

## Lesson One

### Reading about Microorganisms

- Standard 5:** Students will understand that microorganisms range from simple to complex, are found almost everywhere, and are both helpful and harmful.
- Objective 1:** Observe and summarize information about microorganisms.
- Indicator a:** Examine and illustrate size, shape, and structure of organisms found in an environment such as pond water.
- Indicator b:** Compare characteristics common in observed organisms (e.g. color, movement, appendages, shape and infer their function (e.g., green color found in organisms that are producers, appendage help movement).
- Indicator c:** Research and report on a microorganism's requirements (i.e. food, water, air, waste disposal, temperature of environment, reproduction.)

#### Procedure

1. Have a discussion of what students know about microorganisms. Write their comments on the board.
2. Read the Shared Reading about Microorganisms, TRB, page 12.1.1 through 12.1.5.
3. Ask questions or have a discussion while it is being read.
4. Talk about microorganisms of why they are important.
5. Talk about microorganisms of how we need to be careful of them being everywhere.
6. Talk about how microscopes were such an important discovery.
  - a. <http://www.microscopy-uk.org.uk/index.html?http://www.microscopy-uk.org.uk/intro/histo.html>
  - b. <http://www.history-of-the-microscope.org/history-of-the-microscope-who-invented-the-microscope.php>

c. <http://www.nobelprize.org/educational/physics/microscopes/timeline/>

7. Go over the Science Language for Microorganisms, TRB, page 12.1.6.