

PLANT SURVIVAL

Written by Jana Shumway



Content Objective

Kindergarten Science Strand K.2: Living Things and Their Surroundings. Standard K.2.1. Obtain, evaluate, and communicate information to describe patterns of **what living things (plants and animals, including humans) need to survive**. . . Examples could include that **plants depend on air, water, minerals, and light to survive**, or animals depend on plants or other animals to survive.

First Grade Science Strand 1.2: The Needs of Living Things and Their Offspring: Standard 1.2.1: Plan and carry out an investigation to determine **the affect of sunlight and water on plant growth**.

Kindergarten and First Grade DANCE Standard K.D.CR2, 1.D.CR.2: **Explore movement** inspired by a variety of stimuli

Grades: K-1

Length of Lesson: Two 30 minute sessions

Music and Materials needed:

Drum

Visuals and word strips of the following: (spread these out around the room, on the walls)

“Minerals” (soil) on GREEN paper

“Water” (either rain or just water) on BLUE paper

“Light” (sun) on YELLOW paper

“Air” (swirling wind) on RED paper

“Space” (large field with a few plants) on PURPLE paper

Visuals of the “Mystery Plants” (plant varieties) Ideas include: pine trees, flowers, vines, cactuses, bushes, moss, forest trees, poky weeds, etc. (Keep these in a pile – do not put these pictures on the wall)

Music: I use “First Flight” by Alasdair Fraser or “Everything Epilogue” by Safri Duo



Introduction and Exploration with Movement

Spread the students out into the space



1. Say, "When I say the color Green, you need to move like this." (Demonstrate moving in many ways, low to the ground.) Then say, "GREEN," and while they are moving low to the ground, encourage them to move slowly, use their arms and legs, roll, crawl, slither, reach, etc. Make sure they stay low to the ground. Tell them that this is where the soil is. NOTE: Soil is NOT food for plants. Plants make their own food, yet they pull nutrients from the soil.



2. Say, "When I say the color BLUE, you need to move like this." (Demonstrate jumping up high and going down low; then go to a new place in the room and jump up high and go down low.) Then say, "BLUE," and have them jump high and go low in different areas of the room. Tell them this is like rain falling from the sky.



3. Say, "When I say the color YELLOW, you need to move like this." (Demonstrate reaching and stretching in many ways). Then say, "YELLOW," and have the students reach and stretch. Try stretching high, behind you, slowly, while twisting, with your head, with your knees, etc. Tell them this is like the sunrays that reach towards the earth.



4. Say, "When I say the color RED, you need to move like this." (Demonstrate doing a swirl, then move slow and sustained to a new area, then do a different swirl, then move slow and sustained.) Then say, "RED," and have the children try the swirling and sustained movements. Tell them that this is like the wind, or air.



5. Say, "When I say the color PURPLE, you need to move like this." (Demonstrate big, wide movements; do movements that go from small to big, do movement that backs up as it gets wider.) Then say, "PURPLE," and have the students try the wide, big, backing up movements. Tell them that this is like filling up big space.

Review

Now quiz them. Say one color and have them respond with the appropriate movement. After they can remember all of the movements that correspond with the colors, then tell them, "Today we are going to try to grow some plants in our room! ...But how do plants grow? They need nutrients (do the low movement). Their roots absorb nutrients from the soil. They need water (do the high and love movements). They need light (do the reaching movement). They need air (do the swirling movement). And they need space (do the wide movements)." But now let's see some example of different types of plants.

Plant Varieties

Hold up a picture of the following plants (these will later be the "mystery plants"). With each picture, have the students make the same shape with their bodies.

Pine Trees (triangle shapes)

Flowers (curved, rounded petal shapes)

Cactus (crooked, ointed, angled, pokey shapes)

Bush (big and wide shapes at a middle level)

Forest Tree (twisted tree trunks, twisted backs with bent arms)

Moss (keep low to the ground and spread out wide)

Vine (long, skinny, spiraled shapes)



Split into groups

Now have the students sit in a circle. Go around the circle and tap each child's head to assign them a color. You will also assign some to sit in the middle of the room. Have them go to the color (on the wall) that they were assigned, or sit in the middle. "GREEN...BLUE...YELLOW...RED...PURPLE...SIT IN THE MIDDLE OF THE ROOM." Repeat until each child has an assignment.

Then tell the students that those "in the middle of the room" will represent the "mystery plant" and we'll see what plant will grow from those little "seeds". Have the students in the middle go down really low in a seed shape. Then secretly show, only those students creating the seed shapes, a picture of a "mystery plant" (pine tree, cactus, flower, bush vine, etc.). Then they'll know what shape/plant they'll need to grow into.

The rest of the students get to help those little seeds grow. Call out a color and what the color represents. "Blues come out and let me see the rain." ... "Blues go back and sit down." ... "Yellows come over near the seeds and reach as the sun light stretches towards the seeds." ... "Look, it's working! The seeds are starting to grow!" ... "Reds and greens come out. I love the swirling air and how the greens are keeping so low to the ground so the seeds can get nutrients from the soil." Once each color has had a chance to do their part, have the students guess what the mystery plant is. "Yes, these seeds turned into bushes. We can tell by their big, fat, wide shapes."

Then have all the kids rotate to the next color, with one group coming in the middle to represent the seeds or "mystery plant". Have the groups continue to rotate until all of the groups have done every color or part.

Conclusion

Review what they learned by asking the question, "So what does it take to help a plant grow?" Discuss how light, nutrients, water, air and space help plants grow.

Optional ideas

I have done this with scarves of each color (little "juggling scarves"). The scarves are fun yet they can take away from the movement. The students get so excited to wiggle the scarf around that they forget to really do the particular movements like stretch or go down low, etc. But it's still a fun option.

