



## Grade Level

1<sup>st</sup>/2<sup>nd</sup> Grade

## Duration:

40-45 minutes (Pre-Recorded video and live, virtual instruction)

### CA Standards

Grade 1-Life Sciences

Grade 2-Life Sciences

### NGSS Aligned

1-LS1 From Molecules to Organisms: Structures and Processes

2-LS2 Ecosystems: Interactions, Energy, and Dynamics

## Lesson Overview

In this lesson students will discover what a seed requires to be dispersed, and to optimize its chance of survival. They will look at how the structure of different seeds relates to the dispersal methods. They will discover how seeds travel from a parent plant in search of water, sunlight, and nutrients. Furthermore, by conducting follow up experiments, students can notice those characteristics which encourage seed dispersal by means of wind, water, animal carriers, and pod explosion.

## Objective

At the end of the lesson students should be able to:

- Define seed dispersal and describe is involved in the seed dispersal process.
- Differentiate between 4 types of seed dispersal methods: wind, water, animals (including humans), and pod explosion.
- Understand that living organisms within an ecosystem will survive and grow only if their needs are met.

## Materials

- Ms. Smarty-Plants™ virtual field trip video
- Ms. Smarty-Plants™ Documents (printed or Google Docs form)
  1. Vocabulary list document
  2. Seed Dispersal Word Search
  3. Google Quiz Review document
  4. Post Activity document
  5. “Which Earth Hero Are You?” document
- Paper, crayons, color pencils and/ or markers
- Virtual Classroom meeting platform (ex: Google Classroom, ZOOM, Seesaw, etc.)

## Lesson Procedures

1. Pre-Activity- The “Minute with Ms. Smarty-Plants™” video is played by the teacher 1 week before the virtual fieldtrip. Students will watch this brief, fun video introducing their virtual fieldtrip to The Water Conservation Garden! In the video they will meet Ms. Smarty-Plants™ and she will give the students a task to complete prior to the field trip. The “Minute with Ms. Smarty-Plants™” video will be shared in your confirmation email.
2. During Class- Ms. Smarty-Plants™ visits your class! The day of the virtual fieldtrip starts with a short video of Ms. Smarty-Plants™ teaching in The Garden along with a sing-along in American Sign Language. During the live virtual instruction, students will engage in a game of “Hide and Seed”. Each student will draw an acorn on a piece of paper. Once all the students have drawn their acorn, they will have 15 seconds to fold it and hide it somewhere in the room and return to their screen. After they have hidden their acorn drawing, MSP will review material learned in the video. As the lesson draws to a close MSP will revisit the hidden acorn and give the children 15 seconds to find their drawing.
3. Post Activity-Students can complete a lesson based word search. To further enhance your student’s experience, a free Ms. Smarty-Plants™ seed packet will be available for pickup at The Water Conservation Garden.

## Teacher Resources:

This video is a fun introduction to see dispersal! Play this video prior to your field trip

[How Seeds Move](#)

**Stay positive & make a difference!**

We encourage each student to create their own Earth Hero moment.

(see document [“Which Earth Hero are You?”](#))

