## Portfolio Activity 10.6 ARRANGING A PROJECT-BASED SCIENCE CLASSROOM

Materials Needed:

- Drawing materials such as pencils, rulers, and compass
- Paper or a computer with a drawing program
- A classroom to observe
- A. Using the four principles of good classroom organization you just read about, design a 20-foot by 40-foot classroom so that it contains all of the following items:
  - 25 flat-topped (not slanted) student desks
  - 25 student chairs
  - A 12-foot by 3-foot table
  - 10 extra chairs
  - A freestanding bookshelf
  - A teacher's desk and chair
  - A round table with a 5-foot diameter
  - A file cabinet
  - An overhead projector
  - Two computers on carts
  - An aquarium with fish
  - A cage with gerbils
  - Four plants in pots
  - A pencil sharpener
  - Textbooks

- Student belongings
- The teacher's supplies

Permanent features of the classroom are shown in Figure 10.1.

- B. Describe how your classroom organization will facilitate project-based science learning. You may want to review chapters that discussed benchmark lessons, collaborative learning, and other techniques that facilitate learning science.
- C. What specific types of learning centers, bulletin boards, and visual displays would you design to interest students in science and promote the development of driving questions and investigations?
- D. Visit an elementary or middle grade classroom to determine whether the classroom follows the four guidelines for good organization. If not, what would you do to change it?
- E. Record your ideas and file your design in your portfolio.

Closets with coat hooks

Closets with coat hooks

Sink
Permanent shelves
Windows

*Figure 10.1* Permanent features of classroom.

