Case Details

Case Title:

Garden

Author(s):

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Date Published:

11/6/2008

Grade Level(s):

Middle School

Subject(s):

Life Science

Summary:

Sam becomes very interested in botany after visiting with his aunt, a botanist. However, a science experiment gone wrong lands Sam in the Emergency Department. Can Sam use his mistake to teach others the importance of learning about plants?

Suggested Citation:

Dundee, S. B. (2008). *Garden*. Retrieved June 03, 2012 from Emory University, CASES Online Web site: http://www.cse.emory.edu/cases/casedisplay.cfm?case_id=2528

Notes:

This case can be used for cross-curriculum implementation in mathematics and life science courses.

Learning Objectives:

1. Identify plants commonly used for medicinal purposes.
2. Identify the environment and habitat needed for specific plants to grow.
3. Design a garden and a landscape plan.
4. Calculate the circular area that a plant will occupy.

National/State Standards:

Georgia Performance Standards

S7CS5. Students will use the ideas of system, model, change, and scale in exploring scientific and technological matters. (NSES Content Standard A)
S7CS6. Students will communicate scientific ideas and activities clearly. (NSES Content Standard A)
S7CS9. Students will investigate the features of the process of scientific inquiry.
S7CS10. Students will enhance reading in all curriculum areas

S7L1. Students will investigate the diversity of living organisms and how they can be compared scientifically. (NSES Content Standard C)

S7L4. Students will examine the dependence of organisms on one another and their environments. (NSES Content Standard C)

M6M2. Students will use appropriate units of measure for finding length, perimeter, area and volume and will express each quantity using the appropriate unit.
M6G1. Students will further develop their understanding of plane figures.
M7G1. Students will construct plane figures that meet given conditions.
M7G3. Students will use the properties of similarity and apply these concepts to geometric figures.
M8P1. Students will solve problems (using appropriate technology).
M8P2. Students will reason and evaluate mathematical arguments.
M8P3. Students will communicate mathematically.
M8P4. Students will make connections among mathematical ideas and to other disciplines.
M8P5. Students will represent mathematics in multiple ways.