

Grade Level

Pre K- Kindergarten

Overview

The following activity is an introductory lesson in the basics of observation skills for young children. Observation is a crucial component to scientific inquiry as well as many basic life skills. This activity encourages young children to take notice of their surrounding environments and reflect on their observations.

Background

Phenology is the study of the timing of life cycle events, done mostly through personal observations.

Real-world Connection

Observation skills are necessary for scientific study and are included throughout the elementary SOL standards. In addition, observation skills are necessary for all aspects of learning academically, socially, and emotionally.

Learning Objectives

- Students will make at least one observation about the natural world
- Students will understand that plants grow in phases
- Students will understand the importance of pollinators

Virginia Standards:

- VA Early Childhood Development Standards:
- Strand 2: A2, A3, A5, A6, A7, A10, A12, B1-3, B6, B14, B15
- VA SOL Standards:
- K.1, K.4, K.6, K.8, K.9

CONDUCTING THE ACTIVITY

Time Required

20-30 Minutes

Logistics

Outdoor spaces with access to plants, tables set up inside/outside for take home activity portion

Materials needed

- Plants to observe
- Blank paper
- Crayons/Markers
- Air-dry clay
- Soil
- Native seeds

ENGAGE (Connect to prior knowledge)

- Ask your students about things they typically see outside and encourage them to explain whether it's living/non-living
- Ask your students how they know what is outside vs. what is inside, how did they come to that conclusion
- Discuss observation, and what we use to make observations
- Discuss how plants are living, that they grow and change, and that we can observe these changes and what makes them possible (i.e. the presence of pollinators)
- Discuss various plants and stages your students may already be familiar with

EXPLORE (Hands-on learning)

- Provide each student with a blank piece of paper and a few different colors of crayons/markers
- Lead a walk-about around your plant/garden area and encourage students to point out what they see/hear/smell/feel
- After you have led them through the area, give them a few moments to draw one observation they made and allow them to share it with the group
- Again, discuss the importance of pollinators to the plants in the garden
- Provide each child with a small ball of air dry clay and instruct them to flatten it out with their hands
- Provide each child with a small amount of soil (having pre-filled cups prepared may be helpful), have them sprinkle the soil on top of the air-dry clay until they have a thin layer
- Provide each child with a small amount of seeds and have them sprinkle them onto their layer of dirt
- Have each child roll and knead their clay until all three components are thoroughly mixed, and they have formed a small round ball
- Explain that these seeds will grow wherever they throw their seed balls, and that they can observe their changes
- Discuss different places that may benefit from the seed balls

EXPLAIN (Listening and communicating understanding)

- After you have led them through the area, give them a few moments to draw one observation they made and allow them to share it with the group
- Again, discuss the importance of pollinators to the plants in the garden
- Discuss different places that may benefit from the seed balls

EXTEND (Group projects, real world connections)

- Re-visit your plant area at least once every season, observe and record what has changed
- Choose one plant to continuously observe over time

EVALUATE (Summarize, check for understanding, assess)

The drawing and reflection pieces embedded within the activity are the best way to evaluate:

- Share one observation you made
- Share one thing you know about plant growth and/or pollinators (or one thing you have learned)
- Share one place would benefit from increased plant growth
- Share any questions you may have

