American Heart Association.

## Teaching Gardens

## Planting Your Garden

## Choosing Plants

When choosing plants for your garden, encourage students to think about the purpose of each garden bed. Is it for food, flowers, seeds to conduct science experiments or to beautify the school grounds? Many school gardens include some beds just for perennials, perhaps around the perimeter of the garden, and some beds for annuals. Involve students in researching plant requirements. For instance, they can find out the soil needs, space needs, hours of sunlight and hardiness zones for plants they want to grow.

## Perennial Plants

Perennial plants last two or more seasons. Perennial plantings serve as a foundation for your garden and can attract wildlife, provide habitat for beneficial insects, produce fruit or surround your garden with flowers. Perennial plants are usually easier to maintain than annual vegetable crops.


There are many things to consider when selecting perennials:

- Evergreen vs. deciduous - Do you want a plant that stays green all year or one that drops its leaves in winter?
- Flowering or fruiting times - Choose plants that fruit or flower when school is in session.
- Size and structure - Will the mature size of the plant fit in the space available?
- Uses of plant - Some perennials are selected for culinary herbs, ornamental uses, medicinal uses, habitat, food production, special themes or study purposes.
- Light requirements - Will the plant receive the appropriate amount of sunlight throughout the year?
- Climatic zones - Will the plant survive your winter cold?


## Annual Plants

Annual plants live their entire life cycle (emerging from a seed to making a seed) in a year or less. Annual plants make up most of our vegetable crops, and most of them can be harvested within two to three months after sowing. Bi-annual plants are like annuals but may live up to two years.

Annuals are generally classified as either "warm season" or "cool season" crops. Cool season crops, such as broccoli, cauliflower and cabbage, thrive in cool areas or during cooler months of the year; they are usually root, stem, leaf and flower bud crops. Many of these crops can over-winter in mild climates if planted in the fall or can be planted in early spring for a late spring harvest. Warm season crops, such as tomatoes, peppers, and melons, thrive in warm areas or during the hotter months of the year. They are usually fruit and seed crops. They are often planted in mid-spring to early summer.

You can determine when to plant annuals by referring to the Planting Chart that follows. The Planting Chart refers to weeks before or after frost dates as a guide for when to sow seeds or plant transplants outdoors. Seed packets will also provide this information.

## Crop Planning Chart

If you would like a crop to be ready at a certain time, or you would like several crops to be ready to the same time, you may want to use a crop-planning chart

1. Find the average first and last frost dates for your area.
2. Use a regional planting guide to review what kinds of crops can be planted in your region for each season. You can often obtain a regional planting guide from your local Cooperative Extension Agency or garden center.
3. Based on your planting or harvesting options for the season, choose a garden activity that you would like to do with your students (i.e. pizza or salad day).
4. List crops that thrive in your areas and that you would like to use for the activity.
5. Based on your academic calendar and the general seasonality of the crop, set a target harvest date. Record this in the chart.
6. Use seed packets of the Planting Chart to find the number of "days to harvest" for each of the crops you listed and enter this on the chart. If you are planting a nursery transplant, subtract about 30 days from the days to harvest. Of course, the actual number of days to harvest varies with weather, soil conditions and number of other factors.
7. From your target harvest date, use a calendar to count backward the number of "days to harvest" to find your planting date. Enter this on the chart.
8. Use the Planting Chart or seed packets to ensure that your planting date falls within the suggested planting time for this plant. Adjust accordingly. Congratulations! You now have your planting dates.

## Sample Crop Planning Chart

| Crops Needed | Target Harvest Date | Number of Days <br> to Harvest | Planting Date |
| :--- | :--- | :--- | :--- |
| Example: Pumpkins | $10 / 1$ | $110-130$ days | $6 / 1$ |
|  |  |  |  |
|  |  |  |  |

## Crop Planting Chart

|  |  |  |  |  | Spring | anting | Fall Planting |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { O. } \\ & \stackrel{\mathrm{O}}{\mathrm{O}} \end{aligned}$ | $\begin{aligned} & \overline{1} \\ & \frac{ \pm}{\Psi} \\ & 0 \\ & 0 \\ & 3 \\ & \varepsilon \\ & \frac{1}{0} \\ & 3 \end{aligned}$ | $\begin{aligned} & \overline{0} \\ & \frac{1}{7} \\ & 0 \\ & 3 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  | $\begin{aligned} & \text { U } \\ & .0 . \\ & 0 \\ & 0 \\ & 3 \\ & 0 \\ & 0 \end{aligned}$ | Start seeds indoors (weeks before last spring frost) |  |  | 0 <br> 0 <br> 0 <br> 0 <br>  <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 |  |  |  |
| Beans, bush | * |  | * | * |  | 2 after |  | 8-10 | 55 | 6 | 1 |
| Beans, pole | * |  | * | * |  | 2 after |  | 8-10 | 75-90 | 6-8 | 1 |
| Beets | * | * |  | * |  | 4 before | 8-10 before | 7-10 | 55-65 | 2-4 | 1/2 |
| Broccoli |  | * | * |  | 4-6 before | 3-5 before | 10-12 before | 7-10 | 55-85 | 15-18 | 1/4 |
| Brussel sprouts |  | * | * |  | 4-6 before | 3-5 before | 12-16 before | 7-10 | 75-90 | 18 | 1/4 |
| Cabbage | * | * | * |  | 4-6 before | 3-5 before | 10-12 before | 7-10 | 65-110 | 18 | 1/4 |
| Carrots | * | * |  | * |  | 2 before | 8-10 before | 14-21 | 65-75 | 2 | 1/4 |
| Cauliflower |  | * | * |  | 4-6 before | 3-5 before | 10-12 before | 7-10 | 55-85 | 15-18 | 1/4 |
| Chard | * | * | * | * | 3-4 before | 2 before | 8-10 before | 10-14 | 50-55 | 8-12 | 1 |
| Corn | * |  |  | * |  | 2 after |  | 10-14 | 60-100 | 12-15 | 1 |
| Cucumber | * |  | * | * | 2-3 before | 2-3 after |  | 7-10 | 50-70 | 12 | 1/2 |
| Eggplant | * |  | * |  | 6-8 before | 2-3 after |  | 7-10 | 70-90 | 12-18 | 1/2 |
| Kale |  | * | * | * | 5-8 before | 5 before | 10-12 before | 7-10 | 55-65 | 12-15 | 1/2 |
| Kohlrabi |  | * | * |  | 4-6 before | 3-5 before | 8-10 before | 10-14 | 50-55 | 10-12 | 1/4 |
| Lettuce |  | * | * | * | 6 before | 3 before | 4-10 before | 10 | 40-75 | 10-12 | 1/8 |
| Parsley | * |  | * | * | 5-7 before | 2-3 before |  | 14-21 | 70-90 | 6 | 1/4 |
| Peas |  | * | * | * |  | 6 before | 10-12 before | 10-14 | 55-75 | 4 | 1 |
| Peppers | * |  | * |  | 4 before | 4 after |  | 14-21 | 65-90 | 10-12 | 1/2 |
| Potatoes | * |  |  | * |  | 4 before |  | 14 | 120 | 10-12 | 6 |
| Pumpkins | * |  |  | * |  | 2 after |  | 10 | 100-110 | 36 | 1 |
| Radishes |  | * |  | * |  | 5 before | 8-10 before | 5-10 | 20-60 | 1-2 | 1/4 |
| Spinach |  | * | * | * | 7-10 before | 3-6 before | 4-10 before | 10-14 | 40-70 | 4-8 | 1/4 |
| Squash, summer | * |  | * | * | 1 before | 3 after |  | 7-10 | 50-65 | 15-24 | 1/2 |
| Squash, winter | * |  |  | * |  | 2 after |  | 7-10 | 75-120 | 24-36 | 1/2-1 |
| Tomatoes | * |  | * |  | 4 before | 4 after |  | 7-10 | 55-90 | 24-36 | 1/4-1/2 |

