in that system.
- 6. Define bioaccumulation.

## **Skills-based Learning Outcomes**

Upon completion of *Nutrient Pollution (WB)*, students should be able to:

- 1. Predict how increasing the availability of a limiting nutrient will impact organisms that directly use that nutrient.
- 2. Predict possible indirect effect(s) of increasing a limiting nutrient, for example, on higher trophic levels in a community.
- 3. Predict how concentrations of a bioaccumulating molecule will vary by trophic level.
- 4. Graph data from an experiment with a single quantitative independent variable.