



Module 2 Activity

Tomato Seed Starting

Materials List

- Tomato seeds
- Sterile seed starting mix or potting soil
- Seedling cell trays
- Plant labels
- Spray bottles
- Water source
- Paper towels or rags
- Compost or vermiculite (*optional*)

Seed Starting Instructions

1. Add sterile seed starting mix to cells or containers, leaving about half an inch at the top. Gently tamp the mix down and then pre-water with a gentle sprinkle.
 - a. *Note: Potting soil often drains poorly and can harbor bacteria that will damage seedlings, so sterile seed starting mix is preferred.*
2. Place 2-3 seeds in each cell or container equal distance apart. Not all these seeds will germinate most likely, but we can thin out the ones that do.
3. Cover seed with more mix to the top of the cell or container. Gently pat down mix over seeds to get rid of any air pockets in the cell/container.
4. Water the seeds lightly, being sure not to soak the soil. You can use a spray bottle to do this.
5. Place seedlings in a warm space, around 70°F to 75°F.
 - a. At this point, we do not need any light for the seedlings just yet.
 - b. You have the option to cover seedlings with a humidity dome.
6. Once you see the first sprouts, the seedlings should be placed in a well-lit area—either by a south-facing windowsill or under a growing light.
 - a. At this point any humidity dome should be removed to promote air circulation which helps prevent disease and bacteria growth.

Seed Starting Instructions continued

7. After about two weeks, the seedlings need to be thinned or snipped at the soil line. We will choose the strongest plants in each cell to continue growing and remove any seedlings that are having difficulty growing.

8. After about a month of growing, tomato seedlings may need to be repotted into larger containers.

- Remove a seedling from their cell and check the roots to determine if the plant needs more space to grow.
- The new container should be at least an inch (in diameter) larger than the original cell.
- Fill the new container with about 1-2 inches of mix, place seedlings, then fill in the container around the plant. Mix should cover most of the stem, coming up just below the plant's leaves. The stem will sprout more roots when covered.

Transplanting Instructions

Tomato seedlings should be transplanted after seedlings grow about 4" to 6" above the soil and nighttime temperatures are generally above 50°F and no lower than 43°F.

At this point in their growth, you will notice that the seedlings have established foliage leaves and the roots hold onto the soil in a clump. Plants can be put in the ground with soil covering lower leaves to encourage more root growth. You can also pinch off lower leaves as you see fit using your thumb and index fingernails.

Tomato plants should be placed 12-18 inches apart from one another so that each plant has access to nutrition within the soil without taking from another.

Growing Schedule Template

In Philly we are in Plant Hardiness Zone 7b, which means we have a temperate climate. The following dates are from the 2023 growing season and can be used to create a growing schedule for future seasons.



Growing Schedule Template continued

Seed Start date	March 14
Approximate Sprout date	March 21 - March 24
Hardening-off* dates (10-day period)	April 24 (start) - May 3 (end)
Days 1-3 from seed start date	20-30 minutes of sunlight, or 1 hour of shade (if cloudy day)
Days 4-6 from seed start date	1-2 hours of sunlight, or 3-4 hours of shade
Days 7-9 or 7-14 from seed start date	2-4 hours of sunlight, or all-day shade
Transplanting date	May 3

**Hardening-off is the process of transitioning your plants from indoors to outdoors, acclimating them to the wind, sun, and climate. Hardening-off should be done earlier in the day when temperatures are above 65°F. Cloudy days are a great time to start.*

