

Standard: Science A12, A15, B1, B2, Math.6, Cultural E2

Concept: Seeds resemble other seeds from their parent plant. They don't always fall and grow directly under the parent plant. Seeds travel in different ways. Students will conduct scientific investigations to determine how the seeds travel.

Gear Up:

Students collect seeds (and cones) from the nature trail. Ask the children to note where the trees are growing, and ask how they think about how the plants happen to grow where they do.

Explore:

Students do three tests to see how the seed might travel.

1. **Air Test:** Blow on seed to see if it floats or falls. (These should be freshly gathered)
2. **Hitchiker Test:** Gently touch the seed with a teddy bear's fur. If it sticks to the fur, it is a "hitchhiker."
3. **Water Test:** Drop the seed in a bowl of water to see if it floats or sinks.

Draw seed. Tape picture or seed on an individual Venn Diagram

Process Skills: Observing
Infering
Questioning
Recording Data
Using a Venn Diagram

Apply/Assess:

Ask students to predict what a seed (not tested) might do if they blew on it, touched it with the fur or dropped it in water. Have the student record predictions in their Science Notebook, then test their prediction.

Process Skills: Observing
 Predicting

Generalize:

Have students compare their charts with others. Note and discuss any discrepancies. (Some seeds may appear in more than one category)

Students might do research on plants/seeds. Which plants are native to our area, and which were brought in by homesteaders.

Extensions:

Walk outside again and see if student predictions seem to partly explain the places things grow.

Ask a homesteader, gardener, or grandparent to come talk with the children about ways they experience their natural environment in a responsible way. Also, it would be neat to have someone from the Senior Center come in and talk about changes they have noted in the vegetation in this area since they have lived here.

Plant seeds in different areas and see what happens. (ie. wet seed/dry seed, or sunny/shady).

Materials:

An assortment of seeds
A shallow bowl
A stuffed animal
Pencil

Student seed collections
Water: enough to fill the bowl
Paper
Tape

LCM SCORING GUIDE

MARGARET A. BABCOCK

HOW DOES THIS SEED TRAVEL? SEED OBSERVATION AND SORTING

OUTSTANDING		SATISFACTORY		MORE PRACTICE
5	4	3	2	1
STUDENT SORTS ALL SEEDS IN A LOGICAL MANNER AFTER TESTING WITH WIND, WATER, ETC.	STUDENT SORTS AT LEAST FIVE SEEDS AFTER TESTING	STUDENT SORTS SOME OF THE SEEDS IN A LOGICAL MANNER AFTER TESTING	STUDENT SORTS SEEDS	STUDENT IS PRESENT ON DAY OF ASSESSMENT
STUDENT'S CHART IS NEAT AND EASY FOR ANYONE TO READ	STUDENT'S CHART IS NEAT OR EASY TO READ	STUDENT HAS MADE A CHART AND IT CAN BE UNDERSTOOD WITH EXPLANATION	STUDENT HAS WRITTEN SOMETHING	
STUDENT IS ABLE TO EXPLAIN AND DEFEND HIS OR HER RESULTS	STUDENT TALKS ABOUT RESULTS	STUDENT CAN EXPLAIN RESULTS WITH SOME PROMPTING	STUDENT CAN ANSWER SIMPLE QUESTIONS	
STUDENT FOLLOWS PRODUCTIVITY, SAFETY AND KINDNESS RULES	STUDENT FOLLOWS PRODUCTIVITY, SAFETY AND KINDNESS RULES	STUDENT WORKS WITH A MAXIMUM OF ONE REDIRECTION	STUDENT IS ALLOWED TO REMAIN WITH THE CLASS THE ENTIRE TIME	
STUDENT HAS IDEAS FOR FURTHER EXPLORATIONS OR CONNECTIONS	STUDENT MAKES A CONNECTION TO OTHER SCIENCE EXPERIENCES	STUDENT MAKES A CONNECTION TO OTHER SCIENCE EXPERIENCES		

Overall score of 21-25= O, 17-20=S+, 12-16= S, 8-12= S- ,
Less than that means reteaching or further practice