

Garden Rotation

Age Group: 6th grade

Time: 20 minutes

Materials:

- Gloves
- Hand tools (trowels, cultivators)
- Weed buckets
- Seeds
- Starts
- Wheel barrow
- Shovels
- Rakes

Description:

Teachers must chose a garden activity based on what is appropriate for the season, matches the needs of the garden and gives students the exposure to the largest variety of activities in the garden. The lesson will begin with a brief explanation of the chosen garden activity and the tools needed to complete it. Students will then actively participate in the gardening activity for about 10 minutes, followed by 5 minutes of clean-up time.

Objectives:

Students will be able to...

- Have hands-on experience in the garden.
- Understand and demonstrate procedures for digging, harvesting, weeding, seeding and all that has to do with growing our own food!
- Practice using garden tools properly.

Environmental Education Guidelines:

- Questioning & Analysis
- Knowledge of environmental processes and systems
 - The earth as a physical system: Processes shape the earth, changes in matter, and energy.
 - Environment and Society: Human/environment interactions, resources, and technology

Major Life Science Themes:

- Ecosystems
- Change over time
- Structure & function

Safety:

- Remind students of proper handling of gardening tools.
- General garden safety, as expressed in the rules section below:
 - stay on the paths,
 - ask before you eat,
 - stay within sight of an adult

Instructional Sequence:

Introduction (5 minutes)

- Gather students around the area where the activity will take place and arrange tools to reference for explanation.
- Explain what the activity of the day is and the amount of time we have to complete it.

- Explain the importance or reason for the activity.
- Demonstrate any new skill (ex. digging with hand trowels)
- Remind students of safety precautions
- Demonstrate the way the materials should be set up for the next group.
- Answer questions and begin!

Garden Activities (10 minutes)

1. How to grow food
 - Facilitate a discussion about what it takes to grow food.
 - Ask the students what they already know about growing food.
 - Discuss growing food as a group
 - Food comes from the earth
 - Food is from plants
 - Plants need certain things in order to grow
 - Every plant is different, but all plants need SOIL(FOOD), WATER, SUN, AIR and SPACE
 - Gardeners and Farmers work to give our food plants what they need so they can grow a lot of healthy plants
 - Food plants need care over time, not just putting the seed in the ground.
 - Seeds come from plants, even though they look like they come from the store.
2. Bed Prep:
 - Explain that “bed prep” can refer to activities such as removing weeds, adding compost, adding amendments, double digging, forking and aerating, taking out old plants, removing rocks, and/or laying mulch.
 - Determined the appropriate activity prior to the beginning of class, and gather any materials necessary.
 - Outline a small enough area for the students to accomplish the task set for them in this small amount of time.
3. Planting Outside:
 - Explain that what can be started from seed outside is dependant on the season.
 - Explain the method you will use for planting and why. (Broadcasting seeds? Stagger or opposite? Shallow or deep?)
 - Demonstrate planting and then allow the students to continue with the activity.
 - Label or record plantings in the notebook.
 - Remind the students of steps to be taken after planting:
 - Does your planting need to be covered to protect it before germination?
 - Covered to protect from frost?

- Does your plant need to be watered?
4. Sheet mulching:
 - Ask the students why they think that so many garden paths are covered with wood chips?
 - Describe the benefits of laying cardboard (reusing, adding organic materials, suppressing weeds...) and using mulch to fill the pathways.
 - Point out the area to be sheet mulched.
 - Set a reachable goal for the short amount of time and allow the students to begin mulching, layering ready cut cardboard and mulch. Let the kids have fun with it!
 5. Seed starting in the Greenhouse:
 - Visually explain the process of seeding by using containers, seeds and labels.
 - Allow the students to seed and label.
 6. What can I plant now?:
 - Organize seed packets into four distinct and separate seasons.
 - Have four simple illustrations to represent the seasons visually in four different directions (For example: a sun, an autumn leaf, a snowflake, a new flower). Choose some common warm and cool season foods to place in pile or bucket next to the drawings.
 - Ask:
 - What is in season (ready to eat)?
 - What can be planted now?
 7. Transplanting or potting up in the Greenhouse:
 - Set aside plants to be potted up or transplanted, have gloves and other tools ready.
 - Discuss:
 - Why we transplant
 - What is different about potting soil compared to garden soil
 - Careful handling of all plant parts
 - Watering and feeding the young plants.
 - Direct students to transplant
- Clean-up** (5 minutes)
- Direct the students to clean up by placing all materials and tools back as they had found them so that they are ready for the next group.
 - Direct students to wash hands if necessary.

Assessment/Evaluation:

In their Garden Journal, have students write a paragraph about what they learned at the garden today. What was new? What did you like/dislike?

Additional/Optional Activities:

- *Composting*
 - Take a closer look at the outdoor compost piles.
 - Take samples from each pile and note the differences between piles.
 - Determine which pile needs maintenance.
 - Take the temperatures with the compost thermometer to compare which compost is the hottest.
 - Ask:
 - Should one be turned? Does the pile need to be watered? Covered? Needs inoculation? Needs more greens/nitrogen? Needs browns/carbon?
- *Harvesting:*
 - Learn the best way to pick lettuce leaves and fill a bucket for Lane's salad bar or Oregon Food Bank or other lucky recipient. What else can be harvested during this season?
- *Creative Garden Planning*
 - Design your own garden!
 - Ask:
 - What would you like your garden to look like? What shape is the garden bed? What shape are the paths? What types of food would you want to grow? What else would you want to grow? Are there any special features in your garden? (ex: bench, tiles, bird bath, art work, etc.)
- *Square Foot Gardening*
 - Ask:
 - How much space do plants take up? If I had one square foot, how many carrots could I plant there? Why? What about melon, broccoli, tomatoes, potatoes, corn, etc.? Use visuals from square foot gardening curriculum.
- *Edible Weeds*
 - Find a weed that is edible or usable in another way.
 - Tell a story about a weed.