



BIG GREEN LEARNING GARDEN

Learning garden talking points

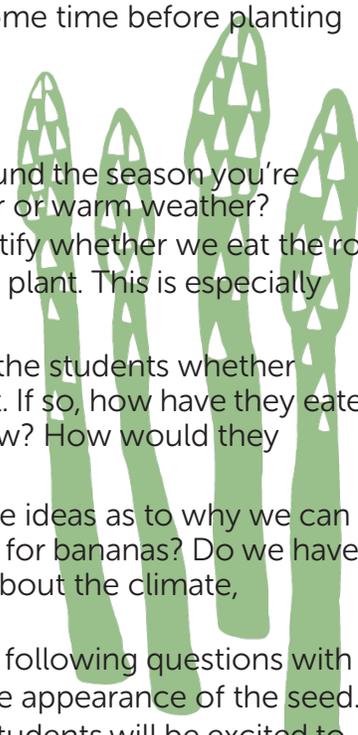
The following are suggested talking points that can be used when leading planting or harvesting days with students in the Learning Garden, or really at any time you are in the Learning Garden with students! Select talking points that are most appropriate for the students you're working with.

Introduction to the Learning Garden

- **Has anyone ever planted a seed or seedling before?** Has anyone ever worked in the Learning Garden before? Does anyone have a garden at home? Has anyone grown anything "edible"? What does "edible" mean? Allow students to share their answers and experiences.
- **What are the advantages of growing and eating local food?** Food tastes better when it's fresher! If the students are older, you can talk about the environmental effects of shipping food all over the world vs. harvesting it straight from your garden.
- **In addition to plants, what other living things might we find while working in the garden?** There are often many insects in the garden which is a good thing for garden health (a healthy garden is full of life!) but could be viewed as exciting or scary. Depending on the garden and the students you're working with, it may be good to address bees, worms, or other creatures right off the bat to prevent too much distraction or squealing. If possible, you can also include some time before planting to explore the soil, dig, hold worms, etc.

Introduction to the seeds/seedlings

- **What crops are we growing?** Try framing the question around the season you're planting in. Will we be planting crops that like cool weather or warm weather?
- **What part of this plant do we eat?** Have the students identify whether we eat the root, stem, leaf, flower, fruit, or seed of the crop you are about to plant. This is especially helpful if you plant a "Plant Parts" themed garden.
- **What recipes have you eaten that feature this plant?** Ask the students whether they've ever eaten the crop you're about to plant or harvest. If so, how have they eaten it? Was it in a specific recipe? How was it cooked? Was it raw? How would they describe the taste?
- **Why can't we grow that?** Allow older students to formulate ideas as to why we can or cannot grow certain crops in our region. Is it warm enough for bananas? Do we have enough space for apple trees? This will get them thinking about the climate, seasonality, and where their food comes from.
- **What do you think the seed looks like?** Work through the following questions with your students to help them form a hypothesis regarding the appearance of the seed. By the time you finally reveal what the seeds look like, the students will be excited to



plant whatever it is, regardless of whether they like to eat it.

- Do you think it is a big seed or a little seed?
- What color is the seed?
- What shape is the seed?
- Is the seed smooth or rough and spiky?

Caring for the Learning Garden

- **What do plants need to grow?** Plants need L.A.W.N.S. (light, air, water, nutrients, and space)

LIGHT & AIR

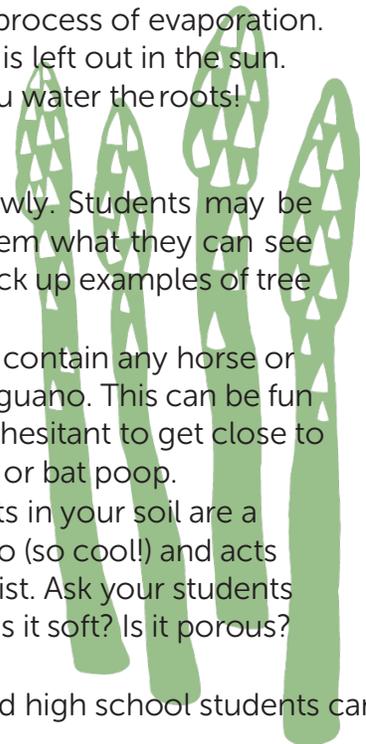
- **How will our plants get enough light and air to grow?** We don't need to do anything to provide these things; the sun and the air we breathe supply these needs for our plants.
- **What is photosynthesis?** If you're working with older students, you can talk about the roles that sun, water, and air play in the process of photosynthesis.

WATER

- **What is our watering system called?** Irrigation! This is a good vocab word for students and allows you to show off the hoses and tubes that water the plants. It's also a great opportunity to talk about water conservation (water directed to roots, less evaporation, less runoff, etc.).
- **Why do we aim water at the soil rather than at the plant itself?** We water the soil to get the water directly to the roots, the part of the plant that soaks up all the water (the leaves cannot take in the water and are more susceptible to diseases when they're wet). We also can help avoid the process of evaporation. Ask your students what happens to a glass of water that is left out in the sun. This will help them think about evaporation and why you water the roots!

NUTRIENTS & SOIL

- **What colors do you see?** Start the soil discussion slowly. Students may be hesitant to jump elbow-deep into the soil, so asking them what they can see helps to break the ice. Have your students identify and pick up examples of tree bark, twigs, dried leaves, etc.
- **Is there poop in this soil?** The soil we provide does not contain any horse or cow manure, but it may contain worm castings and bat guano. This can be fun to point out to your students. If the students are already hesitant to get close to the soil, or don't like the smell, don't mention the worm or bat poop.
- **What are those little white things?** The small white parts in your soil are a mineral called perlite. This mineral comes from a volcano (so cool!) and acts like a sponge, soaking up water and keeping the soil moist. Ask your students to pick up a piece and crush it between their fingers. Was it soft? Is it porous? Help them think about the physical properties of perlite.
- **Where do plants get their food?** Late middle school and high school students can



think about nutrients and the chemical elements in the soil. The primary three nutrients are Nitrogen (N), Potassium (K), and Phosphorous (P).

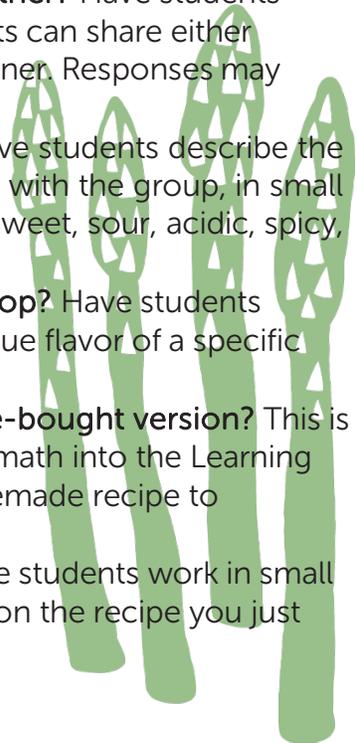
- **Why do we cover up our seeds?** Ask your students what would happen if there were a big rain storm, or a strong wind, or a hungry bird flying by. It's important to tuck our seeds into their beds so we can protect them and provide direct access to the nutrients in the soil.

SPACE

- **Why do we use a measuring tool when we plant our seeds?** This is a great opportunity to talk about a plant's need for proper spacing when we're planting seeds with the Planting Strings activity.

Tasting Plants from the Learning Garden

- **What does it mean for something to taste fresh?** Have students describe the qualities that make fresh fruits and vegetables taste "fresh" and think of other things they eat that taste fresh.
- **What does it mean for something to be refreshing?** Have students define the word refreshing and think of other things they eat (or drink) that are refreshing.
- **What does it mean for something to be healthy?** Have students define the word healthy and think of other fruits, vegetables, or recipes they eat that are healthy. Take it one step further by asking students to change a recipe to make it healthier.
- **How would you describe the crop to someone else?** This is a great opportunity for students to practice and share observations with the group, in small groups, or with a partner. Responses may include observations about the crops color, size, texture, or taste.
- **How would you describe the flavors of two crops together?** Have students describe the flavors of two crops paired together; students can share either descriptions with the group, in small groups or with a partner. Responses may include: bitter, sweet, sour, acidic, spicy, herbal, & earthy.
- **How would you describe the flavors of this recipe?** Have students describe the flavors of a recipe; students can share either descriptions with the group, in small groups or with a partner. Responses may include: bitter, sweet, sour, acidic, spicy, herbal, & earthy.
- **What other recipes would be enhanced by a specific crop?** Have students think of other dishes that would be enhanced by the unique flavor of a specific crop.
- **How does our homemade recipe compare with a store-bought version?** This is a great opportunity to discuss nutrition labels and infuse math into the Learning Garden. Students can compare the ingredients of a homemade recipe to something packaged or storebought.
- **Can you create your own Learning Garden recipe?** Have students work in small groups with a partner to develop their own recipe based on the recipe you just tasted.



Conclusion

- **How can we continue to care for our Learning Garden?** Talk about the importance of watering the garden, respecting the plants, and protecting the garden from people who may not know that seeds have been planted in it.
- **When can we harvest the garden?** Ask for a definition of “harvest” if the students are younger. Talk about how long it will take before they get to harvest and eat all the garden goodies they just planted.
- Thank the students for all their hard work in the garden.

Remember, talking points are to be used at the discretion of each individual teacher, depending on available time and relevancy! Have fun asking your students questions and look for questions that might turn into a class project or experiment.

