Starting From Seeds

Phase 1: Starting your Seeds indoors

Select your seeds
Find seeds grown specifically for this region (Zone 8b-7a)

Use recent seeds; germination rate can be cut in half after every year

Start your seeds at the right time with the right amount of space

Seed Starting Mix
Purchase at any garden store, or make your own:

- 5 gall. well-sifted compost, 2 gall. perlite, 2 gall. coconut core, 1 c. soil amendment (2-1-2 ratio)

Containers
Anything goes as long as it has drainage and is at least 3" deep

Heat, Light and Moisture
Seeds prefer to be warm and damp before they have fully germinated.

They require no light at this phase.

Be extra gentle with your watering techniques—spray bottles work great. Soil should be constantly damp.

Temperature varies for each seed type:
See "Seed Germ Temp" in the Vegetable Guide

- Cool crops: 55-75˚ (brassicas, greens)
- Hot crops: 65-75˚ (nightshades)

Phase 2: Maintaining your starts

Light
At least 12 hours of light a day. If starting your seeds before March, consider using supplemental light (florescent shop lights 1-2" above your plants work just fine). Otherwise, they will do fine in a southern facing window with some rotation.

Heat
Keep temperature lower once they've emerged:

- Cool crops: 50-60˚
- Hot crops: 60-70˚

Water
Wait for the soil to dry out slightly between watering and try to keep water off of leaves

Nutrients
If you notice your transplants getting a little yellow after their true leaves have emerged, purchase liquid plant food to supplement their food.

Phase 3: Transplanting your starts

If you notice your plant outgrowing its original container, but it's still too cold to plant outside, transplant the plant into a container that is about an 1-2" larger on each side to allow for healthy growth.

Hardening off
A week before they are to be transplanted, begin taking your starts outside during the warmer parts of the day and back inside at night. Leave the starts outside overnight. Finally, transplant the seeds in the early evening so they have a night to settle in.

Handling Starts
Be gentle and touch only the leaves if you must. A butter knife makes for a great tool to "prick out" seedlings.

Water
Thoroughly and frequently water the seedlings into their new environments.

Starting your seeds outdoors

This will be discussed in more length at May's class (Planting Your Summer Vegetable Garden)

Temperature
Seeds will have a much better chance of sprouting if the temperature and sunlight are in their favor. Refer to the vegetable guide or check your seed packet to determine ideal conditions and check the weather and measure soil temperature often.

For ideal germination:

- Cool crops: air temperature 40-60˚ and soil temp 45-55˚
- Warm crops: air temp 60˚+ and soil temp 55-65˚

Prep the beds
Clear, loosen, & evenly spread the soil.

Water
A gentle spray is essential. Try putting damp burlap over the recently planted bed for the first 4-7 days to keep seeds in place and maintain even moisture

Important Terms

Germination
from seed to sprout

Frost Free Date
when the chance of frost is lower than 10% in a given region and the temperature will most likely stay above 33˚.

Open Propagation (OP)
are plants whose seeds are savable

Hybrid
are bred from two or more different parent stocks and are unable to pass these traits on

Cotyledon
the seed embryo and includes the first leaves of the plant

True Leaves
the second set of leaves which emerges above the cotyledon leaves.

Indeterminate
usually tomato types which are tall, vine, and will fruit somewhat consistently

Determinate
usually tomato types which are bushy, compact and will fruit mostly at the same time

All American Selection (AAS)
an award winning, standardized plant.

Plant Start Planning Guide

Vegetable	Like it?	Level	Safe to set out †	Space needs	Seed Germ. Temp.	Where to start	Germ. to Harvest
Basil		*	1 week after	*	60-90˚	Either	40
Beans		*	1 week after	**	60-85˚	Outdoor	75
Beets		*	2 weeks before	*	50-85˚	Outdoor	90
Broccoli		**	2 weeks before	**	45-85˚	Either	90
Cabbage		**	4 weeks before	***	45-95˚	Outdoor	100
Carrots		**	2 weeks after	*	45-85˚	Outdoor	70
Collards		*	4 weeks before	**	60-70˚	Outdoor	55
Corn		**	2 weeks after	***	60-95˚	Outdoor	95
Cucumber		**	2 weeks after	***	60-95˚	Either	60
Eggplant		***	3 weeks after	**	75-90˚	Indoor	70
Kale		*	4 weeks before	*	45-85˚	Outdoor	50
Kohlrabi		*	4 weeks before	*	45-85˚	Outdoor	60
Lettuce		*	4 weeks before	*	40-80˚	Either	35
Melons		***	2 weeks after	***	75-95˚	Indoor	85
Onions		*	4 weeks before	*	50-95˚	Outdoor	100
Peas		*	8 weeks before	**	40-75˚	Outdoor	60
Peppers		***	2 weeks after	**	65-95˚	Indoor	90
Pumpkins		*	2 weeks after	***	70-90˚	Outdoor	100
Spinach		*	6 weeks before	*	40-75˚	Either	40
Zucchini		*	3 weeks before	***	70-95˚	Either	55
Swiss Chard		*	2 weeks before	*	45-85˚	Outdoor	50
Tomato		**	2 weeks after	**	60-85˚	Indoor	80

* = Low ** = Moderate *** = High

† Relative to Frost Free Date: ___/___/___

Vegetable	Notes	Weeks to start before FFD (frost free date)	Days to Maturity* (after transplant)	Februrary				March					April				May					June			
				1	8	15	22	1	8	15	22	29	5	12	19	26	3	10	17	24	31	7	14	21	28
Russian Pickling Cucumber	Territorial; 1532(OG)	2 to 4	50-55								SI				HO	P									
Garden Peach Tomato	Peaceful Valley	6 to 8	62-85					SI									HO	P							

* We average 85 growing days in our region

Spring Equinox
P = Plant Outdoors
SO = Start Outdoors

Expected Frost Free Date
SI = Start Indoors
HO = Hardening Off