

Rose Bay
Geometry Lesson Plans
Cynthia C. Chesley

Day Two
October 2, 1998

Safety and Orientation

Maintenance

- a. Re-mark a previously marked trail
- b. Clear brush from trails

Hot Dog Lunch

Activity 1: Tree Heights

- a. Break students into groups. Assign each group to one of Mr. Vandagriff's "student" teachers.
- b. "Student" teachers will explain to my group of students how to measure the angle of inclination to the top of a tree using a protractor and a weight tied to a piece of string.
- c. Using the angle of inclination, their distance from the tree, and trigonometric ratios, the students will calculate the heights of various trees around the park.
- d. One of the trees measured will be short enough that the students can get an actual measurement using a meter stick. Students will then brainstorm and test ways to make their measurement strategies more accurate.

Sunshine State Standards:

- MA.B.1.4.3 The student measures quantities in the real world and uses the measures to solve problems.
- MA.B.3.4.1 The student solves real-world and mathematical problems involving estimates of measurement and estimates the effects of measurement errors on calculations.
- MA.C.3.4.1 The student represents and applies geometric properties of right triangle trigonometry and to solve real-world mathematical problems.

Activity 2: Reflection

1. Review safety and orientation
2. Discuss behavior
3. Why did trails need to be marked again?
4. Critique of Activity 1
5. Requests for next trip