CH. 12: Introduction to Plants

Lesson: 12-1 What makes a plant a plant?
Author: Mr. Hilvers
Endorsed: St. Lawrence School
Level: Grade 6

****Correct Homework, if any****

Lesson Objective
Identify the characteristics that all plants have.
Discuss the origin of plants.
Explain how the four main groups of plants differ.

Teaching Procedure
Day 1: Read/discuss p. 270-271.
Day 2: Read/discuss p. 272-273.

Homework Assignment
Worksheet 12-1

Lesson: 12-2 Seedless plants
Author: Mr. Hilvers
Endorsed: St. Lawrence School
Level: Grade 6

****Correct Homework, if any****

Lesson Objective
Describe the features of mosses and liverworts.
Describe the features of ferns, horsetails and club mosses.
Explain how plants without seeds are important to humans and to the environment.

Teaching Procedure
Day 1: Read/discuss p. 274-275.
Day 2: Read/discuss p. 276-277.

Homework Assignment
Worksheet 12-2

Lesson: Seed collection project
Author: Mr. Hilvers
Endorsed: St. Lawrence School
Level: Grade 6

****Correct Homework, if any****

Lesson Objective
Interpret guaranteed nutrient analysis of plant fertilizer.
Mix potting soil.
Plant a seed.
Understand importance of labeling plants in a greenhouse and recording growth rates.
Use classification system to differentiate among plant species.
Use internet to research plant information.

Use Excel spreadsheet to record plant information.
Observe germination of a seed.
Identify plant characteristics.
Observe life cycle of various plant species.

Teaching Procedure
Assign seed collection project (distribute handout) C:\Data\document\St Lawrence\SCIENCE ASSIGNMENT-SEED 2.doc :
- Students are to collect three seeds from each of two known plants, and bring them to school in separate zip-lock bags labeled with the plant's common name and student's name. Package seeds are not permitted.
- Students will use computer lab to research the following information for each plant:
    1. Scientific name (Genus species)
    2. Days to germination
    3. Mature size
- Students will log this information on an Excel spreadsheet located on school's server.
- Students will learn to identify a fertilizer's nutrient analysis using the package label, and will mix soil, plant and label their seeds using a pot marker.
- Students will record the actual days to germination upon observation of their seeds' emergence on the class's printout of the spreadsheet.

Homework Assignment

Lesson: 12-3 Plants with seeds
Author: Mr. Hilvers
Endorsed: St. Lawrence School
Level: Grade 6

Correct Homework, if any

Lesson Objective
Compare a seed with a spore.
Describe the features of gymnosperms.
Describe the featres of angiosperms.
List the economic and environmental importance of gymnosperms and angiosperms.

Teaching Procedure
Day 1: Read/discuss p. 278-279. Do peanutbutter lab: Distribute 3 peanuts per student. Have them dissect first one and identify the parts. Then have them shell the other two, put into food processor and serve butter on Ritz cracker to all.
Day 2: Read/discuss p. 280-283. Bring in pine cone and show structure.
Show/discuss http://www.urbanext.uiuc.edu/gpe/case3/c3facts2.html

Homework Assignment
Worksheet 12-3

Lesson: 12-4 The structures of seed plants
Author: Mr. Hilvers
Endorsed: St. Lawrence School
Level: Grade 6

Correct Homework, if any

Lesson Objective
Describe the functions of roots.
Describe the functions of stems.
Explain how the structure of leaves is related to their function.

Identify the parts of a flower and their functions.

Teaching Procedure

Day 1: Read/discuss p. 284-285. Bring in a root and have students identify the structures.
Day 2: Read/discuss p. 286-287. Bring in celery and do xylem/phloem demonstration.
Day 3: Read/discuss p. 288-289. Bring in leaves and have students identify the structures.
Day 4: Read/discuss p. 290-291. Bring in flowers and have students identify the structures.

Homework Assignment

Worksheet 12-4

Lesson: Test
Author: …
Endorsed: …
Level: Grade 6

Student Evaluation