

## Lesson Eight

### Microorganisms—Protista II

- Standard 5:** Students will understand that microorganisms range from simple to complex, are found almost everywhere, and are both helpful and harmful.
- Objective 3:** Identify positive and negative effects of microorganisms and how science has developed positive uses for some microorganisms and overcome the negative effects of others.
- Indicator d:** Relate several diseases caused by microorganism to the organism causing the disease (e.g., athlete's foot-fungi, streptococcus throat-bacteria, giardia- protozoa).

#### Procedure

1. Reread "Microorganisms and Food" as to how the United States helps prevent diseases in food, read "Microorganisms and Food".
  - a. Discuss the measures the United States takes to make sure that the food they eat is clean from the time it is harvested or processed to the day they take it home from the grocery store.
  - b. Discuss the different ways foods are preserved to prevent spoilage.
  - c. Discuss the importance of following expiration dates.
  - d. Discuss the importance of when the food gets to their houses, what they need to do to make sure it stays unspoiled.
  
2. Do the activity "What is My Diagnosis?"
  - a. Put the students in groups of 2, 3, 4, or 5.
  - b. Explain to your students that as a group they are going to read about seven diseases that are common in the world.
  - c. When they are done reading about them, they are to match the diseases they read about with the disease scenario cards by following the dichotomous key.
  - d. When each group is done, have them tell the answers they got.
  - e. Have a discussion as to how they were able to match the diseases.
  
3. Have a discussion as to how they can avoid getting these diseases.

