Seeds can live for several years if stored under the right conditions. Different varieties of seeds will have different life spans so be sure to look up how long your seeds will last before you plan to store them.

**To store seeds until the next growing season:** Keep seeds in brown paper bag in a jar with a loose lid.

**To keep seeds safe to plant in a few weeks:** Keep seeds dry and avoid extreme temperatures (for example: do not leave them in your car or outside).

### Germinating Seeds
The first step to germination is to rehydrate the seed. Once a seed has soaked up all the water it needs, it will begin to germinate at the right temperatures. Most seeds ideally germinate between 80-85 degrees Fahrenheit, but will still germinate (just slower) at temperatures above or below the ideal range of 80-85 degrees Fahrenheit. If a seed fully dries out during the germination process, it may not survive. Be sure to take extra care and keep your seeds moist until it has grown roots and leaves.

### Troubleshooting Germination
Unless collected from your own garden, there is very little chance you could purchase bad seed. The most common reasons seeds do not germinate are underwatering, overwatering, or cold temperatures.

If you are germinating seeds indoors, remember that the smaller the container of soil which contains the seed, the more rapidly it will dry out. If you need to leave your seeds unwatered for the weekend, you should plant your seeds in clean milk cartons or something larger so the soil will not dry out. Germinating seeds in trays such as egg cartons are not recommended as they will dry out too quickly.

If your seeds are not germinating in the Learning Garden, they most likely will need to be watered more or less frequently to see better results. If you have overwatered, your seeds will soften and mold. Cold day or night time temperatures will slow seed germination significantly. Wind and sun may dry the top layer of soil in your garden within a day. Check the temperature and soil moisture each day. If you are still unsure as to why your seeds have not germinated, consider reaching out to your garden educator.

**Germination Activity**
Harvest seeds from your garden and germinate them in the classroom with your students. Germinate seeds in a plastic bag with a moist paper towel. Check the bag each day to make sure they stay moist. Add in a quick math connection by figuring out the germination rate.

Example: if you attempt to germinate 10 lettuce seeds and only 8 germinate, that means your germination rate was 80%.
Sourcing Seeds

Big Green will provide enough seeds and seedlings for you to fill your Learning Garden. If you would like more seeds, many seed companies donate to schools! Take a look at our ‘Requesting Seed Donations’ page for directions on sourcing seeds from Baker Creek Heirloom Seed Co., and look online for other opportunities from other organizations. Consider planting seeds in milk cartons from the lunchroom with your students so they can take their plants home for their own gardens.

Gardeners grow seedlings in a controlled indoor environment to assure they have the strongest and largest plants possible to plant in their garden. Growing seedlings indoors allows you to extend your growing season past your local seasonal constraints resulting in much earlier harvests.

Growing seedlings from seed

Growing Containers: Germinate seeds in clean milk cartons so students can take their plants home for their own gardens. Be sure to cut the top of the milk carton off and cut a few holes along the bottom (the corners are the easiest) to make sure you can efficiently water.

Location: If you are growing seedlings indoors, find a warm place with direct sunlight for at least 8 hours per day. If you do not have adequate light, you will need to purchase indoor grow lights. If your plants do not have enough light, they will grow ‘leggy’. Leggy plants grow tall and weak and typically are not strong enough to survive when they are planted outdoors.

Timing: Check the seed packet for specific directions on when to plant indoors. A common recommendation would be, “Plant indoors 4-6 weeks prior to average last frost”.

Thinning

To ensure you grow strong and large seedlings, plant more seeds than you intend to grow and once all the seeds have sprouted, pull out the weakest plants and leave one seedling that you think will grow into the strongest and largest plant.