SEEDS HELP PLANTS TRAVEL

Vocabulary: seed, fruit, travel, suitcase, pea

Lesson time: About 1 hour in February

KINDERGARTEN

Description
Students learn how seeds help plants travel, then help some peas travel to their new home in the school garden.



Guiding Question
How do plants travel?

Big Idea
Living things are the same and different.

Learning Objectives
At the end of this lesson, students will be able to describe at least three ways that seeds travel and know how to plant seeds in the school garden.

Materials
A Fruit is a Suitcase for Seeds, by Jean Richards (2002, Milbrook Press).
Illustration KS3a.
Optional: KS3b.
Pea seeds.

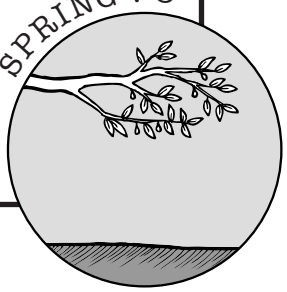
Preparation
Gather materials for the lesson.
Prepare an area in the school garden where students can plant peas.
Optional: Recruit and train volunteers to help students plant peas.
*For best results, plant peas between February 15 and March 15

Introducing the Lesson
Activate students' prior knowledge and interest. Review with students the key concepts from Kindergarten Fall Lesson 3, *Fruits and Seeds, Roots and Stems, Flowers and Leaves*: Plants have different parts, and we can eat some parts of plants. If you completed Kindergarten Spring Lesson 2, *Popcorn is a Seed*, remind students that seeds have two purposes: 1) to start new plants, and 2) to make food for people and animals.

Preview the lesson. Ask students if they think plants can move from place to place. Discuss how a plant might move.

Procedure
1. *Learn how seeds travel*. Read to students the book *A Fruit is a Suitcase for Seeds*, by Jean Richards (2002, Milbrook Press). As you read, help students notice the different ways that seeds travel: wind, water, inside fruits, with the help of people and animals. Talk about how fruits help people and animals at the same time that people and animals help the plant get its seeds to a place it can grow.

2. *Introduce planting*. Point out that people sometimes move seeds on purpose. Return to the book *A Fruit is a Suitcase for Seeds*. Call students' attention to the pages that say, "When you put a seed in the ground and water it, a new plant grows from it. Explain that putting a seed in the ground is called planting it, and clarify between the meaning of plant as a verb and plant as a noun. Then announce the class is



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going to the garden to plant seeds.
Introduce peas. Call attention to the pages of *A Fruit is a Suitcase for Seeds* that say, "Some vegetabes we eat are really fruits. They carry seeds too. Peas are seeds." Tell students they are going to plant peas. Show students the pea seeds. Have them share their ideas about how the seeds start a new pea plant and how peas that we can eat grow on the plant. Then, show students Illustration KS3a, which shows the stages of a bean plant's growth. Help students understand that pea plants grow from seeds in the same way. Alternatively, if you have time and access, you may wish to show students a book specifically about pea plants, such as *Watch Peas Grow*, by Therese Shea (2011, Gareth Stevens Publishing).

3. *Plant.* Go to the garden. Take students to the area prepared for peas and show them how to plant the pea seeds. Allow the students to plant several seeds each, until the area is fully seeded. Return to the classroom and wash hands.

Assessing Student Knowledge

Evaluate students' understanding of how seeds help plants move during a full class discussion. Ask students questions such as: *How can seeds get carried from one place to another? What are some different ways that fruits can carry seeds?* For further evaluation, have students draw or dictate a story of a seed that grows on a plant and travels to a new place.

Evaluate students' ability to plant seeds by observing them while they plant peas in the garden or in containers to take home (see extension).

Extensions

Observe the new plants. Periodically visit the peas the students planted to observe the plants as they grow. When the peas are ready to harvest, pick, wash and eat the peas, while emphasizing that fresh peas are a healthy snack.

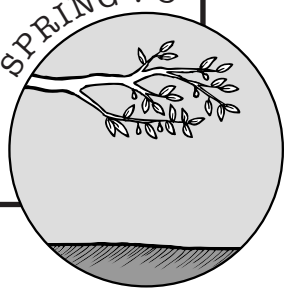
Plant peas in containers. Gather from the cafeteria and wash enough milk cartons for each student to have one. Fill the cartons halfway with dirt and let each student plant some peas in his or her carton. Label the cartons and let students take them home to watch their plants grow.

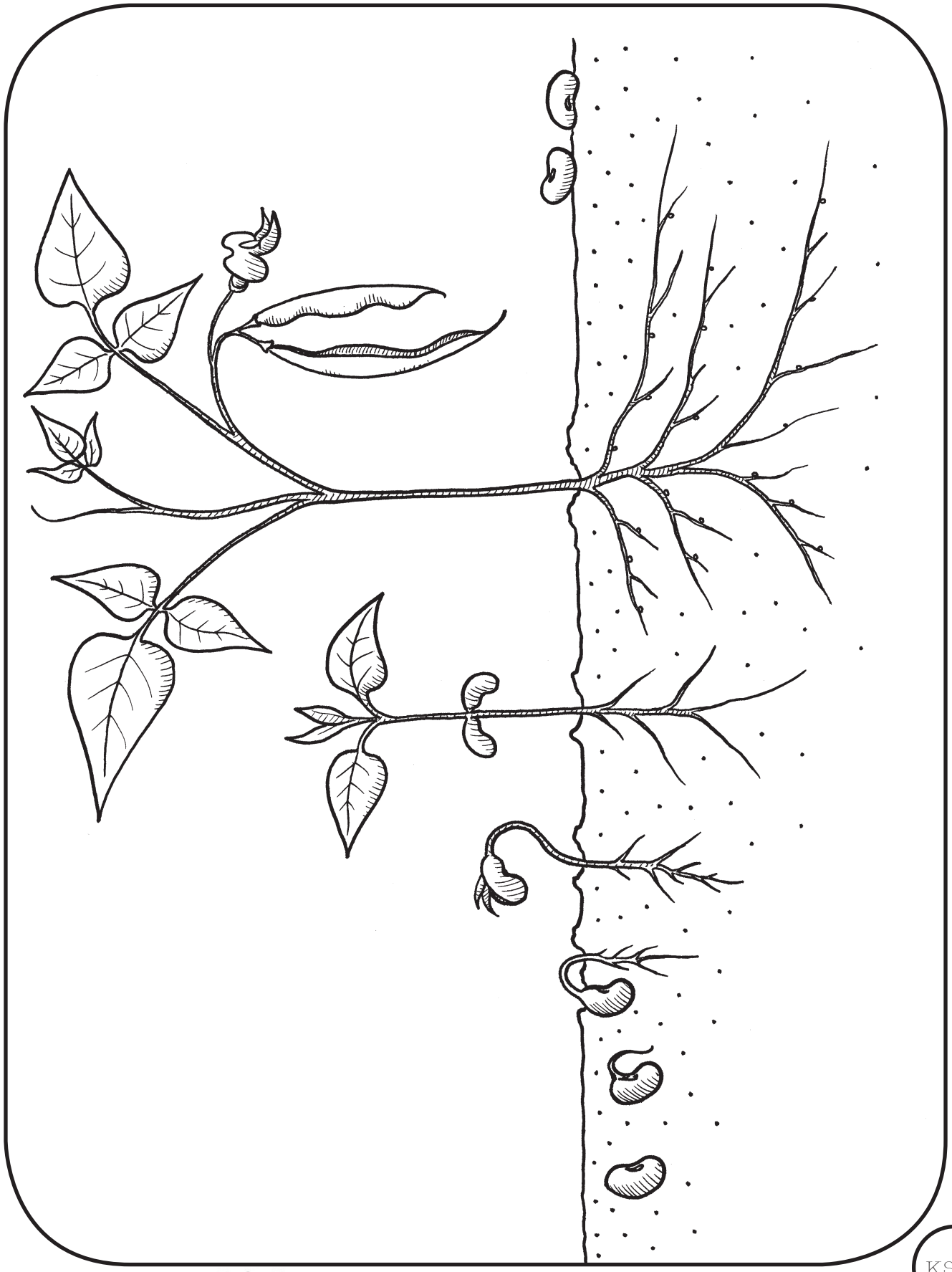
OR. Dept. of Ed. Key Standards

Oregon State Board of Education Science Content Standards:
K.3S.1 Explore questions about living and non-living things and events in the natural world.

Oregon Social Studies Academic Content Standards:
K.10. Explain how people can care for the environment.

Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects:
K.L.4 a. Identify new meanings for familiar words and apply them accurately (e.g., knowing duck is a bird and learning the verb to duck).





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Humans
Bursting
Water
Animals
Wind
snow pea
melon
filbert
plum
violet
jewel weed
poppy
witch hazel
cattail
coconut
walnut
acorn
burdock
blackberry
tomato
milkweed
maple
dandelion
Cottonwood pod