Lesson Plan

Grade: All - Adaptable and Hands-On Lesson

Title: Soil tests for schools

Supplies in the resource kit:

- Soil Testing Kit(s)
- · Shipping & Fees
- Bucket, shovel, and soil probe if needed

Supplies needed:

School Garden or Raised bed

Key Terms

- Soil Test Analysis that determines the current fertility of the soil
- Soil Sample A small collection of soil from a particular area without organic matter, typically taken 6-10 inches down
- Soil Fertility The ability of soil to sustain plant growth (has enough nutrients to allow for plants to grow well)

Objectives

- Organize soil testing vocabulary
- · Conduct a soil test
- Explain the importance of soil nutrients for plant growth
- Compare nutrient levels from the soil to desired levels
- Formulate a plan to make the school garden better
- Hypothesize how garden productivity will increase

Background/Ideas for implementation

This program is not only aimed to help schools be more conservation friendly by promoting the proper use of fertilizers and soil health, but also to help trigger more classroom involvement in the gardens at their schools.

Further topics on this subject could lead to conversations and lessons about composting, soil layers, animals that live in the soil, soil health and nutrients, consumption of fruits and vegetables, environmental attitudes, pollinators and pollinator friendly gardens, urban gardening, as well as being healthy and active in various ways.



Resources to expand and various school garden lesson plans:

- School Garden Lesson Plans by Whole Kids Foundation
- School Garden Project
- University of Georgia Extension
- Cornell Garden-Based Learning





2022 Fall Soil Testing for Schools

Have raised beds or classroom managed gardens at your school? Delaware SWCD will pay for a fall soil test and help you analyze the results!



KITS

Call or email the Delaware SWCD office to arrange pick up or drop off of any needed soil testing kit(s)



COLLECT SAMPLES

Students and faculty work together this fall to collect proper soil samples



SHIPPING

Let us know when the soil test kits are ready to be sent to the lab for analyzing and we will pick them up, mail them and pay the fee



EDUCATION

Consider planning lessons with the students about plant needs and fertilizing (Nitrogen, Phosphorus, & Potassium/Layers of the soil/Growing seasons/Soil Pollution)



RESULTS

Review the results and meaning with the students. We can help!



MAKE SOIL CORRECTIONS

Add amendments to the soil as recommended from the soil test results. We are happy to help with this too!

How To Collect a Soil Sample

- clean garden tools
- dig down 6-10 inches
- collect small handful of soil
- repeat all over the test area
- mix all samples thoroughly
- fill sample box with mixture

