

Grow Your Own Salad

Overview:

Greens are one of the easiest crops to grow indoors. Grow spinach, lettuce, mesclun mix, mustard or kale and you can begin to harvest micro-greens within a month! Fruiting vegetables, such as eggplant, tomato, cucumber and squash, need more space than the average home or school can offer. To get started on greens, however, you just need a few things: A bright sunny window and/or grow lights, seeds, pots and soil.

Growing greens indoors not only provides you delicious salad ingredients, it can be a conversation starter about where food comes from. Compare the taste of store bought greens to home grown greens. Discuss the advantages and disadvantages of buying shipping food across the country and eating locally harvested foods.



Materials:

- Seeds
- · Growing containers
- · Potting soil

Approximate Time to Complete: 30 minutes for planting, 4 to 8 weeks until harvest

Location: Indoor

Ages: All ages

Season: All seasons

Instructions:

- 1. At a local garden center select quick-maturing varieties of greens that won't grow too large, such as 'Tom Thumb' or 'Black Seeded Simpson' lettuce varieties or other greens like arugula. Also purchase soilless potting mix and plastic growing containers. Rather than buying pots, you can also be creative and grow salad greens in recycled household containers. For example, the clear plastic containers that store-bought lettuce mixes come in make excellent growing trays. The key with any homemade container is to poke drainage holes in the bottom and be sure to put a drainage dish below.
- 2. Locate a window in your indoor space that provides the most sunlight available to you. Generally windows facing the south receive the most sunlight followed by those facing west. Optimally, choose a location with 8 more hours of sunlight available (indoor light will not be as intense as outdoor light thus making it important to receive a longer duration). The amount of sunlight will not only be determined by direction, but also by shade from roof overhangs, trees or surrounding buildings.
 - During winter months, the sun is at its lowest angle in the sky and its lowest intensity of the year. The days are too short and dim for good plant growth. However, using a simple shop light or a grow light system, you can increase the light intensity indoors enough to grow greens even during the darkest months. Purchase a 2- or 4-bulb fixture and use either full-spectrum grow lights (the best option) or a combination of cool-white and warm-white fluorescent tubes. These bulbs will give your greens seedlings the right combination of light wavelengths and intensity to grow strong and full.
- 3. Have your child or students fill your containers with moistened potting soil. Moisten the soil in a bucket or bowl before placing it in your container. You want the soil to feel like a moist sponge, but you do not want it to be so wet that water can be squeezed out of it. You may need to alternate adding water and soil until the optimum moisture is achieved.



- 4. Next, sprinkle the seeds about 1-inch apart on the soil surface and barely cover them with soil. Because the seeds of greens are so small, you may want to help young children with this step.
- 5. Place the planted containers in your window or under lights and keep the seeds and soil moist. If using lights, keep the bulbs on for 14 hours a day. Once the seeds germinate, keep the lights positioned just a few inches above the seedlings. Adjust the lights daily as the plants grow. A timer is a worthy investment, so you don't have to remember to turn the lights on and off. If your plants are placed in a windowsill, make sure to rotate the pots every couple of days since once side of the plants will be getting more light exposure.
- 6. Water as needed. If the leaves turn pale green or yellow, give the plants some liquid fertilizer when watering, being sure to follow the manufacturer's instructions.
- 7. Once the leaves on the greens are a few inches tall, it's time to start harvesting. Remind your gardeners that you won't be growing full heads of lettuce like the ones you buy at the store. The idea is to harvest a few leaves at a time from each plant and then let them grow again. That way, the plants won't take up too much space and you'll get multiple harvests.
 - Harvesting is easy. Using scissors simply cut the greens 1 inch above the soil line, leaving a few larger leaves in the center to keep plants healthy. Lettuce, spinach and mesclun greens will grow back to yield another harvest in a couple of weeks. After a few harvests the plant stems may get thick and the leaves may remain small. This indicates it's time to compost the potting mix and roots, and start over.
- 8. Depending on the size and number of containers planted, your harvest may continue for many weeks. For fun, purchase a package of store-bought greens and do a blind taste test against your homegrown greens. See if your young gardeners can tell the two apart.



Plant People

Overview:

Homemade "Chia" pets are the perfect activity for a cold or rainy afternoon.

Materials:

- · Pair of pantyhose
- · Potting soil
- · Grass seed
- Miscellaneous craft supplies
- Craft glue or glue gun

Approximate Time to Complete: 30 minutes

Location: Indoor or outdoor

Ages: PreK - 4th Grade

Season: All seasons

Instructions:

Make your own plant person from a pair of old pantyhose, a little bit of soil and some grass seed!

- 1. Cut a 6 to 8 inch long piece of panty hose (any color will work). If your piece does not include a toe, then knot one end of the hose and turn it inside out. It will end up looking like a little pantyhose bag.
- 2. Next scoop 2 to 3 teaspoons of grass seed into the closed end. Fill the rest of the hose with potting mix and tie the hose closed. Use your hands to gently shape the ball into a head shape.
- 3. Place the head in a shallow dish with the grass seed side on top. Use craft pieces such as wiggle eyes, buttons, pompom balls, felt and chenille sticks to make eyes, a nose, mouth and arms. Attach with craft glue or a glue gun.
- 4. After glue has dried/cooled, carefully water your new plant person until the soil is thoroughly moist and place in a warm location. Check on it daily to make sure soil stays moist (if it seems to dry out quickly you can keep a reservoir of water in your dish), and within 3 to 5 days your new plant person will begin to grow "hair."
- 5. Once the hair is established, you can give him/her a hair cut or just let it grow and see how long it will get. If you have time and supplies, make more than one to create a whole family of plant people.





Seed Balls

Overview:

Seed balls are small bundles of seeds, clay, and soil or compost. Although seed balls have been around since ancient times, they were rediscovered in the 1930s by the Guerilla Gardening movement as a way to covertly introduce vegetation by simply tossing the seed balls (or, on a large scale, dropping them from an airplane). They are still used today to re-vegetate areas burned by wildfires. On a small scale, seed balls are fun to make and offer an inexpensive way to sow native plants and flowers.

Materials:

- Clay (available from craft stores)
- · Compost or potting soil
- Seeds (easy-to-grow or native varieties)

Approximate Time to Complete: 30 minutes

Location: Indoor or outdoor

Ages: All ages

Season: Plant in spring, summer and fall

Instructions:

- 1. Divide your materials so you have:
 - 5 parts clay
 - 1 part compost/potting soil
 - 1 part seeds
- 2. Combine the clay and compost. Add a little water if your mixture is dry. The mixture should be moist but not dripping wet; similar to the consistency of cookie dough.
- 3. Add the seeds to the clay and compost. Thoroughly work the materials together with your hands.
- 4. Shape the mixture into balls about the size of a golf ball.
- 5. You can plant the seed balls while they're still moist, or allow them to air dry.
- 6. Find areas in your yard and surrounding community that could use a little green. Toss or place your new treasures directly onto bare soil. As long as they are watered (either manually or by rain), the clay will break down and the seeds will grow.

Choose Your Seeds:

Wildflowers are good choice of seeds for seed balls because in nature they are self-planted and their seedlings are hardy, requiring little care. Seeds of native wildflowers work especially well because they are adapted for your climate, and they also provide a food source for local pollinators. (Choosing native wildflower species isn't a must, however. Non-native wildflowers, including red poppies, also work well in seed balls. Just be sure to avoid any plants that are invasive in your area.)

Some seed suggestions:

 ${f Cosmos}$ — One of the easiest plants to grow from seed. Garden experts often say if you can't grow cosmos, you may want to try a different hobby.





Milkweed – Food for monarch caterpillars; use your seed balls to grow plants where these hardworking, migrating butterflies can lay their eggs.

Red poppies – A symbol of remembrance to honor fallen soldiers, red poppies are easy to grow and provide eye-catching splashes of color.

Coreopsis – Adaptable to a variety soil conditions and light levels, coreopsis plants are extremely drought tolerant once established.

Coneflower – A popular plant for butterflies and birds, purple coneflower is also extremely drought tolerant once established.



Building a Terrarium

Overview:

A terrarium is a miniature garden grown inside a covered glass or plastic container. It is a low maintenance way to incorporate plants into your classroom or home and an excellent tool for teaching children about the water cycle as it demonstrates evaporation, condensation and precipitation. In the presence of light and heat, water evaporates from the plants through transpiration and from the soil. Since it is an enclosed environment, when the water vapor hits the side of the container, it condenses. Once enough water accumulates or the temperature decreases, the condensation will then precipitate down the sides of the container back into the soil.



Materials:

- · An enclosed container
- · Pea gravel or small rocks
- · Potting soil
- Small indoor or tropical plants
- Charcoal (optional)

Approximate Time to Complete: 30 minutes to 1 hour

Location: Indoor

Ages: All ages

Season: All seasons

Instructions:

1. Find an appropriate container. Glass jars, fish bowls and tanks, clear plastic bottles and food containers can all make fine terrariums. Just make sure there is enough room to reach your hand into your container for planting and maintenance.

Clear plastic soda bottles are commonly used in school settings because they are readily available and inexpensive. To create, cut off the top of a large, clear plastic soda bottle, leaving a container that is approximately 8 inches tall. After planting in the soda bottle, you can either tape the top back onto the soda bottle or just cover it tightly with plastic.

- 2. Clean the container using soapy water and rinse well. Dry completely.
- 3. Cover the bottom of the container with ½ inch (for small containers) to 11/2 inch (for large containers) of pea gravel for drainage. This mimics the bedrock found under our soils and allows access water to drain from the soil. You can also add a few granules of filtering charcoal (not the type used for barbecuing) to the top of the gravel to help remove odors. The charcoal is optional and is not needed if your terrarium maintains proper moisture levels.
- 4. Next fill the container to approximately one-third to one-half full with moist potting mix. The amount of soil you put in will depend on the size of the container (you need to have enough room for plant roots). You should use a sterilized potting soil mix to avoid problems with molds and fungi (small bags of potting soil are available at most garden centers).

The moisture level of the soil when you put it into your terrarium is very important. Pour the soil into a bowl or tub and mix with water until the soil is moist enough to cling together in a ball when pressed into the hand. If



water drips from the soil when pressed into a ball, then it is too wet and you should add more dry potting soil to your mixture. Once you find the perfect balance, place the soil in your container. Try to avoid getting soil particles stuck on the sides of the container above the soil level.

Many potting mixes contain slow release fertilizers. If the soil you purchased does not contain any fertilizer you may want to add a small number of slow release fertilizer pellets or some organic fertilizer like worm castings to your mix before planting. You want your plants to stay small and grow slowly, so you do not need much.

5. Next add your plants. You need to look for plants that are small, slow-growing, and perform well in humid environments. How you arrange the plants will depend on the size and location of the terrarium. If you will be viewing the terrarium from one side, then place the tallest plants in the back and shortest plants in the front. If your terrarium will be viewed from all sides or you plan to rotate it, plant the tallest plants in the middle and the shorter plants along the outside.

There is a wide range of plants to choose from. Most garden centers have an area reserved for indoor plants and you can usually find a variety of plants in 2 to 4 inch pots.

Some recommended plants to use include:

- african violet
- artillery fern
- false aralia
- jade plant
- miniature peperomia
- nerve plant
- oxalis
- pink polka dot plant
- prayer plant
- small ferns
- small peace lilies
- small philodendrons
- spider plant
- strawberry begonia
- Swedish ivy

These are just a few suggestions. Experiment with different plants. If they appear to grow too vigorously or respond poorly to the humidity, remove them and try something new. You can also try growing plants from seeds and cuttings.

- 6. In addition to plant material, you can also be creative and add other objects to create mini-landscape scenes. For instance you may want to add decorative rocks, small animal figurines, small bridges or mirrors to look like mini ponds.
- 7. After planting, attach the container lid or cover with plastic. Place the terrarium in a windowsill with indirect lighting or under grow lights. Do not place it in strong direct sunlight or water will evaporate too quickly and plants may scorch.
 - Observe your terrarium closely for the first few days to make sure you have the proper moisture level. You'll know that the terrarium contains the right amount of water if the sides and top get misty with water droplets when in bright light. If there is no moisture along the sides, then you need to add some more water. If the sides are always very wet and it is hard to see the plants, then there's too much water and you should remove the top for a few hours and allow some of the excess water to evaporate. Once you achieve the perfect balance, it will not need frequent attention.
- 8. Check on your terrarium periodically. Prune or remove plants with excessive growth. You want to avoid plant leaves touching the sides of the container as much as possible to prevent constant water sitting on the foliage. Also check on the moisture levels as some water may be lost over time.



Plant a Butterfly Garden

Overview:

Kids love butterflies! Encourage your child's sense of connection to the natural world and invite butterflies into your landscape by planting a butterfly garden. A butterfly garden provides a colorful array of nectar-producing plants that not only attract butterflies (and often hummingbirds as well), but offers plants to feed the caterpillar stage of their life cycle. With the appropriate plantings, a butterfly garden provides opportunities to educate your children about the life cycle of a butterfly, allowing them to view each stage of growth and explore the intricate relationships of plants and animals.

Materials:

- In-ground garden space, raised bed or container garden
- Trowel or shovel
- · Flowering plants for adult butterfly
- · Host plants for caterpillars

Approximate Time to Complete: 3 to 4 hours to plan, gather plants and install; multiple weeks to grow and attract butterflies

Location: Outdoor

Ages: Fun for all ages

Season: Spring through fall

Instructions:

- 1. Begin by finding a garden location that receives at least six to eight hours of sunlight and is sheltered from the wind. Your spot also needs to provide nighttime hiding places for butterflies such as small trees or large shrubs, and places for them to attach while in their chrysalis.
- 2. Select plants that grow well in your area. You need to include flowering plants that attract butterflies (many butterflies have favorite plants to sip from) and also leafy "host plants" that attract egg-laying butterflies and provide food for the caterpillars (also known as the larvae). It is always best to select native plants that will attract butterflies native to your area.

When selecting plants, choose a variety of species that bloom throughout the growing season. This will help lure the butterflies to your garden for longer periods. A mixture of annual and perennial plants can offer a wide assortment of blooms when butterflies are most active during mid- to late summer. Make it easy for passing butterflies to locate the flowers you're providing by planting each kind of plant in groups of at least three.

Some flowering shrubs are also good butterfly attractors, including glossy abelia, lilac, summersweet, buttonbush, blueberry, mockorange, ninebark, and spicebush. Shrubs are a good addition because they can offer shelter for the butterflies in addition to food.

The aptly named butterfly bush (Buddleia) will also attract them, but be wary about planting it. Most of the varieties offered for sale are cultivars of Buddleia davidii, a species that has escaped from cultivation and become an invasive weed in many parts of the country (sale of fertile butterfly bush varieties is banned in Washington and Oregon). Breeders have developed some sterile varieties that don't set viable seeds and are the best choices for including in your garden. These include the cultivars 'Miss Molly' and 'Miss Ruby', and varieties in both the Flutterby and Lo & Behold series.



Here are a few examples of common butterflies and their preferred food sources:

Butterfly	Host plant(s) for caterpillars	Nectar plants for adult butterflies
Giant Swallowtail	Citrus, hop tree, prickly ash, rue	Lantana, orange tree
Eastern Black Swallowtail	Carrots, celery, dill, parsley, Queen Anne's lace, rue, Texas turpentine broom	Milkweed, phlox
Monarch	Milkweed	Milkweed, asters, red clover, zinnia, cosmos, lantana, pentas, daisy
Variegated Fritillary	Violets, pansies, stonecrops, passionflowers	Meadow flowers, hibiscus, composite family
American Painted Lady	Daisies, everlastings, and other composites	Burdock, daisy, everlastings, mallow, yarrow, zinnia, heliotrope
Orange Sulphur	White clover, alfalfa, vetch, lupine	Clovers, dandelion, parsley, zinnia, other meadow flowers, members of the composite family
Silver-Spotted Skipper	Beans, beggar's tick, licorice, locusts, wisteria	Many garden and meadow flowers

^{*} Source: The Family Butterfly Book by Rick Mikula. Storey Publishing, © 2000

- 3. Plant your garden. Add one or two large, flat rocks in the sun so butterflies a place to bask when mornings are cool. Since butterflies cannot drink from open water, provide them with a "puddle" by filling a container, such as an old birdbath, with wet sand where they can perch and drink safely.
- 4. Once the garden is planted, stand back and wait for the butterflies to stop by. With a successful butterfly garden, your kids will be able to observe the developmental process of a butterfly. The eggs soon hatch, and the larvae appear and eat the leafy growth of the host plant, eventually developing into full-grown caterpillars. Remember, you will need to tolerate some leaf damage from your very hungry garden guests. Later, these caterpillars affix themselves to a twig or branch and form a chrysalis, entering the pupa stage. Within about two weeks, they metamorphose into butterflies and re-emerge.



^{*} Special Note: Avoid all pesticides. Butterflies are insects, so it makes sense that insecticides — even those labeled "organic" — can harm them. Herbicides used to quell weeds can also harm nectar and host plants. If you feel that you must control pests, start with hand-picking or squishing the offenders, and make the area attractive to pest predators (ladybugs, lacewings, birds). To keep weeds in check, maintain a layer of mulch and pull weeds regularly.

Theme Gardens

Overview:

Theme gardens are an excellent way to foster the love of gardening with your children. The inspiration for a theme garden can come from many things like a story, a favorite food, a favorite color, a historical event, or a favorite animal. As you brainstorm, let your younger gardener's imagination run wild and then search for plant that help you achieve your chosen theme (and that will grow well in your area).

Materials:

- Books, magazines and computers to search for inspiration
- Paper to draw ideas and garden plans
- Soil, plants and seeds to grow your garden

Approximate Time to Complete: Variable depending on children and type of garden designed

Location: Outdoor

Ages: All ages

Season: Planning can be done any time, planting will most likely take place during spring, summer of fall.

Instructions:

1. Begin by picking a theme for your garden. You can use your theme to guide you through the garden designing process. A theme can be anything you can imagine. Here are a few ideas:

Alphabet Garden - Try to use plants whose names start with the different letters of the alphabet.

Butterfly Garden - Include plants that will attract butterflies to your yard.

Book Garden - Pick out a book with a garden theme and then try to recreate it such as Peter Rabbit or Tops and Bottoms.

Dinosaur Garden - Grow plants that were around when the dinosaurs were alive like ferns and horsetail.

Giant's Garden - Plant varieties which will grow super big like giant sunflowers that reach 15 feet in height and pumpkins that grow to 150 pounds.

Miniature Garden - Plant varieties that will stay really small like baby carrots and tiny pumpkins.

Moon Garden - Grow plants that bloom at night like moonflowers.

Pizza Garden - Grow all the ingredients to make a pizza including tomatoes, wheat, basil, oregano, peppers and onions.

Rainbow Garden - Use plants whose flowers or leaves show off the different colors of the rainbow including red, orange, yellow, green, blue and purple.

Salad Garden - Grow all the ingredients to make a tasty salad like lettuce, carrots, radishes and cucumbers.

Salsa Garden - Grow all the ingredients to make your own salsa including tomatoes, garlic, cilantro and peppers.

Sensory Garden – Select plants that engage your senses such as plants with soft leaves or herbs with scented leaves.

Three Sisters Garden - Native peoples from different parts of North America often planted corn, beans, and squash together - a trio often referred to as the "three sisters."

Zoo Garden - Include plants who share names with animals like lamb's ear or catnip.





- 2. After you choose your theme, decide on the type of garden you want to grow. Will you install your garden in the ground, in a raised bed or in containers?
- 3. Next determine where you will place your garden. Is there a lot of sunlight available? Is there water near by?
- 4. Finally, with theme, garden structure and location selected, find plants that will grow well in your area and create your design. If you're looking for help, you can research online, at the library or perhaps visit some public gardens for direction.
- 5. Draw a picture of your dream garden then transform it to a more detailed garden map on graph paper.
- 6. Gather your supplies and dig in!



Scavenger Hunt in the Garden

Overview:

A scavenger hunt can be a fun way to encourage young gardeners to practice using their observation skills.

Materials:

- List of items to find (download our sample Nature Scavenger Hunt page)
- · Clipboard
- Pencil

Approximate Time to Complete: 15 minutes or more

Location: Outdoor

Ages: 4-10

Season: All seasons

Instructions:

Although the garden provides many opportunities for exploration, sometimes it helps if kids have some direction to begin their observations. A scavenger hunt can provide a little bit of structure while still offering the flexibility for individual discovery.

- 1. Create a list of items commonly seen in the garden and nature such as leaves, birds, insects, rocks, etc. The older the children participating in the hunt, the more specific your list can be. For example, instead of asking them to find a bird, ask them to find a cardinal. To adapt the activity for younger children, use pictures to make your list (hand drawn or cut from a magazine). Download a sample scavenger hunt page from KidsGardening.
- 2. Place your completed list on a clipboard; then grab a pencil (or crayon) and visit your garden, a park, nature trail or some other type of a community green space.
- 3. There are many ways to adapt this activity. Here are a few ideas:
 - Make a nature bracelet. If playing in a public space it is best to hunt with your eyes, but if you are in your
 own yard or another location where collection is acceptable, kids can make bracelets from masking tape
 (sticky side out). As your child finds the (non-living) items on the list, have him/her stick the items to the
 bracelet. At the end of the game, kids will have a fun keepsake to show off.
 - Rather than basing your hunt on visual characteristics, you could also develop a sound, texture, or smell, hunt (or an edible hunt if you have a vegetable or herb garden and your child is old enough to understand not to eat unknown items).
 - If your child or children are highly competitive, keep track of the time it takes to find all the items, trying to beat your previous times, or add prizes.





Kitchen Scrap Gardening

Overview:

With little effort and a pinch of creativity you can devise some very imaginative indoor gardens from your kitchen leftovers! Kitchen scrap gardening is when you grow plants from items you'd normally throw in your compost bucket. Kids love this idea, and it's a great way to reinforce the sustainable living concepts of recycling and reusing. Plus, it's a kick to grow new plants from old plant parts.

Materials:

- Vegetable and fruit scraps (oranges, lemons, limes, sweet potatoes, avocados, carrots, beets, onions, and ginger work well)
- Growing containers
- · Potting soil
- Water

Approximate Time to Complete: 30 minutes to plant, multiple days to grow

Location: Indoor

Ages: All ages

Season: All seasons

Instructions:

- 1. Scout your kitchen and refrigerator for potential vegetable and fruit candidates. Some of the best are oranges, lemons, limes, sweet potatoes, avocados, carrots, beets, onions, and ginger. Believe it or not, you can use all of these and many other vegetables and fruits to propagate new plants.
- 2. Plant scraps in potting soil or immerse in water. The best method for encouraging new growth will depend on the plant and plant part represented. Here are specific instructions for some easy to plant scraps:

Starting Little Seeds

Citrus fruits are plentiful in winter, and the seeds in oranges, lemons, grapefruit, and limes are easy to grow into new houseplants. Fill a 4-inch-diameter pot with moistened potting soil. Remove whole seeds from the fruit and plant three to four of them one inch deep in the pot. The seeds should sprout in two to four weeks and you'll have a mini citrus orchard. Keep the seedlings well watered for about six weeks and then transplant individual trees into bigger pots. It will be quite a while before you see citrus flowers (let alone fruit - these trees won't bear for many years, and most eating-quality fruits are borne on grafted, not seed-grown trees.) But you can enjoy the leaves. The leaves smell like whatever type of citrus you're growing, so be sure your children do some "rub and sniff" tests.

Starting Big Seeds

If the small seeds are a hit, try growing big seeds of tropical fruits such as mango and avocado. Let an avocado pit dry out for a day or two, then plant it in a 6-inch-diameter plastic pot filled with moistened potting soil. Leave the tip of the pit exposed to air. Another fun - and easy - way to sprout an avocado is to suspend the pit over a glass of water. Poke three toothpicks around the middle of a pit and rest the toothpicks on the rim of the glass. Add water until it just touches the bottom of the pit. Kids can watch the roots and sprout emerge. Cool! It can take a month or two for roots to appear. If using the water sprouting method, replant the pit in potting soil once roots and a sprout emerge.





Mangoes are a little more difficult. Soak the hard seed for a week in warm water, replacing the water every day. Then plant it in potting soil like an avocado and settle down for a wait; it can take up to four months for a sprout to emerge.

New Plants from Tubers

Sweet potatoes and ginger -tuberous roots and rhizomes, respectively - are plant parts that that are easy to grow into new plants. Prop a sweet potato over a water-filled glass by poking three toothpicks in a circle into the middle of the tuber and resting the toothpicks on the rim of the glass so that the narrower, pointed half of the tuber is submerged in the water. Place the glass in a sunny window. Soon roots will begin to sprout from the portion in the water, and usually within a few weeks, stems and leaves will begin to grow from the top of the tuber. To keep your sweet potato as a houseplant, carefully transplant it into a container of potting soil once a good root system has developed.

Ginger is particularly fun to grow because both the cut ends and the glossy new leaves (when crushed) emit a strong gingery aroma. Suspend a chunk of ginger with toothpicks over a glass of water or place it in a container of moist-ened potting soil. If using the water method, transfer the new plant to a container of potting soil once roots appear.

Off With Their (Carrot) Heads!

You can force many root crops (beets, parsnips, and carrots, for instance) to sprout new top growth by beheading them. Kids love the chopping part. Slice off the head end along with one to two inches of the root and place it in a saucer filled with pebbles for support and water. In a week or so new greens should appear from the top. Then snug the root into a container filled with potting soil.

This beheading technique also works well with pineapples. Cut off the top inch of the fruit and scoop out most of the yellow flesh inside the crown, leaving the core. Let the top dry for a day or two, then place it in a tray filled with pebbles for support and water. Roots will appear and new shoots will sprout from the top in about two weeks, and soon you'll have a fantastic tropical plant. To continue growing the new pineapple, transplant it into a pot, covering the crown and roots with soil.

Spicy Greens

For a kitchen scrap plant that's both pungent and edible, try garlic or onions. Plant old cloves of garlic or bulbs of onions just below the surface in containers filled with moistened potting soil. Within a few weeks you'll see sprouts. Unlike the other kitchen scrap plants described above, you can eat these greens in salads and stir-fries.

3. Place in a sunny window and watch your gardens grow!



Garden by Age

Overview:

Gardening is a fun activity for kids of all ages, but their developmental levels will influence their interests and interactions in the garden.

Materials:

- Garden space and tools
- Plants
- Time for creativity and exploration

Approximate Time to Complete: Ongoing

Location: Outdoor

Ages: 3-12

Season: All Seasons

Instructions:

It is never too early to get kids hooked on gardening. Garden expert Cheryl Dorschner shares some of her favorite tips for engaging young gardeners along with her observations about how kids approach the garden differently as they age. Here are some of her top tips for supporting fun kids' gardening experiences:

- 1. Recognize that kids' gardening priorities are different, well, practically opposite those of adults. Let kids choose what to plant. Offer guidance and make sure there are some sure-success plants among their picks. But if they want beets, roses, and petunias, why not? Relax your standards. Crooked rows or weeds as pets are fine.
- 2. Transplanting is fun, even if your child plays with plants the way they move action figures or Barbies about. But remind them that plants' roots need some time to grow in one place.
- 3. Leave room for good old-fashioned digging. Holes are a highly popular landscape feature. Look for worms. Add water, and frogs appear.
- 4. Model the message that some insects are beneficial, and even destructive bugs are highly interesting.
- 5. Do behind-the-scenes maintenance of kids' gardens, keeping them edged and weeded. Don't expect kids to do all the watering and pest patrol.

Gardening through the Years:

Preschoolers, Ages 3-4: As long as I don't expect us to accomplish something in the adult sense of the phrase, gardening is great fun. We move mulch. We catch toads. We pull a few weeds. We blow the fuzz off dandelions. If a child wants to plant last night's dessert — watermelon seeds, we do just that. This age of unbridled exploration must be accompanied exploration. Preschoolers are never safe unattended. And while you're together, you have a chance to explain the life cycle of a seed or the history of evolution in an ancient fern. Let kids take the lead while you supply the background information. It's in the storytelling that kids learn about gardening and the world. Don't know all the answers? No one does. Library trips are part of the journey.

Kindergartners, Age 5: "All the world's a stage" for youngsters who have an emerging sense of how to play with others. Gardens are great places to act out dramas. Create forts, tree houses, secret hide-a-ways, and kids' own gardens where children can interact and learn. Continue to let kids take the lead. If your child sees a hollow stump as a potential troll house, drop your pruning shears and join him in inspecting it. Help him gather the supplies he needs to make the project happen. Assist only where needed — say in lashing sticks together to make a ladder,





or by offering leftover nasturtium seeds or marigold seedlings to embellish his ideas. At last, kids this age have the attention span and dexterity to be left within sight to create their own worlds. And don't fuss about how those little Edens turn out. The world was a messy place during its creation.

Early Elementary School, Ages 6-7: Your youngster's improving reading and math skills add new depth to gardening fun. Now kids can make plant markers, read seed packets, pore over catalogs, and pay for nursery plants. And yet they're still wide-eyed and open to nature's mysteries. Soil, holes, and water hold endless fascination, as do bugs. But for children this age, the "doing" is still more important than the end result. For them, a garden is a willy-nilly collection of plants of all shapes, sizes and colors. A bouquet is whatever fits in the diameter of a palm and curled fingers and whose stems reach into a jar full of water.

Middle Elementary School Ages 8-9: The emphasis shifts from doing to doing well. Your children can design a garden on graph paper, thinking about flower heights and colors or how much space a tomato plant will need. They can translate that drawing to a real garden. Their ability to use tools increases; they can build arbors and fences. It's never too early, but now is an especially wonderful time to enter your vegetables and bouquets in contests at the local fair or town events or to join a group such as a community garden, CSA or 4-H. These activities combine gardening with friendships — both so important now.

Late Elementary School/Tweens, Ages 10-11: Now gardening celebrates its ability to cross several disciplines with ease to speak to your children's many interests. Garden is science, math, art, and still fun. Your youngsters can organize a class project to create a small garden at the local nursing home — and gain the support of businesses and parent volunteers. They can build garden structures and community. They can start seeds and businesses. We know a couple of boys whose award-winning sunflowers at the fair launched their own sunflower seed business. And the opportunities for fun in the garden are endless. With a little imagination, this year's scarecrows can look like the Spice Girls, or Arthur, or the scariest dementor Harry Potter ever met.

Early Teen Years, Ages 12-13: At this age, if youngsters don't take a hiatus from gardening in favor of friends and anything currently "way cool," they can put their green thumbs to work in the family landscape and in community projects. While focusing on sports, fashion, or school plays fills their days to overflowing, how can gardening compete? In a word, it has to be "awesome." And it is. Many students now do independent studies, such as "eighth-grade challenges," to demonstrate their mastery of a subject. These are the years when some gardening project guided by a biology teacher, group leader, neighbor, or parent just may set some youngsters on career paths. It's enough to hope your child will grow up to garden, but who knows, you may have a budding botanist or future horticulturist in the family.

