

Lab Assistant: Seed Walk – Explore Seed Dispersion



Student Lab Objectives:

- Walk with students outside to find a variety of seeds
- Explore their collected seeds under the microscope
- Sort and classify their seeds according to the way they are dispersed (wind, water, animals, or popping)

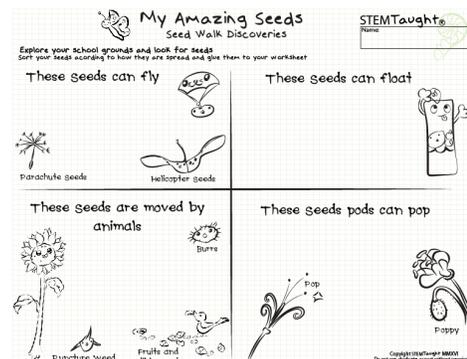
Lab Prep:

1. **From Kea Crate**– STEMTools that each student will need: 1 Maggie Magnifying Glass, 1 Tobey Tweezers, 1 sample collecting baggie
2. **Get microscope cart** – one microscope per student
3. **Print student lab sheets** – one per student



Running the Lab Activity:

1. **Talk to your class about seeds and the ways that they move (5 min).**
3. **Show the in-class movie:** Let's Take a Seed Walk: Spreading Seeds (5 min).
4. **Go for a seed walk - Class Exploration Activity:** Take your students for a walk outside to explore and discover the many types of seeds on your school grounds. From tiny weeds to tree seeds your class should be able to discover a variety of seeds and collect them with their tweezers. Each child will need a sample baggie for collecting and a magnifying glass for observing. Remind students to look for clues that will help them determine how the seeds are spread in nature. (20 min)
5. **Microscope observation** of seed samples: Allow students to explore their seeds and their classmates' seeds. Harbor the excitement that comes with their discoveries and assist students that need help using the microscopes. Help students use the lowest magnification option, and top lighting option. Help students adjust eyepiece width to fit their eyes width and assist students who need help getting the hang of focusing. Focusing tip – Instruct students to turn the knob all the way in one direction and then slowly turn the knob in the opposite direction until their image is in focus. (30 min)
6. **Student Worksheet activity:** Pass out 1 student worksheet per child. Ask the students to sort their seeds according to how they are spread in nature and use white school glue to glue their seeds to their paper in the appropriate category, transported by wind, water, animals, or popping. Fill a container of water in your sink and leave it there for students to use to float test their seeds as they please. Ask them to use the observations from the microscopes to determine how their seeds are transported. Microscopic hooks and barbs cling to animal fur, thin light fluffy stuff and filaments are easily blown by wind, and empty seed pods with curled ends often indicate that it popped suddenly. Encourage student to also draw their findings on the worksheets. (20 min)



Additional note: The three distinct activities in this lab can be done in separate blocks of time if you wish. Splitting up the activities can prolong the excitement for STEM in your class and give students something to look forward to. We recommend at least doing the worksheet sorting activity at a later time so as not to detract from the microscope exploration time.