



Seed Travels- Kindergarten

Objective: The students will:

- a.) describe how seeds travel and grow to be a plant in a new spot
- b.) recognize and collect seeds from plants
- c.) examine seeds closely to determine possible mode of travel
- d.) know that plants have stems, leaves, roots and seeds (and flowers usually in Spring)

Kindergarten Science Standard:

2a Students know how to observe and describe similarities and differences in the appearance and behavior of plants and animals (e.g. seed-bearing plants, birds, fish, insects).

2c Students know how to identify major structures of common plants and animals (e.g., stems, leaves, roots, arms, wings, legs).

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| <input type="checkbox"/> Plant part diagram | <input type="checkbox"/> Dark socks |
| <input type="checkbox"/> Example of different seed types
(parachute, hook, yum-yum) | <input type="checkbox"/> Hand Magnifiers |
| <input type="checkbox"/> Bird or animal puppet | <input type="checkbox"/> Plastic collecting jars |
| <input type="checkbox"/> Scat sample with seeds | <input type="checkbox"/> Paper with seed categories |
| | <input type="checkbox"/> Silk flower and a seed |

Theme: Plants have many ways to scatter their seeds!

Introduction:

I'd like to introduce you to a plant and see if we can see all the different plant parts (leaves, stem, roots, seeds)!

Roots: Drink in water and nutrients from the soil & anchor the plant in the ground (make sound of slurping in water & have students repeat this "Roots slurp in the water and nutrients from the soil!")

Stem: Holds the plant upright and has tubes inside that move the water. Have students stand up tall and say "Stems hold the plant upright!"

Leaves: Take in sunlight and make it into food for the plant- so the plant can grow! "Yum-Yum-Yum- the leaves take sunlight and make yummy food"

Flowers: (hard to find this time of year, but maybe..) Flowers attract bees. Bees visit flowers and help the flower make seeds. "Flowers call in bees and make seeds!"

Seeds: Seeds grow new plants! They grow the baby plants of this plant! "Seeds grow new plants!"

Now we are going to focus our learning on seeds! And, we will learn that "Plants have many ways to scatter their seeds!"

In the fall, flowers wither and die, and their seeds need to travel to a new place to grow! Can seeds just get up and walk to a new place? No.... How can they scatter and get to a new place to grow???? Let's find out!

Plants have many ways to scatter their seeds:

Activity:

Gathering: Now we are going to search for different kinds of seeds. Each student will get a sock on which to collect seeds. We will collect for 10 minutes, looking for as many different kinds of seeds as we can find. I will call you back in 8 minutes.

Participants collect seeds from old dried plant stalks or use a dark sock to collect seeds (many seeds stick to material).

Observing: When the group is called back: In a minute you will get a hand lens (show them how to use the hand lens) to look carefully at the seeds you have found.

We will now sort the seeds and see how those seeds travel.

[Have the group sit in a circle for the explanation]

Here are some ways seeds travel:

Parachute seeds: Some seeds are parachute seeds. They look like tiny parachutes! Look at these milkweed seeds. When a wind blows, the seeds ride the wind. Have students act out being a parachute seeds, with arms above, pretending to float down.

Hook seeds (or Velcro seeds): Some seeds have tiny hooks. The hooks catch on an animal's fur and the animal carries the seed along and eventually drops it. Look at the hooks on this Cocklebur seed. The hooks can even stick to people's clothing and people carry the seed along for a while! (hook the seed on someone's jacket)

Yum-Yum Seeds: (acorns, manzanita berries, raspberries) Some seeds taste yummy to animals- like acorns or blackberries. The animals eat the seeds (use animal puppet) and later poop out the seeds and you can see the seeds in their "scat" (scientific word for 'poop'). [Show scat sample] Scat gives the seeds good fertilizer and helps the seeds to grow into healthy plants! Look at this scat- can you see the yum-yum seeds that the animal ate? So yum-yum seeds get eaten, go through the stomach and intestines, and end up in the animal's scat!

Floater Seeds: Some seeds float like boats and float way down a stream. Some end up washing up on shore, in a nice patch of soil and guess what happens? They sprout and grow!

Categorizing: Now you will get into small groups and try to categorize what kind of seeds you have. Do you have: parachute seeds, hook seeds, floater seeds or yum-yum seeds? Each group will get a set of containers in which to sort seeds. If you have a seed that doesn't fit our categories of Parachute, Hook or Yum-Yum seeds, you can make a new category and write it down. If you have something and you are not sure what it is, put it into a container and place a question mark next to it!

Seeds are sorted into categories. They can make up new categories like: "helicopter seed" to describe their seed category. Sometimes the students will collect other things that are not seeds, such as galls from an oak tree. If they are wondering about whether it is a seed or not, have them tape the item to their paper and make the question mark.

Wrap-up: Look at all the seeds (and other things) you have collected! Plants have many ways to scatter their seeds!

What have we learned about these seeds?

How do they travel?

When the seed arrives in a new place, it needs sun, soil, water and air to help it grow!

These seeds have many ways to travel, and that is why Circle J- Norris Ranch is covered with many kinds of plants!