

Plants for Pre-K Gardens

Choosing the right plants is always important, but it's especially crucial for gardens designed for young children. This list includes annual and perennial plants considered safe for wee ones. You'll find two main categories – cool season and warm season plants – so you can plan to have something blooming or ready to harvest for most of the gardening year. These are subdivided into which to purchase as established plants rather than start from seed. Generally, seeds are more economical, but some is small and hard to handle, a challenge to germinate, or the resulting plants may take a long time to mature.

Plants to Avoid

Although every child needs to learn that some plants are not good to eat or touch, it is best to avoid poisonous plants or those with irritating characteristics like thorns. Online databases of poisonous plants are available:

- [NC State University Poisonous Plants](#)
- [Cornell University Poisonous Plants](#)

WHAT'S AN ANNUAL?

For those of you new to the gardening world, it's helpful to become familiar with a few plant terms to help you navigate through the myriad choices.

- **Annuals** are plants that complete their life cycle during one growing season; that is, they sprout from seed, blossom, set seed, and die within a short time. In this list, we divide them into cool-season and warm-season annuals. Cool-season types, such as lettuce and spinach, grow best when daytime temperatures are 60° to 70° F. Warm-season annuals, including beans and corn, grow best when daytime temperatures in the mid-70's through the 90's.
- **Biennial** plants live for two growing seasons. During the first season they build up reserves that they use during the second to blossom and produce seed, after which they die. Common biennial plants include carrots and onions. (Gardeners don't grow these two crops for flowers or seeds, but you may wish to let some specimens complete their life cycles just to illustrate the biennial cycle to children – just be aware that the roots will no longer be palatable!)
- **Perennials** live for three or more years. Lifespans vary, with some lasting just a few years and others living for decades.

Cool-Season Plants

GROW FROM SEED

- **Beets** are grown for their nutritious roots. To kids, harvesting root crops is like digging for buried treasure! Colors include red, orange, yellow, white, pink and striped. Leaves are also edible. Harvest roots while fairly young – they can become tough and fibrous when they grow too large. Beets can be eaten boiled, baked, or pickled. Biennial.
- **Carrots** are packed with health-promoting nutrients and taste great fresh from the garden! Varieties range in size from baby carrots to foot-long roots. Although orange carrots are most common, yellow, white, orange, and maroon varieties are available. All have attractive, feathery leaves. Carrots are fairly easy to grow in well-drained, well-tilled soil. Keep soil evenly moist to ensure even germination of seed. Biennial.
- **Calendulas**, sometimes called pot marigolds, look more like daisies, with bright flowers in a range of yellows and oranges. They prefer cool temperatures but do not tolerate frost. Some gardeners grow them as companion plants to vegetables because they repel certain pests. Annual.

- **Dill** can grow up to five feet tall with airy foliage and beautiful yellow flowers. This herb is used to flavor dill pickles, dressings, fish, and dips. The flowers attract butterflies, and the leaves are a food source for swallowtail butterfly caterpillars. In hot climates it grows best during the spring and fall months, but it thrives all summer in cooler climates. Annual.
- **Lettuce** grows quickly and forms the foundation for fresh classroom salads. Dozens of varieties are available in many different colors (reds, purples, and all shades of green). Heading lettuce forms a tight mass of leaves that you harvest all at once. Looseleaf lettuce can be harvested by the leaf throughout the growing season. An excellent crop for both spring and fall. Annual.
- **Radishes** germinate in 3 to 7 days and many are ready for little hands to harvest 30 to 45 days. Like beets and carrots, the roots are the prize, and they come in a wide variety of shapes (round to oblong), colors (including red, white, pink, purple, yellow), and sizes. Most are eaten raw to add a spicy flavor to salads. Annual.
- **Peas** come in several different types from snow peas to field peas, some with edible pods and others dried and used for soups. Most have a vining habit and need support in order to yield a good crop. Try growing them on a trellis, fence, or bamboo tepee. Peas are a good source of protein, minerals, and vitamins, and they're great fun to pick. Annual.
- **Spinach** leaves are packed with powerful nutrients such as Vitamins A, C, iron and calcium. It grows easily and very quickly, and prefers the cool temperatures of spring and fall. You can start harvesting as soon as plants have five or six leaves. Annual.
- **Swiss Chard** is grown for edible petioles (leaf stalks) and leaves. The variety 'Bright Lights' is popular with kids because its stems and leaf veins come in a range of bright colors, including yellow, pink, red, orange, purple, white, and green. Like spinach, it's high in vitamins and iron. Annual.

OBTAIN ESTABLISHED PLANTS

- **Broccoli**, grown for its green, immature flower buds, is a tasty treat that is also high in nutritional value. When you offer kids the opportunity to "eat flowers," they're sure to be intrigued! Broccoli can blossom prematurely (called bolting) in hot weather, so plant seedlings when the weather is cool to ensure a good harvest. Annual.
- **Brussels Sprouts** as you may guess from their appearance, are related to cabbages. They are a fun size for small children, especially when they grow alongside a cabbage for size comparison. Annual.
- **Cabbage** forms an edible head of tightly clustered leaves. They come in a variety of sizes and colors (red, purple, and white). Eat it cooked or raw. Annual
- **Onions** are a universal seasoning. Grow and taste both the edible bulbs and green tops. Plant onions seedlings or "sets" (small onion bulbs), available from garden centers and catalogs in the spring. They vary in skin color (white, brown, yellow, red, or purple), shape, and flavor (from sweet to spicy). The tops grow quickly for student sampling. Biennial.
- **Pansies**, with their happy "faces" and wide array of colors, are definitely kid-pleasers. They're also easy to grow. The flowers are edible and great for pressing to use with craft activities. They grow and blossom best in cooler temperatures. Annual.
- **Parsley** is high in Vitamin A and by weight has more Vitamin C than an orange! The curly variety has a tight, mounding growth that resembles a bed of soft moss, making it a nice "touch plant". Parsley is also a food source for black swallowtail butterfly caterpillars. Biennial.
- **Snapdragons** come in a range of sizes (from dwarf to tall) and in every color except true blue. Kids love pinching their velvety, tubular flowers to make the "dragon's jaws" snap! Annual.

Warm-Season Plants

GROW FROM SEED

- **Bean** seeds are large enough for kids to handle easily and plant, and they grow quickly, some maturing in as few as 45 days. Both bush and pole varieties come in a wide array of types and colors include yellow, green, and purple. Pole beans are great for creating child-friendly structures like tepees and tunnels. Kids can harvest snap, string, or French beans for eating raw or cooked. Types meant for drying, such as pinto, kidney, and black beans, stay on the vine until the pods become brown – they make an exciting package for curious kids to open, with shiny, colorful seeds inside. Annual.
- **Cantaloupes** provide sweet, refreshing fruit and are a wonderful source of Vitamins A and C. These vining plants require lots of room to spread (leave at least 5 feet between standard plants, and 3 feet between compact “bush” varieties). Children will enjoy monitoring the growth of these ball-shaped fruits. Annual.
- **Sweet Corn**, with its tall stature, can offer a structural as well as edible element to a preschool garden. Because it is pollinated by the wind, in order to get edible ears you need to plant it in blocks of several rows (at least 3 by 3 feet) or in tight “hills” of at least 3 stalks. After you harvest, leave the stalks in place and let kids play hide-and-seek in the patch, and use the stalks to make decorations. Annual.
- **Cosmos** has fine, delicate foliage and bright daisy-like flowers in orange, yellow, red, pink, white, and purple that attract butterflies. It’s very easy to grow, even in poor soil. Different varieties grow from 16 inches to 4 feet tall. Annual.
- **Cucumbers** can be eaten fresh, added to salads, or turned into pickles. Like its cousin the cantaloupe, it’s a vining plant. Let it sprawl across the ground, or if you’re short on space, or train it up a trellis or choose compact “bush” varieties. Annual.
- **Gazania** is another daisy-type flowers with white, pink, red, orange, yellow, and some bi-color blossoms. It’s fairly drought and heat tolerant. Blossoms close at night and in cloudy weather – have children watch for these changes. Perennial in zones 8-10; annual elsewhere.
- **Gomphrena** blossoms are made up of papery bracts (modified leaf structures) that make them easy to dry for play and for craft projects. Globe-shaped flowers come in purple, red, and white. Annual.
- **Gourds** are vining plants with fruits that come in a wide variety of shapes, sizes, and colors. Bottle gourds can be used to make birdhouses, luffa gourds for sponges, and ornamental types for creating table displays or even to use as playthings. Gourds have been used for thousands of years for decorative purposes and also used as early bottles, storage containers (the first Tupperware), utensils (spoons), and musical instruments. They produce vigorous vines that need support from a fence or sturdy trellis and lots of space to produce well. Annual.
- **Hollyhocks** are tall, old-fashioned garden favorites that are fairly drought tolerant and easy to grow. The large showy flowers come in a rainbow of colors that can be fun for young children to play with. Biennial or perennial.
- **Nasturtiums** are available as compact plants or trailing varieties with edible lily-pad-shaped foliage and velvety blossoms. Flowers range from white through yellows and dark red. Blossoms are sweet with a peppery watercress flavor and contain Vitamin C. They’re beautiful on salads and sandwiches. Annual.
- **Peanuts** are perky green plants with bright yellow flowers. They have a fascinating growth habit: After pollination the flower stalk stretches down to touch the soil, and fruits (peanuts) develop underground. Annual.
- **Pumpkins** are a children’s favorite – kids love to grow their own Halloween pumpkins. Although orange pumpkins are the most common, they also come in red, white, and gray. Pumpkin plants need lots of room for their vines to spread. Miniature varieties may only need 6 to 8 square feet, but large types need between 50 and 100 square feet for healthy growth. At harvest time, pumpkins can be turned into jack-o-lanterns and their seeds roasted for a tasty and nutritious snack. Annual.

- **Strawflowers**, like gomphrena, have papery bracts that make them excellent dried flowers. They come in a variety of colors including shades of red, orange, yellow, pink and white. Brighten up a winter classroom with flowers the children have helped grow.
- **Sunflowers** are universally loved by children. They're easy to grow and produce cheerful, vibrant, flowers. You can grow dwarf varieties no taller than your students or giants that tower to 8 feet tall. Flowers are also variable in size, from dwarfs that would fit in the palm of your hand to giants that are as large as your head. Colors include white, yellow, orange, and burgundy, and some bicolors. They're known for their edible seeds and seed oil, but the unopened buds and flower petals can also be eaten and taste like a mild artichoke. Flower petals are bittersweet. Annual.
- **Tithonia**, also known as Mexican sunflower, has red, orange, and yellow flowers that attract butterflies. The plants can grow tall and a bit wild looking, but they are heat and drought tolerant. Annual.
- **Watermelons** are a summer time favorite and rewarding for kids to grow. Like cantaloupe, plant them in hills and give them need lots of space (7 to 10 feet between hills). Annual.
- **Zinnias** come in hundreds of varieties, ranging from dwarf plants up to 3 feet tall, and in a rainbow of colors, some of which are specked and striped. Flowers may have a single layer of petal-like ray flowers or may have more layers for a fuller look. They are hardy and grow well in hot, dry conditions. Zinnias make great cut flowers and attract butterflies. Annual.

OBTAIN ESTABLISHED PLANTS

- **Basil**, like other culinary herbs, is a stimulating sensory plant for children to smell and taste. Aside from traditional basil, there are also lemon, lime, anise, and cinnamon flavored types. Leaf color and shape also varies, from tiny, pale green leaves to deep purple ruffles. They also come in different sizes, but classic basil can reach 2 feet at maturity. Basil grows best in full sun. Basil plants also produce attractive flowers, although if you are harvesting leaves for cooking it is best to remove flower buds and encourage vegetative growth. Annual.
- **Impatiens** bring bright color to shady beds. They come in red, orange, pink, purple and white, with some variegated and double blossoms. They're easy to grow and bloom continuously throughout the growing season. Annual.
- **Petunias** grow well during cooler months in the far south, but throughout the summer in cooler climates. The trumpet-shaped flowers bloom prolifically and come in a wide range of colors, some with interesting patterns including stripes and speckles.
- **Pineapple Sage**, another plant for sensory exploration, derives it's name from the pleasing pineapple-like odor of the crushed leaves. As an extra bonus, the foliage adds sweet flavor to teas and salads. The scarlet flowers attract hummingbirds and butterflies. Perennial in zones 8-10; annual elsewhere.
- **Rosemary** is an evergreen woody shrub that produces pine-scented leaves used in cooking and potpourri. Flowers are white or blue flowers and you can choose varieties with upright growth or with trailing branches. It is also commonly used in cooking with breads, meats and vegetables. Perennial in zones 8-10; annual elsewhere (bring it inside for the winter).
- **Stevia**, also known as sugarleaf, is another good sensory plant for children. The leaves taste 10 to 15 times sweeter than an equal amount of sugar! It grows slowly at the outset, but can reach 2 to 3 feet. Pinch off the flowers if you wish to maximize the sweetness of the leaves. Perennial in zones 8-10; annual elsewhere.

Perennial Plants

You'll find both flowering and fruiting perennials in this list. You can plant most perennials throughout your growing season, although each variety may have an optimum planting date for your area. The most flexible planting time in most areas is in the spring after chance of frost has passed, but many will also thrive if planted in summer or fall. If you do plant them in the heat of summer, monitor water needs frequently. If you plant in fall, allow enough time for roots to become established before cold weather hits. Seeds of many perennial are challenging to germinate, and most do not blossom during their first year, so start with small transplants or mature plants so you can enjoy the benefits sooner.

- **Black-eyed Susan** is a cheery, daisy-like flower that has a long bloom period. They make great cut flowers and also attract butterflies.
- **Blueberries** not only provide fruit early to mid-summer, they are attractive, low-maintenance shrubs with good fall color. Bush varieties range from four to seven feet tall, and "wild" blueberries stay low to the ground. All require acidic soil, but they have few pests other than hungry birds.
- **Butterfly Bush** (buddleia) can grow into a large shrub (up to 12 feet) and produces beautiful, fragrant, cone-shaped flower clusters in whites, purples, pinks and reds. As the name suggest, it attracts a number of butterflies and other insects. Once established, it is a very hardy and drought tolerant plant.
- **Catnip** is a member of the mint family, is easy to grow, very fragrant, and has attractive flowers. Young children enjoy growing this plant as a special treat for their feline friends.
- **Chives** are normally grown for their flavorful leaves, which can bring a mild onion/garlic-like flavor to dishes like salads and baked potatoes. Chive flowers are also edible and come in white, lavender, or purple.
- **Coneflower** is a North American native wildflower. New flower colors are being developed, but the most common are purple, white, or yellow. The ray-like petals surround a pincushion center. They're excellent cut flowers that also attract butterflies.
- **Coreopsis** has attractive yellow flowers that bloom throughout the summer. It's easy to grow and can tolerate poor soil and hot weather.
- **Coral Honeysuckle** is an evergreen to semi-evergreen vine with beautiful, tubular coral flowers that attract hummingbirds. Whether you grow it in the ground or in a container, provide a trellis for it to climb. Although it is easy to grow, it doesn't become invasive like Japanese honeysuckle (yellow blossoms).
- **Lamb's Ear** has soft, woolly, blue-green leaves that kids love to pet. This low growing, clumping perennial grows vigorously, so it can take the attention. Plant it along borders where small hands can reach it easily.
- **Lemon Balm** has attractive green foliage with a refreshing citrus flavor. Let children smell and taste the leaves, and add them to tea and fruit salads. Grows to 2 feet tall. Perennial in zones 4 to 9.
- **Mints** of all kinds are a sensory treat. The most common are peppermint and spearmint, but there are others to try, such as ginger mint and chocolate mint. Plants grow from 8 inches to 3 feet tall. All spread quickly by underground rhizomes, so if you don't want them to take over other plants, plant mint in a pots or a separate bed.
- **Monarda** (bee balm) attracts butterflies, hummingbirds and bees, providing lots opportunity for exciting observation. Flower colors include red, pink, white, and purple. It's a mint, so make sure it doesn't take over the garden. It will grow in part shade, but flowers best in full sun.
- **Oregano** is a compact herb plant with attractive pink and purple flowers. The herb is a favorite in Greek, Italian, and Mexican cooking. Plant it in full sun. Perennial in zones 5 to 9.
- **Salvia** is available in many different shapes, sizes and colors, with varieties adapted to different climates and growing conditions from very wet to very dry soils. The red, pink, white, purple, and blue flowers are borne on spikes and attract butterflies and hummingbirds. Remove spent blooms to encourage new flowers.

- **Strawberries** are usually the first fresh fruit of the growing season, making them a children’s favorite. Typically flowers are white, but there are some with pink blossoms.

It makes an excellent ground cover or border plant because of the long stems, called “runners”, that trail and sprout new plants.

- **Thornless Blackberry** shrubs have long canes that grow to heights of five to 10 feet tall. Fruit matures in mid to late summer. Great picking for little hands!
- **Thornless Raspberry** shrubs range from 4 to 6 feet tall. Summer and fall-bearing varieties are available. Children enjoy wearing the berries like thimbles on their fingertips before popping them in their mouths.
- **Verbena** comes in varieties with white, pink, red, or purple flower clusters that attract butterflies and other insects. Some have an upright growth habit, while trail. They grow well in sunny locations and well-drained soil, and established plants are fairly drought tolerant.