

Name: Wendy Chavez

SIOP LESSON PLAN TEMPLATE

Key: SW = Students will; TW = Teacher will; SWBAT = Students will be able to...:

Topic: Environmental Requirements for good plant growth

Grade/Class: Horticulture/ 2nd and 5th Date: October 25, 2010

Content Objective(s):

SWBAT

- List 4 factors that affect the roots of plants
- Describe the differences between clay, sandy, and loamy soils and identify a sample of each
- Compose a balanced fertilizer program for 1 plant that is grown commercially in the area
- List 4 aboveground requirements for good plant growth
- List the 3 major plant food elements and 2 functions of each
- care for and fertilize plants

Language Objectives:

Conversation: SW discuss the information pertaining to the CO's as a class

Reading: SW read about good growth requirements as a class

Vocabulary: Create a presentation that includes vocabulary and present it orally to the class in a group

Writing: SW write about the requirements needed for good growth in an outline

Materials (including supplementary and adapted): Textbook, powerpoint presentation, fertilizer samples, vermiculite, perlite, peat moss, projector and aversision, greenhouse materials, our propagated plants

Higher Order Questions:

- List 4 factors that affect the roots of plants
- Describe the differences between clay, sandy, and loamy soils and identify a sample of each
- Compose a balanced fertilizer program for 1 plant that is grown commercially in the area
- List 4 aboveground requirements for good plant growth
- List the 3 major plant food elements and 2 functions of each

Teacher Activities: Building Background

Links to Students' Past Experience: Discuss the fertilizer we've been using on our plants and relate it to the types we are reading and learning about. Identify the parts of the the soil we've used. Discuss what types of fertilizer seem to be working on our plants. Compare and contrast the types we've used.

Teacher links to Prior Learning: Link it to the plants we are planting and caring for in the greenhouse and the fertilizer we are using.

Key vocabulary: soil, fertilizer, sandy, clay, silt, loamy, drainage, aeration, aggregation, perlite, sphagnum moss, peat moss, vermiculite, limestone, tree bark, nitrogen, phosphorus, potassium, lime, acidity, pH, humidity, capillary water

<h3>Comprehensible Input</h3> <p>This component comprises some of the features that make SIOP instruction different from “just good instruction.” Check those that apply and describe below. Include those selected to the lesson sequence section below.</p> <p><input checked="" type="checkbox"/>_x_Speech appropriate for students’ proficiency level <input checked="" type="checkbox"/>_x_Clear explanation of academic task</p> <p><input checked="" type="checkbox"/>_x_Techniques used to make content concepts clear for:</p> <ol style="list-style-type: none"> 1. Beginning 2. Early Intermediate 3. Intermediate 4. Early Advanced 		
<h3>Scaffolding</h3> <p><input checked="" type="checkbox"/>_x_Modeling <input checked="" type="checkbox"/>_x_Guided Practice <input checked="" type="checkbox"/>_x_Independent Practice</p> <p>Verbal Scaffolding:</p> <p>Procedural Scaffolding:</p> <p>Instructional Scaffolding:</p>		
<h3>Interaction</h3> <p><input checked="" type="checkbox"/>_x_Whole class <input checked="" type="checkbox"/>_x_Small group <input checked="" type="checkbox"/>_x_Partners <input checked="" type="checkbox"/>_x_Independent</p> <p>Description of Cooperative Learning Structure/s:</p> <p>SW work together to understand the vocabulary definitions and present them to the class</p> <p>SW make their own fertilizer from parts</p> <p>SW read text, listen to classmates read, answer questions orally and interact in a group</p> <p>Use of Students’ Primary Language/s: all speak English</p>		
<h3>Practice/Application</h3> <p><input checked="" type="checkbox"/>_x_Hands-on <input checked="" type="checkbox"/>_x_Meaningful <input checked="" type="checkbox"/>_x_Linked to objectives <input checked="" type="checkbox"/>_x_Promotes engagement</p> <h3>Integration of Processes</h3> <p><input checked="" type="checkbox"/>_x_Listening <input checked="" type="checkbox"/>_x_Speaking <input checked="" type="checkbox"/>_x_Reading <input checked="" type="checkbox"/>_x_Writing</p> <p>Description of Hands-on activity: SW create their own fertilizer from parts and plant seeds then compare store bought fertilizer efficiency to the one they made</p>		
<h3>Lesson Delivery</h3> <p><input checked="" type="checkbox"/>_x_Pacing <input checked="" type="checkbox"/>_x_Student engagement <input checked="" type="checkbox"/>_x_Content objectives <input checked="" type="checkbox"/>_x_Language objectives</p> <p>Description of Lesson Delivery components:</p>		
Time:	Lesson Sequence	Notes regarding differentiation
Week long	Bellwork to reinforce previous days objectives/ read text aloud/ take notes while paused for clarification/ discuss powerpoint presentation/ hands on activity or seatwork following class discussion/ group work or practice at lab tables	All learning styles are incorporated into daily lessons (visual, auditory, kinesthetic motor)

Review and Assessment (Check all that apply and describe)

☐ Individual ☒ Group ☐ Oral ☒ Written

Review Key Vocabulary:

in groups and as a class following each presentation

Review Key Concepts:

Oral review as a whole class and assessment individual and written

Adapted from *Making Content Comprehensible for English Language Learners*, 2nd/ 3rd editions