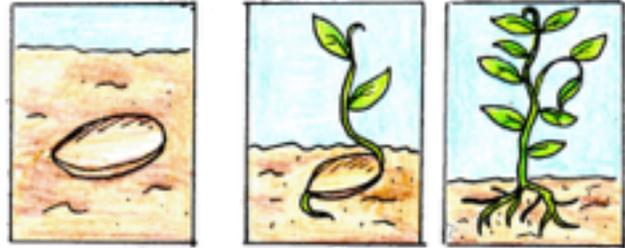


A Year in the Life of a Seed

Lesson Summary:

In this lesson, students will learn about the life cycle of a seed by working as a group to arrange colorful illustrations depicting each stage of a plant's life.



Grade Level: K-2

Lesson Objective:

Students will:

- Understand how a plant grows from a seed.
- Put the cards in the correct order to best represent a seed's life cycle.
- Explain how a seed becomes a plant that in turn produces more seeds.

Time Frame: 10-15 minutes

Materials:

- Seven hand-made, illustrated cards, each representing a different stage in a seed's life cycle

Procedures:

1. Gather students in a group and place cards in random order in the middle of the circle. Ask the group to look at all of the cards silently to see if they can see how the cards are related to each other.
2. After a short silent observation time, ask the group if they can determine what the illustrations might represent. Accept any answer that has to do with plants or seeds, and keep it simple at this point. Explain to the class that the cards are almost like pictures in a book that tell a story, but they are not in order yet.
3. Ask for a volunteer to point to the card that might show the first part of the story (the seed). Continue to ask for help in laying out the cards into the correct order. If students make incorrect guesses along the way, either leave the cards as they are for now, or ask the whole group whether they agree with the sequence thus far.
4. When all of the cards are laid out, go back through the cards and tell the story of the 'life cycle of the seed'. If any cards are still out of order, they may become obvious at this time and the group can help to rearrange them. At this point the cards will most likely be displayed in a straight line, from seed to mature plant.
5. Challenge students to arrange the cards in an even 'better' order that more accurately represents the life cycle of a plant. This process may take some assistance, and you may need to tell students that a different 'shape' might make more sense.

6. When students have figured out that the cards should be arranged in a circle, lay out the cards to show this change. Discuss why this is a better representation. Talk about how some farmers gather seeds from mature plants, and how some seeds are dispersed without human assistance.
7. Spend time in the garden looking for plants at different stages of growth. Try to locate where the seeds are in each plant and and talk about how to save them. Ask students what may happen to the seeds if there is no human intervention.

Assessment:

Students will be able to:

- Correctly describe a seed's life cycle, using accurate and age-appropriate terminology.
- Explain why laying out the cards in a circle is a better representation of a seed's life cycle than a horizontal line.

NH State Science Standards:

S:LS1:2:3.2 Recognize that living things have a life cycle, during which they are born, grow, and die.

S:SPS1:2:4.2 Identify and describe patterns and relationships in observed objects and events.

S:SPS4:2:6.1 Plan and carry out simple activities with a group.

Common Core Standards:

CCSS.ELA-Literacy.SL.1.1 Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small groups.

CCSS.ELA-Literacy.SL.1.1a Followed agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).

CCSS.ELA-Literacy.SL.1.1b Build on others' talk in conversation by responding to the comments of others through multiple exchanges.

CCSS.ELA-Literacy.SL.1.3 Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.

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