

Garden Lesson: Exploring Seasons

Season: Spring | Grades: Preschool, Kindergarten and 1st

Ohio Science Concept

- Kindergarten: Daily and seasonal changes: weather changes are long and short term
- 1st Grade: Sun, energy and weather: the sun is the principal source of energy

Next Generation Science Standard

- K-ESS2-1: Use and share observations of local weather conditions to describe patterns over time.
- 1-ESS1-2: Make observations at different times of year to relate to the amount of daylight to time of year.

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

Ohio Mathematics Standards

- Kindergarten: Understand the relationship between numbers and quantities
- 1st Grade: Represent and solve problems involving addition and subtraction

Objectives

Students will...

- Make observations and collect data regarding the weather.
- Use senses to explore the garden and search for characteristics of the spring season.
- Learn and practice proper planting techniques for Cincinnati spring crops.

Materials

- Transition signal (bell, chime, etc.)
- Introduction: Seasons chart
- Observe Station: Weather chart, thermometer, wind sock, rain gauge, chalk, measuring tape, compass, "Today's Weather" clipboard, pencil
- Explore Station: Seasons poster and pictures, "Spring Scavenger Hunt", clipboards, pencil
- Garden Station: CGC spring seed packet, flour

Overview

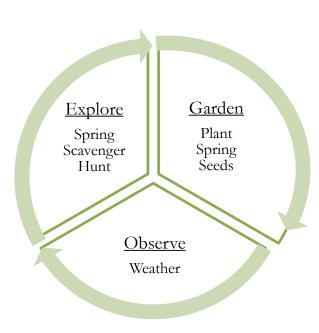
What do seasonal changes look, feel and smell like in the garden? In this lesson students engage in making observations and collecting data to investigate characteristics of the "soon to be" spring season! At the observation station students are guided in collecting weather data and discussing characteristics 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? Use your senses to describe this season. What do we like to do in this season?
- Break into three groups for station time

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



Observe: Weather

Materials: weather chart, thermometer, wind sock, rain gauge, chalk, measuring tape, compass, "Today's Weather" worksheet, clipboard, pencil

- Use a weather chart to review the season and its characteristics
- "We're going to use some tools to help us investigate the weather"
- Fill in "Today's Weather" worksheet by using the corresponding tools to measure and collect data.
- Measure shadow height with chalk and measuring tape on asphalt.

Explore: Sign of Spring Scavenger Hunt

Materials: "Signs of Spring" scavenger hunt, clipboards, seasons and pictures cards.

- Have students match the cards listing the different seasons to pictures of plants in different 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: Plantings

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

- Demonstrate proper way to plant a seed and discuss what happens next in the life cycle after planting.
- Reference spring planting guide for proper plant spacing; use flour mark places for students to plant seeds
- Have students plant 2 seeds per space marked with flour and count together as you plant
- Ask occasional math (simple addition and subtraction problems) questions to identify the number of seeds.

5 minutes Conclusion: What Can You Do?

- Have students 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 (pre or post garden): "Seasons of the Year" poem In class science continuation component: "A Week of Weather" activity





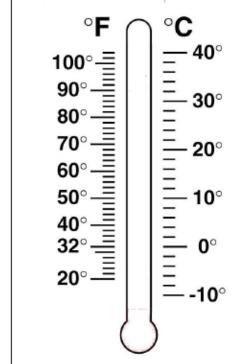
| Name |
|------|
|------|

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?