## Planting

The best gardens are those that are carefully planned to maximize sunlight, drainage and beneficial relationships between plants. All this planning is a good thing - it helps the winter months fly by as you map out your garden for the following year. Before planting for the season, $\mathrm{it's}^{\prime}$ important to consider how you can best meet the requirements of all your crops, especially perennials which will come back year after year and as such should be placed somewhere they will be happy.

Your first consideration should be sunlight: does the plant require full sun (6 or more hours a day), partial sun (3-6 hours a day) or shade (less than 3 hours). Next consider water - how is the drainage in your soil? Some plants need lots of water and quick drainage, like cucumbers, while plants with shallower roots, like lettuce, don't mind having "wet feet".

Another important consideration is what plants you grow together. Companion planting is the process of grouping plants whose presence is mutually beneficial either because they prevent insect attack or increase growth and flavour. Box 1 gives an outline of some companion plants, though there is enough information that an entire book "Carrots love Tomatoes" has been written on the topic.

| Plant | Friends | Enemies |
| :--- | :--- | :--- |
| Asparagus | Tomatoes repel <br> asparagus beetles; parsley <br> and basil help growth | Onion family, <br> gladiolus, mint |
| Beans | Potatoes repel Mexican <br> bean beetles; rosemary <br> repels insects; corn and <br> celery improve growth. | Beets, cabbage family <br> plants, and sunflowers <br> hinder pole beans. <br> Onion family plants <br> and fennel hinder all <br> beans |
| Beets | Onion family repels <br> insects. Other helpers: <br> bush beans, cabbage, <br> lettuce | Pole beans |
| Cabbage family <br> (Broccoli, <br> Brussels sprouts, <br> cauliflower, kale) | Celery repels cabbage <br> white butterflies; onion <br> family deters maggots | Pole beans, <br> strawberries, tomatoes |
| Carrots | Peas add nutrients; <br> onion family repels <br> carrot flies, rosemary and <br> sage repel insects | Dill, celery, parsnips |
| Corn | Beans and peas add <br> nutrients; potatoes repel <br> insects | Tomatoes |
| Cucumbers | Radishes and geraniums <br> deter cucumber beetles, <br> beans add nutrients | Potatoes, sage, and <br> other aromatic herbs |


| Plant | Friends | Enemies |
| :--- | :--- | :--- |
| Eggplant | Green beans deter <br> Colorado potato beetles | Weaken tomatoes and <br> peppers |
| Lettuce | Carrots, radishes, beets, <br> strawberries, cabbage, <br> onion family, cucumbers | None |
| Onion Family | Beets, carrots, tomatoes, <br> broccoli, peppers, <br> strawberries, turnips | Beans, peas, asparagus |
| Potatoes | Beans and corn repel <br> insects. Cabbage, peas, <br> marigolds and parsnips | Apples, pumpkins, <br> turnips, sunflowers, <br> squash |
| Strawberries | Lettuce, spinach, beans, <br> onions, and borage | Cabbage |
| Tomatoes | Asparagus and basil help <br> repel insects; nasturtiums <br> trap aphids. Celery, <br> onions, cucumbers, mint <br> chives, and marigolds | Corn, dill, kohlrabi, <br> potatoes, peppers, <br> eggplants, cabbage, <br> fennel |

Sources: Children's Garden and exploring Toronto Programs Training and Resource Binder
It is also important to plant flowers and native species alongside your vegetables so that pollinators will be attracted to your garden to help your plants reproduce. Plants like bee balm, coriander, marigolds, mint, and savory all attract bees to your garden, which helps ensure proper fruit and vegetable production.

Garden layout is another factor to consider, as in will you be growing your crops in hills, rows, or beds. Small individual hills are useful for many squash crops, such as cucumbers or zucchini, as it lets the soil warm up faster and makes it easy to apply compost directly to the plants without disturbing roots. Rows are good if you have a large garden, as they allow direct sunlight, good airflow and lots of room to grow for your plants. To save space, some plants like carrots, lettuce and beans don't mind a little crowding and can be planted closer together in wider, intensive rows. If you really need to save space, try a onemeter square bed divided into square feet, with a different vegetable in each foot. You can reach all parts of the bed from the outside, which means less space needed for footpaths and more devoted to food!

