

| Vegetable                                     | Start Indoors<br>(Weeks Before<br>Planting Outdoors) |  | Germination<br>Temperature<br>(Degrees<br>Fahrenheit) | Days Until<br>Sprouting | Seed Sowing<br>Depth | Space Between<br>Plants | Row Spacing (for<br>Large Gardens) * | Sun/Shade            | Frost Hardy<br>** | Days to<br>Maturity | Photoperiod***        | Notes   |
|---|--|--|---|-------------------------|----------------------|-------------------------|--------------------------------------|----------------------|-------------------|---------------------|-----------------------|---|
|   | Sow Outdoors   |  |   |                         |                      |                         |                                      |                      |                   |                     |                       |   |
| Luffa   | 2  | After Last Frost                                     | 70 to 90  | 7 to 14                 | 1"                   | 36" to 48"              | 48" to 60"                           | Sun                  | Very Tender       | 120 to 200          | Neutral               | Will thrive in heat. Trellis plants to save space, as vines can be 15'+ long. Ensure adequate nitrogen. Bees love them!   |
| Ground Cherry (Golden Berry; Cape Gooseberry) | 6 to 8   | After Last Frost                                     | 75 to 85  | 7 to 21                 | 1/8"                 | 24" to 30"              | 3' to 4'                             | Sun                  | Tender            | 70 to 75            | Neutral               | Heat and drought tolerant. Expect to utilize pest deterrents like netting - squirrels love them! Seeds have low germination rates so plant extras.  |
| Bitter Melon                                  | 4 to 5   | After Last Frost                                     | 60 to 90  | 7 to 12                 | 3/4"                 | 10" to 12"              | 3' to 6'                             | Sun                  | Tender            | 40 to 64            | Neutral               | Seeds generally have low germination rates so plant extra. It is a tropical plant, so it likes heat. You will need a trellis.   |
| Artichoke                                     | 8 to 10  | After Last Frost; spring or fall for perennial types | 70 to 75  | 10 to 21                | 1/4"                 | 2' to 3'                | 3'                                   | Sun/Part Shade       | Hardy             | Varies; see notes   | Neutral               | Can grow as a perennial in zones 7-11; grow as an annual in other zones. Harvest buds while still compact to eat them. If allowed to flower the flowers are a beautiful, showy purple.                    |
| Arugula                                       | 8 to 12  | 2 Weeks before last frost                            | 40 to 70  | 5 to 7                  | 1/4"                 | 6"                      | 10"                                  | Sun                  | Hardy             | 50                  | Long Day              | Will flower with over 10-12 hours of daylight so best for an early spring or later fall crop.   |
| Asparagus                                     | 8 to 12  | After Last Frost                                     | 65 to 75  | 14 to 21                | 1/2"                 | 18"                     | 4"                                   | Sun                  | Hardy             | 730+                | Neutral               | Perennial that can be planted in fall or spring. If starting from seed asparagus stalks can be harvested sparingly the second growing season with a more thorough harvest in subsequent years.            |
| Basil   | 3 to 6   | After last Frost                                     | 75 to 85  | 5 to 10                 | 1/4"                 | 8"                      | 12"                                  | Sun                  | Tender            | 50 to 60            | Facultative Long Day  | Can start from cuttings.  |
| Beans, Pole                                   | Prefer Direct Sow Outdoors                           | After Last Frost                                     | 55 to 85  | 8 to 10                 | 1"                   | 4"                      | 18"                                  | Sun                  | Tender            | 50 to 60            | Neutral               | Pole beans will need a sturdy trellis and can grow 6' to 12' tall; they do not like to be transplanted so direct sow.   |
| Beans, Bush                                   | Prefer Direct Sow Outdoors                           | After Last Frost                                     | 55 to 85  | 8 to 10                 | 1"                   | 8" to 12"               | 36"                                  | Sun                  | Tender            | 60 to 90            | Neutral               | Unlike pole beans, bush varieties stay compact and close to the ground so do not need a trellis; they do not like to be transplanted so direct sow.   |
| Beans, Long                                   | Prefer Direct Sow Outdoors                           | After Last Frost                                     | 55 to 85  | 8 to 10                 | 1"                   | 6"                      | 24"                                  | Sun                  | Tender            | 60 to 90            | Varies                | Beans can grow 18+ inches and generally like heat. Varieties vary so make sure to read package directions.  |
| Beets   | Prefer Direct Sow Outdoors                           | 2-3 Weeks Before Last Frost                          | 40 to 85  | 7 to 21                 | 1/2" - 1"            | 4"                      | 18"                                  | Sun/Part Shade       | Semi-Hardy        | 50 to 70            | Long                  | Beets will need to be thinned after sprouting. Warmer soil temps will speed germination.  |
| Broccoli                                      | 2 to 4   | 2-3 Weeks Before Last Frost                          | 40 to 85  | 7 to 10                 | 1/4" - 1/2"          | 12" to 18"              | 24" to 36"                           | Sun                  | Hardy             | 50 -to 90           | Day Neutral           | Can plant a second round in the fall garden about 85 to 100 days before hard frost.   |
| Brussels Sprouts                              | 4 to 6   | Not Recommended                                      | 50 to 75  | 7 to 10                 | 1/4" - 1/2"          | 18" to 24"              | 12" to 24"                           | Sun                  | Hardy             | 100                 | Neutral               | In Northern regions, start early indoors for a fall harvest. Best planted midsummer for a winter harvest in warm regions or can be overwintered with some frost protection in zones 7+.                   |
| Cabbage                                       | 8 to 10  | 2-3 Weeks before Last Frost                          | 50 to 75  | 4 to 10                 | 1/4" - 1/2"          | 12" to 18"              | 24" to 36"                           | Sun                  | Hardy             | 60 to 90            | Neutral               | Can plant a second round in the fall garden about 85 to 100 days before hard frost.   |
| Cantaloupe                                    | 4 to 6   | After Last Frost                                     | 70 to 90  | 4 to 10                 | 1/2"                 | 24" to 36"              | 36" to 60"                           | Sun                  | Very Tender       | 80 to 100           | Neutral               | Melons do not like being transplanted so either start outdoors or use extra care when transplanting not to disturb roots.   |
| Carrots                                       | Not Recommended                                      | After Last Frost                                     | 40 to 85  | 14 to 21                | 1/4" - 1/2"          | 18"                     | 3"                                   | Sun/Part Shade       | Semi-Hardy        | 70 to 90            | Facultative Long      | Carrots need to be sown very shallowly; require water daily until germination. You can also cover with a towel, water over it to hold more moisture, then remove the towel as soon as germination occurs. |
| Cauliflower                                   | 2 to 4   | 2-3 Weeks before Last Frost                          | 40 to 85  | 7 to 10                 | 1/4" - 1/2"          | 18"                     | 36"                                  | Sun                  | Semi-Hardy        | 70 to 90            | Long Day              | Can plant a second round in the fall garden about 85 to 100 days before hard frost.   |
| Chives  | Not Necessary  | After Last Frost                                     | 50 to 60  | 7 to 14                 | 1/8"                 | 3"                      | 9"                                   | Sun/Part Shade/Shade | Hardy             | 60                  | Obligate Short Day    | Easy to start outdoors and do not like to be transplanted.  |
| Cilantro                                      | 2  | After Last Frost                                     | 50 to 80  | 7 to 10                 | 1/4" - 1/2"          | 4" to 6"                | 15"                                  | Sun/Part Sun         | Semi-Hardy        | 45 to 70            | Obligate Long Day     | Succession plant new seeds a week apart to have a steady supply before the plants bolt.   |
| Collard Greens                                | 3 to 4   | After Last Frost                                     | 45 to 70  | 7 to 14                 | 1/4" - 1/2"          | 18"                     | 10" to 18"                           | Sun                  | Hardy             | 70 to 85            | Facultative short day | Collard greens are one of the most cold-hardy vegetables. When thinning plants young leaves can be used as baby greens.   |
| Corn  | Not Recommended                                      | After Last Frost                                     | 50 to 90  | 7 to 10                 | 1"                   | 12" to 18"              | 36"                                  | Sun                  | Tender            | 80 to 100           | Neutral               | Corn requires cross pollination so be sure to plant a minimum of 3 to 4 rows.   |
| Cucumber                                      | 3 to 4   | After Last Frost                                     | 60 to 90  | 3 to 10                 | 1/2"                 | 24" to 36"              | 36" to 60"                           | Sun                  | Very Tender       | 50 to 70            | Neutral               | Cucumber seeds are happiest being directly sown as soon as soil warms in the spring.  |
| Dill  | 4 to 6   | After Last Frost                                     | 60 to 70  | 10 to 14                | 1/8" to 1/4"         | 10" to 12"              | 18" to 24"                           | Sun/Part Sun         | Semi-Hardy        |                     | Obligate Long Day     | Dill seeds are happiest being directly sown as soon as soil warms in the spring.  |
| Eggplant                                      | 6 to 8   | After Last Frost                                     | 70 to 90  | 7 to 10                 | 1/4"                 | 18"                     | 24" to 36"                           | Sun                  | Very Tender       | 80 to 90            | Obligate Short Day    | Eggplant likes warm soil and is well suited for raised beds, where soil temps will be higher earlier in the spring.   |
| Garlic  | N/A  | Late Fall/Early Winter/Spring                        | N/A   | Varies                  | 2" to 3"             | 2" to 4"                | 10" to 14"                           | Sun/Part Sun         | Hardy             | Varies; see notes   | Facultative Long Day  | There are soft neck and hard neck garlic varieties. Do some research to find which varieties are well-suited to your region   |
| Kale  | 6 to 8   | 3 to 5 Weeks before last frost                       | 40 to 85  | 4 to 8                  | 1/4" to 1/2"         | 12" to 18"              | 19" to 24"                           | Sun/Part Sun         | Hardy             | 55 to 75            | Neutral               | Kale can last most of the year if provided with frost protection; can space plants closer together if harvesting as baby greens.  |
| Kohlrabi                                      | 4 to 6   | 4 weeks before last frost                            | 45 to 85  | 4 to 7                  | 1/2"                 | 6"                      | 18" to 24"                           | Sun                  | Hardy             | 50 to 70            | Neutral               | Kohlrabi plants are beautiful and can be used in an ornamental garden.  |
| Lettuce, Head                                 | 3 to 4   | 2 Weeks before last frost                            | 45 to 85  | 7 to 14                 | 1/8"                 | 10" to 12"              | 12" to 18"                           | Sun/Part Shade       | Semi-Hardy        | 60 to 90            | Facultative Long Day  | Seeds need light to germinate so do not plant too deep. Head lettuces are best harvested when fully mature.   |
| Lettuce, Leaf                                 | 3 to 4   | 2 Weeks before last frost                            | 50 to 80  | 7 to 14                 | 1/8"                 | 3"                      | 6" to 10"                            | Sun/Part Shade       | Semi-Hardy        | 40 to 70            | Facultative Long Day  | Seeds need light to germinate so do not plant too deep. Leaf lettuces can be harvested early as baby greens   |
| Mint  | 8 to 10  | After last frost                                     | 65 to 75  | 7 to 14                 | 1/4"                 | 12"                     | 12"                                  | Sun/Part Shade       | Hardy             | 60 to 90            | Long                  | Can start from cuttings; mint can be very invasive, making it a great plant for container gardening.  |

|                   |  |  |           |              |                             |            |            |                |              |            |                  |  |
|-------------------|--|--|-----------|--------------|-----------------------------|------------|------------|----------------|--------------|------------|------------------|--|
| Okra              | 3 to 4   | When soil has warmed to 65 degrees       | 65 to 75  | 7 to 14      | 1"                          | 12" to 18" | 24" to 36" | Sun            | Very Tender  | 60 to 90   | Varies           | Okra seeds don't like to be transplanted. If you start them indoors, use peat pots, which can be planted with the plant.   |
| Onion, Seed       | 8 to 10  | When soil temperature reaches 50 degrees | 45 to 95  | 4 to 5       | 1"                          | 4"         | 12"-18"    | Sun            | Hardy        | 60 to 120  | Varies           | Direct seeding may not allow enough time for long-day onions to develop in season. Research days to maturity and compare to the length of your growing season to select appropriate varieties. May be started indoors to extend season.  |
| Onion, Set/Plants | N/A  | When soil temperature reaches 50 degrees | N/A       | N/A          | 1"                          | 4"         | 12"-18"    | Sun            | Hardy        | 60 to 120  | Varies           | Sets are small onion bulbs that were started the previous season. They allow for faster maturity.  |
| Oregano           | 6 to 8   | After last frost                         | 60 to 70  | 7 to 14      | 1/8" to 1/4"                | 8" to 10"  | 10" - 12"  | Sun            | Semi-Hardy   | 80 to 90   | Obligat Long Day | Oregano is a hardy plant that can be used as ground cover.   |
| Parsley           | 3 to 4   | 3 to 4 weeks before last frost           | 40 to 90  | 65 to 75     | 1/4"                        | 8" to 10"  | 12" to 18" | Sun            | Hardy        | 70 to 90   | Facultative Long | The taproot of plants can be sensitive so be careful if transplanting.   |
| Peas              | N/A  | 4 to 6 weeks before last frost           | 40 to 80  | 7 to 14      | 2"                          | 2"         | 36"        | Sun            | Hardy        | 60 to 90   | Facultative Long | There are a few types of peas. Snow peas and snap peas have edible pods while sweet peas need to be shelled. Select the variety you most enjoy.  |
| Pepper            | 8 to 10  | After last frost                         | 55 to 80  | 7 to 21      | 1/4"                        | 18"        | 24" to 36" | Sun            | Tender       | 90 to 110  | Neutral          | Specific varieties will vary in number of days to maturity; peppers can be eaten when still immature but will have the best flavor when they are fully developed.  |
| Potato            | N/A  | After last frost                         | 40 to 70  | 14 to 28     | 4"                          | 10" - 12"  | 36"        | Sun            | Semi - Hardy | 90 to 120  | Long             | Potatoes can be planted early but if threat of frost is still looming keep frost protection on hand; there are determinate and indeterminate varieties. Indeterminate varieties can have soil backfilled/mounded around the stem as plants grow and more potatoes will sprout from the stem. |
| Pumpkin           | Not Recommended                                | After last frost                         | 70 to 95  | 5 to 10      | 1"                          | 36" to 48" | 60"        | Sun            | Tender       | 90 to 120  | Neutral          | Pumpkins require a lot of space so plan accordingly.   |
| Radish            | Not Recommended                                | 3 to 5 weeks before last frost           | 55 to 85  | 3 to 4       | 1/2"                        | 2"         | 12"        | Sun/Part Shade | Hardy        | 18 to 40   | Long             | Succession plant new radish seeds each week during the cool season to have a continual harvest.  |
| Rhubarb           | Not Recommended                                | As soon as soil can be worked            | 40        | 7 to 14      | 2"                          | 24"        | 48"        | Sun/Part Shade | Hardy        | 365+       | Neutral          | Plant Crowns; rhubarb needs at least a year to reach maturity and will reach full maturity in 3 to 4 years.  |
| Sunflower         | Not recommended                                | After last frost                         | 50 to 85  | 4 to 11      | 1" to 1.5"                  | 6"+        | 30"        | Sun            | Tender       | 80 to 95   | Varies           | There are LOTS of varieties so search for the one that is right for you.   |
| Spinach           | 4 to 6 weeks                                   | After last frost                         | 45 to 75  | 6 to 10      | 1/2" - 1"                   | 3"         | 12" to 18" | Sun/Part Shade | Hardy        | 50 to 70   | Long             | Spinach likes cool weather so plant as soon as temperatures allow in spring or in the fall.  |
| Spinach, Malabar  | 6 to 8   | 2 to 3 weeks after last frost            | 65 to 75  | 7 to 21 days | 1/4"                        | 12"        | 12"        | Sun            | Tender       | 70 to 80   |                  | This heat-loving vine will grow all summer; needs to be trellised  |
| Squash, Summer    | Not Recommended                                | After last frost                         | 60 to 105 | 5 to 10      | 1"                          | 36"        | 48"        | Sun            | Very Tender  | 40 to 60   | Neutral          | Squash blossoms are edible and can be stuffed and fried.   |
| Squash, Winter    | Not Recommended                                | After last frost                         | 60 to 105 | 5 to 10      | 1"                          | 48"        | 60"        | Sun            | Very Tender  | 110 to 125 | Neutral          | Winter squash can keep for weeks or even months after the first frost to be enjoyed into winter.   |
| Sweet Potato      | N/A  | 3 to 4 weeks after last frost            | 75 to 80  | 7 to 14      | Bury slips up to the leaves | 12"        | 36"        | Sun            | Very Tender  | 100 to 120 | Neutral          | Needs a very long, warm growing season; potatoes are grown from slips, which are sprouts grown from mature sweet potatoes.   |
| Swiss Chard       | 3 to 4   | 2 to 3 weeks after last frost            | 40 to 95  | 5 to 7       | 1/2"                        | 3"         | 18"        | Sun/Part Shade | Semi-Tender  | 40 to 60   | Long             | Beautiful plant to add to an edible landscape.   |
| Thyme             | Cuttings Recommended; start them 6 to 10 weeks | 2 to 3 weeks before last frost           | 70        | 14 to 28     | 1/4"                        | 6" to 12"  | 12" to 24" | Sun            | Semi-hardy   | 75 to 90   | Long             | Starting from seed can be inconsistent, however you can grow from cuttings to increase chances of success.   |
| Tomato            | 6 to 8   | After last frost                         | 70 to 80  | 6 to 8       | 1/4"                        | 24" to 36" | 48"        | Sun            | Tender       | 70 to 90   | Neutral          | Determinate tomatoes only grow to a certain height and set fruit all at once; indeterminate plants will keep growing until killed by frost. Check what type you have for proper plant spacing and support.   |
| Turnip            | Not Recommended                                | 2 to 3 weeks before last frost           | 45 to 85  | 4 to 7       | 1/2"                        | 3"         | 18"        | Sun/Part Shade | Hardy        | 50 to 60   | Long             | Succession plant every week in cool seasons for a continuous harvest.  |
| Watermelon        | Not Recommended                                | 1 to 2 weeks after last frost            | 60 to 95  | 3 to 5       | 1"                          | 60" to 96" | 60" to 96" | Sun            | Very Tender  | 90 to 120  | Neutral          | Plants love to sprawl so plan for a lot of space.  |

\*\*\* Space Between Plants" can vary; look at recommendations for specific varieties on seed packages or transplant labels; if you are gardening in a small plot or raised bed where you will not be planting multiple rows this is how far apart plants should be. Disregard "Row Spacing."

\*\*Frost hardiness is determined by which plants will survive a hard or light frost and is important for determining the earliest time to plant to allow a plant to reach full maturity before it gets too cold.

\*\*\* The photoperiod is the period of time each day during which an organism receives illumination; day length. If growing in a greenhouse or timing plants outside in a high tunnel research if a plant needs certain amounts of daylight to flower and fruit.