

Garden Lesson: Seasons in the Garden

Season: Spring | Grades: 2nd and 3rd

Ohio Science Concept

- 2nd Grade: Interactions with habitats: living things cause changes on earth
 - The atmosphere: long and short term weather changes occur due to changes in energy
- 3rd Grade: Behavior, growth and changes: plants and animals have life cycles that are part of their adaptations for survival in their natural environments

Science Inquiry and Application

- Observe and ask questions about the natural environment
- Employ simple equipment and tools to gather data and extend senses
- Communicate observations, investigations and explanations

Next Generation Science Standards

- 2-LS4-1: Make observations of plants and animals to compare the diversity of life in different habitats
- 3-ESS2-1: Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season

Ohio Mathematics Standards

- 2nd Grade: Measurement and Data- Measure and estimate lengths in standard units
- 3rd Grade: Operations and algebraic thinking- Represent and solve problems involving multiplication and division

Objectives

Students will...

- Make observations and measurements about the weather.
- Examine the garden and surrounding area to identify characteristics of the season.
- Learn and practice proper square foot gardening techniques for Cincinnati spring crops.

Materials

- Transition signal (bell, chime, etc.)
- Introduction: Globe and big yellow ball (sun)
- *Observe Station*: Weather chart, thermometer, wind sock, rain gauge, chalk, measuring tape, compass, "Today's Weather" clipboard, pencil
- *Explore Station*: "Spring Nature Walk" scavenger hunt, pencils, clipboards, seasons and pictures cards.
- *Garden Station*: CGC spring seed packet, flour, yarn, scissors

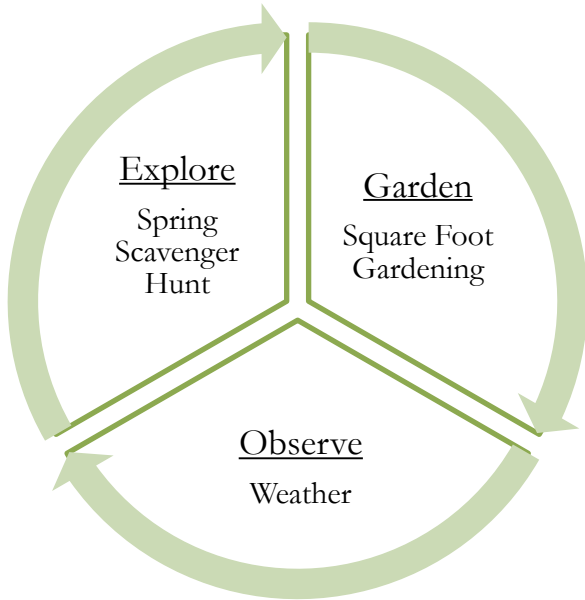
Overview

What do seasonal changes look, feel and smell like in the garden? In this lesson students engage in making observations and collecting data to investigate characteristics of the "soon to be" spring season! At the observation station students are guided in collecting weather data and discussing characteristics of different seasons. At the explore station, students use all senses to search for signs of spring. At the garden station students practice appropriate garden techniques and mathematical skills when planting spring seeds. By taking a closer look at the world around us, students build an understanding of the interconnected components of life in the garden.

5 minutes Introduction

- Welcome & review expectations
- What season is it? Describe it with your senses. What causes seasons?
- Break into three groups for station time

20 minutes Station Rotation (5 minutes per station + 1 minute for transition)



Observe: Weather

Materials: Thermometer, chalk, measuring tape, pencil, clipboard, “Weather Forecast” worksheet, cloud ID guide, newspaper

- What is weather? What are some tools used to investigate weather?
- Fill in “Today’s Weather” worksheet using the corresponding tools.
- Measure shadow height with chalk and measuring tape.

Explore: Sign of Spring Scavenger Hunt

Materials: “Spring Nature Walk” scavenger hunt, clipboards, seasons and pictures cards.

- Have students match the cards listing the different seasons to pictures of gardens in various seasons.
- Explain that now the group will be going on a scavenger hunt to look for signs of the spring season.
- Ask for suggestions/review rules and expectations for respecting nature and other groups.
- Scavenger hunt can be completed in partners or individually, each group needs scavenger hunt, clipboard and pencil.
- Briefly read over scavenger hunt as a group.
- Encourage groups to share exciting things, take their time, and enjoy their findings. Then set off on the scavenger hunt.

Garden: Square Foot Gardening

Materials: trowels (optional), spring seeds, flour, plant ID markers, yarn for square foot boxes, scissors

- On 4x8 raised garden bed, demonstrate how to mark every foot on each side of bed; connect markings with yarn to create square foot boxes; have students repeat this procedure to finish the bed
- Review the life cycle and what comes after planting the seed
- Reference spring planting guide for proper plant spacing; use flour to mark places for students to plant seeds
- Use multiplication and division problems to help identify spacing and predict and check track of seeds planted.
- Have students plant 2 seeds per space.

5 minutes Conclusion: What Can You Do?

- Encourage students to share what they learned
- Ask the students what season comes next? What are some things you can do in the garden during winter and spring?

In class literary component:

- How Plants Grow Book: <http://www.woojr.com/plant-life/>
- There is also a version of the book with text and a version of the book so students can add their own text.

In class science continuation component:

- “Predicting Weather”



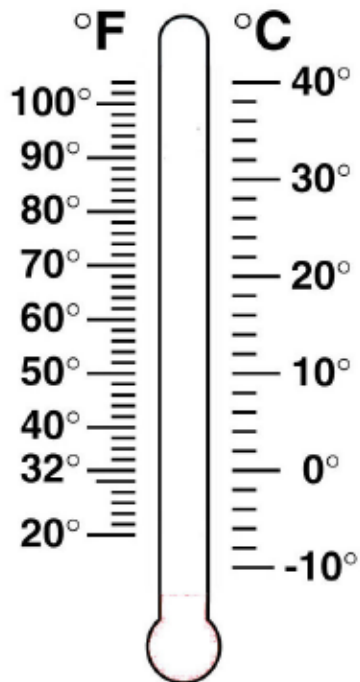
Name _____

Today's Weather Worksheet

Today's date is: _____

The temperature outside is:

Fill in the thermometer below to the correct temperature:



Circle all the words below that describe the weather today

clear rainy

snowy windy

sunny cloudy

Which direction is the wind coming from? _____

Which direction is the wind heading towards?

What is the wind speed?
