



Soil Amendments

Goals

Students learn about the benefits of soil amendments and spend time recording their garden observations.

Curriculum Alignment

Find a list of which Common Core State Standards and NC Essential Standards this lesson plan aligns with on the lesson plan page at www.growing-minds.org.

Materials

Station 1: Outside in the garden

- 2 bags mushroom compost
- 1 bag Nature's Helper
- 2 bags Black Kow manure
- 5-6 trowels
- 5-6 small buckets
- 1 large shovel
- Optional: soil testing boxes (from your local Cooperative Extension office)

Station 2: Garden Stories

- Dry place for children to sit
- One or two suggested children's books

Station 3: Journal Time

- Garden journals (each student should have one)
- Pencils--graphite and colored pencils

Activities

Prepare to Go to the Garden

Ask the class if they can remember the class garden rules. (If you haven't developed garden rules, lead your students in coming up with guidelines for things to do or not to do in the garden.) Remind the students that being in the garden requires them to be calm, careful observers, and to work together. Ask the students to take several deep breaths to help them feel calm and focused.

Introduce the Lesson

Review what conditions plants need to survive, allowing students to come up with answers. Record their answers on the board. Emphasize that plants need food or nutrients and *healthy soil* to live. Ask



Book to Read

[Garbage Helps Our Garden Grow: A Compost Story](#)
by Linda Glaser



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students, “What is healthy soil?” “What does it look like, smell like, feel like? Why is healthy soil important to plants?” Healthy soil is moist and contains food and nutrients for the plants and also for all of the insects, bacteria and fungi (the little guys we can’t see), and worms that help the plants grow. Healthy soil helps roots to expand and thrive, and the happier the roots, the happier the plant! It’s up to gardeners to build the nutrients in the soil and to create healthy, living soil so that plants can thrive. How do students think we can make healthy soil? Can they brainstorm healthy soil ingredients? Explain that to make healthy soil we have to add different kinds of materials to the garden beds and that is what the class will be doing in the garden today. Have the students rotate through the stations described below as a class or divide them into three groups.

Station One: Get Gardening (15 minutes)

Show students the bags of soil amendments. Explain that we need all three (Nature’s Helper, Black Kow, and mushroom compost) to create healthy soil with lots of nutrients and organic matter for the organisms, bacteria and worms that live in soil and help plants grow. Open the bags of amendments and guide the students in filling small buckets with each of the amendments and dumping them on top of the empty garden bed. With their trowels, students should mix the amendments deeply into the garden bed.

Note: Gardeners often add unbagged compost or amendments such as manure to their garden. In the school setting, we suggest always adding bagged materials to ensure a traceable source of amendments should food safety issues arise.

Station Two: Literature Connections (15 minutes)

Read [Garbage Helps Our Garden Grow: A Compost Story](#). What connections can you help students make between the book and the day’s activity? What did the students learn about gardening through the book?

Station Three: Garden Journals (15 minutes)

Guide students in using their journals to capture something new they see or sense in the garden. The students can write words or sentences about the garden or a specific aspect of the garden. They can draw something they see or feel while they are in the garden, or they can collect small things from the garden and put them in their journal envelop or tape or glue them to their page. A garden journal should encourage creativity!

Keeping garden journals helps students practice observation, reflection, and writing skills. Journals can be blank or lined, bought or made.