

Garden Lesson: Exploring Seeds

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

Ohio Science Concept

- Kindergarten (LS): Physical and behavioral traits of living things: Living things are different from nonliving things
- 1st Grade (LS): Basic needs of living things: Living things have basic needs

Science Inquiry and Application

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

Next Generation Science Standards

- K-LS1-1: Use observations to describe patterns of what plants and animals need to survive.
- 1-LS3-1: Make observations to conduct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

Ohio Mathematics Standards

- Kindergarten: Describe and compare measurable attributes
- 1st Grade: Reason with shapes and their attributes

Objectives

Students will...

- Use observational skills to sort seeds based on physical characteristics
- Connect content from a story about seeds to their school garden
- Apply proper techniques to collect and save seeds from plants in the school garden

Materials

- Transition signal (bell, chime, etc.)
- *Reading Station*: Pumpkin Pumpkin by Jeanne Titherington & plant growth sequence cards
- *Explore Station*: 30 copies of Student Worksheet, mixed seeds, cups, clipboards
- *Garden Station*: hand lenses, paper bags

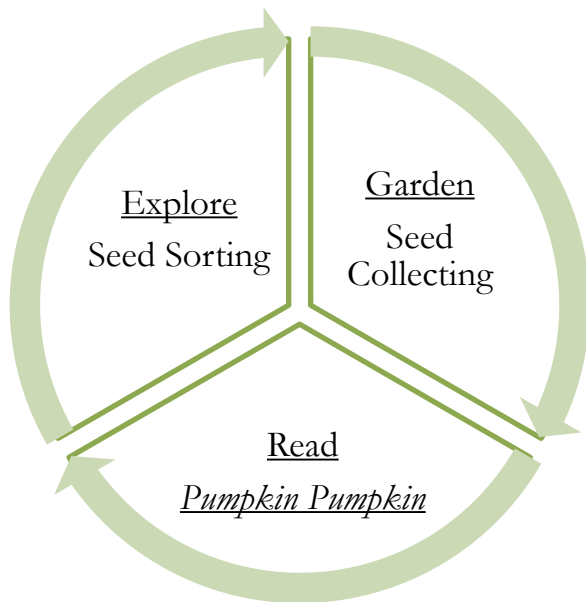
Overview

The focus of this lesson is seed characteristics. At the Reading Station, students will listen to the story Pumpkin Pumpkin by Jeanne Titherington and relate concepts from the story to the seeds and plants in the garden. At the Explore Station, students will sort various types of seeds based on physical characteristics. At the Garden Station, students will collect and save seeds from plants in the garden. The lesson will close with a group discussion reviewing what students learned and how they can make sure their garden stays healthy.

10 minutes Introduction

- Garden tour, observations and expectations
- What are the basic needs for living things? Do you see them in the garden?
- Seeds-what do they look like? How do they grow? Are they living?
- Break into three groups for station time

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



Read: Pumpkin Pumpkin by Jeanne Titherington

- Materials: book, plant growth sequence cards
- Ask the students to think about the sequence of events in the story. What happened first? When did the seed start to grow? Will the story continue?
- If time allows, ask the student to put the plant growth sequence cards in the correct order

Explore: Seed Sorting

- Materials: copies of student worksheet, mixed seeds, cups, clipboards
- Prep: pass out Student Worksheet, pour a small amount of mixed seeds into small cups and pass them out to pairs of students
- Explain that students will be searching in their seed collection for seeds that fit the descriptions on the page (PreK line up small to big / K & 1 sort into categories)

Garden: Seed Collecting

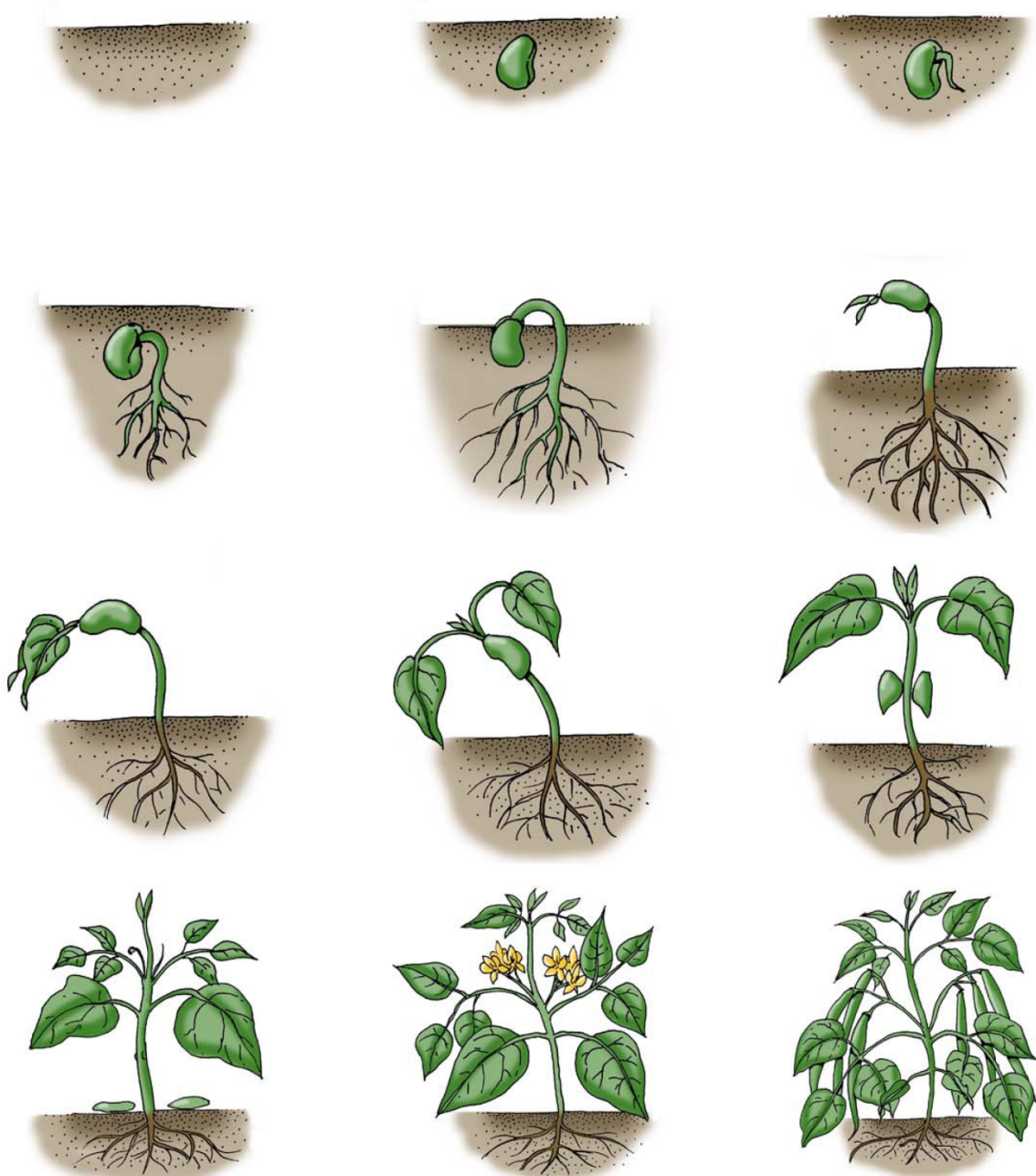
- Materials: hand lenses, paper bags
- Look for plants with seeds ready to be harvested (Sunflowers, Cilantro, etc.) and collect the seeds in the bags

5 minutes Conclusion: What Can You Do?

- While you collect the materials, ask the students to give ideas on how they can help the seeds grow
- What can they do to make sure the garden stays healthy? What can they do to help the environment around the school and in their neighborhood?
- Ask if they have any questions

Reading Station Plant Growth Sequence Cards

www.exploringnature.org



Student Worksheet (PreK)

Line up the seeds from small to big!

small



BIG

Student Worksheet (K & 1)

BIG	Small	ROUND	FLAT	Long
Smooth	Rough	Light	DARK	Multicolor