

## Unit II — Growing Structures

### Instructor Guide

**The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.**

1. Present the following scenario to the students: The department’s instructors want to get approval from the school board to make repairs or improvements to the school’s greenhouse.
2. Have students evaluate the greenhouse to determine what repairs or improvements to make or suggest changes for students to consider, such as replacing a gravel floor with a cement floor or installing an overhead sprinkler system.
3. Have students work individually or in groups to develop a plan that will convince the school board that the changes should be made.
4. Students may use material in the unit and will need to use additional outside sources to prepare their plans.
  - a. Several resources are listed in the references section of this assessment activity that contain information on greenhouse structure options, materials, and costs.
  - b. Students must provide a complete bibliography of their sources along with their presentation.
5. Have students present their plans to the school board (classmates) in the form of a sales pitch. Presentations should each be five minutes long.
  - a. Each presentation will include the following elements:
    - Visual aid, such as a diagram of the proposed changes (indicating where in the greenhouse the changes will be made and including a picture of the materials, if possible)
    - List of materials needed to make the proposed improvement or repair
    - Price sheet displaying the total cost
  - b. For example, if the student proposes installing an overhead sprinkler system, the presentation should include a picture of the system, where it would be installed in the greenhouse, a list of the materials required, and a price sheet that provides the total cost.
6. Remind students who are working in groups that all members must participate in the presentation in some way.
7. The final assessment will be based on the overall content and the presentation of the plan.
8. **ADDITIONAL ACTIVITY:** For further review, an additional unit-level activity, *Greenhouse Portfolio*, is included on pp. 92–93 of the Instructor Guide. For this activity, students will work in groups to assemble a portfolio that includes information about all the structural and internal mechanisms needed to build a new commercial greenhouse. Students will then give their portfolio to the instructor and receive another group’s portfolio to critique using questions included in the activity. Answers will vary.