



BIG GREEN LESSONS

Seed Saving: Pre-Kindergarten – 2nd Grade

Lesson Outcomes

In this lesson students will collect and save seeds from their Learning Garden.

- All plants make seeds, which can be planted again.
- Seeds come from plants in our Learning Garden.

Standards Alignment

Next Generation Science Standards

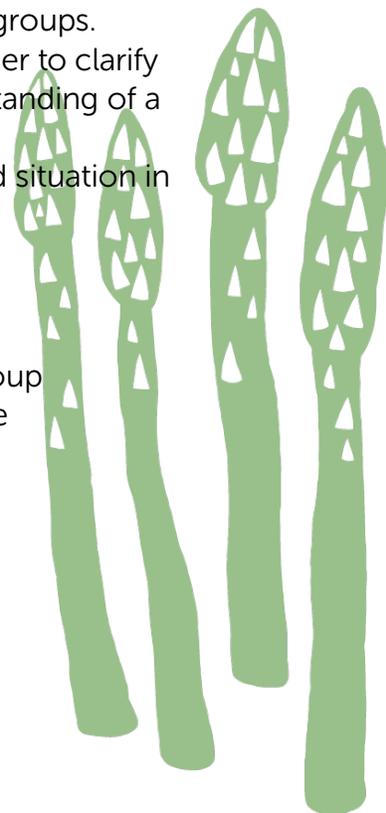
- 1-LS3-1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.
- 2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.

Common Core State Standards – English Language Arts

- SL.K.1. Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.
- SL.K.3. Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
- SL.K.6. Speak audibly and express thoughts, feelings, and ideas clearly.
- SL.1.1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.
- SL.1.3. Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.
- SL.1.6. Produce complete sentences when appropriate to task and situation.
- SL.2.1. Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.
- SL.2.3. Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.
- SL.2.6. Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

Materials and Preparation

- Seed Saving Materials
 - Container or brown paper bag, 1 per student or student group
 - Envelopes for long term storage, see Seed Packet Template
 - Sharpie to mark storage envelopes or bags
- Seed Saving Signs, write in plant name
- Paper Plate, 1 per student or student group
- Magnifying Glass, 1 per student or student group
- Review lesson and familiarize yourself with your Learning Garden



- *Optional: supplies for additional Learning Garden activities*

Teacher Background

Many plants in the Learning Garden will produce seeds that are easy to harvest. Seed saving is a fantastic activity for your students to participate in because it touches on so many different classroom connections. Seed saving will stimulate your students five senses while also provide an opportunity for you to teach cycles, seasonality, and stewardship. In addition to the classroom connections, seed saving expands on the potential utility you can get from plants in your garden and it is also economical!

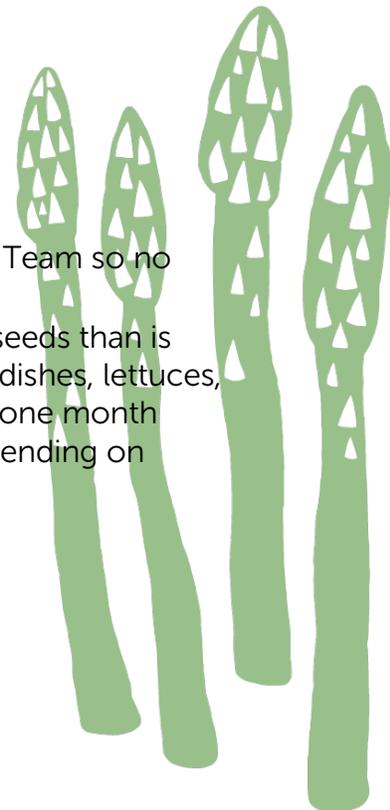
Seed collecting is a simple process. Before you collect seeds with your students take a tour of your Learning Garden to identify which seeds you plan to collect with your students. Some seeds will be in fruits, pods, or husks while other seeds will be growing fully exposed! To collect seeds, have students use their hands to either remove the dry and hardened seeds or the pods or husks (which contain dry and hardened seeds). Students can place the seeds directly into a small container or a brown paper bag. Collect seeds as they become available and even ask to leave specific plants to grow in your garden until they produce seeds. Store your seeds in either an envelope or brown paper bag.

The plants below commonly provide you with seed harvesting opportunities:

- Fennel
- Dill
- Cilantro (Coriander)
- Other Herbs
- Sunflower
- Beans
- Lettuces
- Tomatoes
- Peppers
- Cucumbers or other squashes
- Radishes
- Broccoli

Tips for success:

- Communicate your intentions to harvest seeds with your Garden Team so no one inadvertently removes the plants you will be collecting from.
- Leaf and root vegetables require more growing time to produce seeds than is typically planned for in the vegetable growing season. Let your radishes, lettuces, and greens “go to seed” by not harvesting their leaves for at least one month prior to your seed collection date. More time may be needed depending on specific plant.
- Use the seed saving signs in your Learning Garden.



Introduction

Spend time discussing the following introductory questions:

- Where do plants live?
- Do all plants make seeds?
- Can we collect seeds from plants?
- Do you think seeds are big, small, or all different sizes?

Activity

1. Welcome your students to the Learning Garden and line students up along one side. Stand on the opposite side of the Learning Garden so you can address the entire group.
2. Ask students if they know what they will be doing in the Learning Garden for the day's lesson. Let them know they will be collecting seeds from the Learning Garden that can be planted next year!
3. Invite your students to explore the Learning Garden and to hunt for seeds that can be harvested. Give students 3-5 minutes to explore the garden. Once finished, bring students back together and review their findings.
4. Take students on a quick tour of the Learning Garden, identifying the seeds that they will be collecting today. Place a seed saving sign at each plant to help the students identify the plants they will be harvesting from. Demonstrate how to properly harvest or collect a seed from each plant.
5. Break up students into groups or let students work individually. Pass out a container or brown paper bag to each student or student group.
6. Once you return inside with your seeds have your students return to their seats, either in groups or individually. Let your students know that together you will be exploring the seeds you just collected!
7. Distribute a paper plate and magnifying glass to each student or student group. Ask your students to pour their seeds onto the paper plate so they can see all of their seeds at once.
8. Go through the following prompts with your students and discuss.
 - a. Find the smallest/largest seed.
 - b. Line up seeds from smallest to largest.
 - c. How many seeds are more than one color?
 - d. How many seeds are one color?
 - e. Sort your seed by type (i.e. beans, sunflowers, dill).
 - f. Create a seed pattern.

Conclusion

Have students share key parts of the day's activity and review the Lesson Outcomes. Students should clean-up the Learning Garden as needed.

Additional Learning Garden Activities

Extend your Learning Garden experience and have your students participate in any of the following Learning Garden activities as appropriate. Activities can include creating seed saving envelopes, planting, watering, weeding, and harvesting.

