

Daily Lesson Plan

(DLP)

Topic: Soil Amendments		Day: 2
Grade: 2-3	Lesson Name: Soil Amendments	Time : (60 Mins.)

Topic	Soil Amendments		
Weekly key words	Sil texture, amendment, clay, soil aggregation, loam, sand, peat, humus, compost, etc.		
Seating plan	<input type="checkbox"/> Individual	<input type="checkbox"/> Pairs	Group of 4
Skill development	<input checked="" type="checkbox"/> Reading <input type="checkbox"/> Reflection <input type="checkbox"/> Other (Specify)	<input checked="" type="checkbox"/> Writing <input type="checkbox"/> Illustration	<input checked="" type="checkbox"/> Discussion <input type="checkbox"/> Presentation <input type="checkbox"/> Collaboration <input type="checkbox"/> Observation <input type="checkbox"/> Research

Objectives: ➤ The students will be able to:	➤ Learn more about the amendment of soil
Teaching Resources:	writing board, notebook, tables,
Teaching Learning Strategies	
Introduction: Encourage students to share the difference between organic and inorganic amendments in soil. Take their responses and proceed.	
Methodology: Soil Texture Soil texture, or the way a soil feels, reflects the size of the soil particles. Sandy soils have large soil particles and feel gritty. Clay soils have small soil particles and feel sticky. Both sandy soils and clay soils are a challenge for gardeners. Loam soils have the mixture of different size soil particles.	
When amending sandy soils , the goal is to increase the soil's ability to hold moisture and store nutrients. To achieve this, use organic amendments that are well decomposed, like composts, peat, or aged manures.	
With clay soils , the goal is to improve soil aggregation, increase porosity and permeability, and improve aeration and drainage. Fibrous amendments like peat, wood chips, tree bark or straw are most effective in this situation.	

Soil Salinity and Plant Sensitivity to Salts

Many forms of compost made with manure, and bio solids are high in salts. Avoid these amendments in soils that are already high in salts (above 3 mmhos/cm) or when growing plants that are sensitive to salts. Raspberry, strawberry, bean, carrot, onion, Kentucky bluegrass, maple, pine, viburnum and many other landscape plants are salt sensitive. In such cases, choose plant-based composts or sphagnum peat.

Activity:

Use Tables 2 and 3 for more specific recommendations. Because sandy soils have low water retention, choose an amendment with high water retention, like peat, compost or vermiculite. Clay soils have low permeability, so choose an amendment with high permeability, like composted wood chips, composted hardwood bark or perlite. Vermiculite is not a good choice for clay soils because of its high water retention.

Soil Texture	Permeability	Water Retention
Sand	high	low
Loam	medium	medium
Clay	low	high

Amendment	Permeability	Water Retention
Fibrous		
Peat	low-medium	very high
Wood chips	high	low-medium
Hardwood bark	high	low-medium
Humus		
Compost	low-medium	medium-high
Aged manure	low-medium	medium
Inorganic		
Vermiculite	high	high
Perlite	high	low

Wrap up: Wind up the lesson by asking the students to share their understanding of the tables.

Home Assessment:

Worksheet

Lesson Evaluation:

- Teacher was able to accomplish all aspects of the lesson well ☐
- Teacher was not able to do warm up activity ☐,
- develop lesson plan well ☐,
- do the learning activity ☐,
- do wrap up ☐,
- accomplish lesson objective ☐,
- manage time well ☐,
- manage class well ☐

Worksheet Day

Name: _____

Class: _____

Topic: Soil Exploration

Subject: Science

1. What is soil salinity? What is plant sensitivity to salt? Explain in your words
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