Teacher’s Manual

Preschoolers Learning About Nature & Nutrition Together

P.L.A.N.N.T. A Garden-Enhanced Curriculum for 3-5 Year Olds
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About This Curriculum

P.L.A.N.N.T. stands for Preschoolers Learning About Nature and Nutrition Together. The curriculum is designed for children ages 3-5 and has three main goals:

1. Increase children's environmental awareness and stewardship through gardening and garden-related activities
2. Increase children's nutritional and health awareness through gardening and garden-related activities
3. Increase children's life skills and academic achievements and outcomes through gardening and garden-related activities

The P.L.A.N.N.T. curriculum is connected to Kentucky’s Early Childhood Standards. These standards are part of the Kentucky Department of Education and were designed to reflect the range of developmental abilities typical of young children. The critical knowledge and skills learned in the early years are the focus of this program. The goal is to support early childhood professionals to plan experiences to promote progress along the developmental continuum.

The P.L.A.N.N.T. curriculum is loosely based on Bandura's Social Learning Theory, which is centered on the idea that children learn not just by simple rewards versus consequences; that whole learning takes place through modeling and participating in a hands-on way. The important thing is going to be how the children participate and you will find that there are a variety of “types” of activities that are designed to be adapted to different types of learners in effort to increase participation.

It is important to understand that this curriculum does not provide everything you’ll need to know about gardening. It is recommended that you invest in a gardening book for more information regarding garden construction and maintenance. Also, P.L.A.N.N.T. is a supplement to your regular program and is not designed to be the only curriculum used in your classroom.
Hello!

There are three primary inspirations for the P.L.A.N.N.T. curriculum. First, the children in your classrooms. Their desire to touch, taste, smell, squish, poke, and squeeze is how I knew that they would love these activities and hopefully won't even realize all the great stuff they are learning—and tasting!

You also inspire me. As a former Early Childhood Teacher, who still lives and works in the field, I know first hand that teachers are such amazing creatures. We have such an incredible opportunity to do something great for the children we teach and care for each day. We are storytellers, music makers, snuggle buddies, best friends, advice givers, role models, and most importantly, partners in exploration. Don't lose sight of the inner child in you and always remember that to see the world through a child's eyes is an amazing gift that should be cherished. Childhood is such a brief moment in time and it is our duty and our pleasure to plant the seeds of hope, knowledge, joy, and discovery in each of their fertile minds.

And finally, Mother Nature inspires me. The earth is a living, breathing classroom that is just waiting to be discovered by little hands! This curriculum combines my love for all three things—children, teaching, and the earth.

So go forth and explore all that Mother Nature has to offer and all that we can offer to our children!

Happy Growing!

Nicole Martin

*Author and creator, Preschoolers Learning About Nature and Nutrition Together*
Why Garden With Young Children?

There is a link between nutrition habits that are developed in early childhood (preschool age) and the food choices made in adulthood. Diets high in fruits and vegetables have been associated with reduced risk for several cancers and for cardiovascular disease. Developing positive eating habits during early childhood contributes to optimal health, boosts self-esteem, and decreases the risk of both immediate and long-term health problems.

It has also been shown that consumption of vegetables, as a habit in childhood is an important predictor of higher consumption as adults and that encouraging healthy choices regarding diet and physical activity should occur during the preschool years because behavior patterns begin in these crucial years.

To be successful with this program, it is important to encourage participation from the children and allow for them to play a role in the decision-making. The important thing is going to be how the children participate and not the frequency of their participation. What decisions can the children make as part of their participation? You should decide what role you will take in the garden maintenance and also ask yourself what aspects of the project can the children contribute to? What impacts will that have on them and on the garden?

Increasing their participation will allow the children opportunities to take ownership and responsibility. If they’ve taken time and spent energy on something, they are less likely to be destructive towards it or let others be. Supporting the children in making decisions and respecting their decisions can boost their confidence in being able to enact change in their lives.

Not only does gardening help children make positive associations with healthy foods, but it provides a multi-sensory experience that increases their life skills and academic learning outcomes!

Children between the ages of 3-5 are beginning to express ideas, ask questions, and engage in discussions. They are developing more independence.
and like to be provided with choices. Often they have developed likes and dislikes and are able to express them. Verbal and fine motor skills continue to develop and children are increasingly able to express ideas verbally and through drawings. Start small and provide simple choices for the children. Allow them to explore and encourage inquiry and discovery!

Before you delve into this curriculum, be sure they know what you mean by “garden.” Read stories about gardens, talk about what’s growing in them, and what the people and animals do in the garden. Ask the children what they envision themselves doing in the garden; you’ll find out what they think will be fun about the garden and what they see themselves doing there. And this can help you to design the garden. Engage the children in the decision about what vegetables to grow in the garden. Explain to them that you will be growing things that you will eventually be able to eat! Provide pictures of what the vegetables and plants look like.

Spend a lot of time asking the children about what they think. Invest in shovels, rakes, buckets, pots, scoops and wheelbarrows (child sized) for garden exploration.

And finally…
Be sure that you are willing to take on this gardening project; it won’t be simple! Enlist support from families, administrators, co-workers, and community members. The success of the program depends greatly on your commitment level. Even if you’re not an experienced gardener, you can be successful with this program. Remember it will be what you make it!
How to Teach this Curriculum

The teacher manual is divided up into 4 seasonal units and each unit has 3 monthly themes within it. Children can begin the lessons at anytime but most programs start with the Spring or Summer unit. This teacher’s guide begins with the Spring unit.*

1. **Spring**
   - March: “Planting the Garden”
     - “Sun, Soil, and Seeds”
   - April: “Tools”
   - May: “Dig in”

2. **Summer**
   - June: “Growing the Garden”
     - “Roots and Shoots”
   - July: “Water and Bugs”
   - August: “Vegetables and Composting”

3. **Fall**
   - September: “Harvesting for Health”
     - “Healthy Bodies”
   - October: “Cooking and Eating”
   - November: “Get Moving”

4. **Winter**
   - December: “Indoor Gardening”
     - “Get Crafty”
   - January: “Containers”
   - February: “Our Growing Classroom”

*If you choose to start with the summer unit, you will need to prepare your garden area prior to beginning the program—generally by early spring.

- There are four primary components to this program: a featured lesson, 15 minutes of free gardening, a circle time topic, and a weekly vegetable tasting session.

- At the beginning of each month, teachers will find a monthly overview, which includes a brief overview of the monthly goals and objectives of the theme.

- Teachers will then find a Family Newsletter that can be photocopied and distributed to the parents of the participating children at the beginning of each month.
• Following the Family Newsletter, teachers will find the Circle-time Activities Menu that corresponds with the monthly theme. One topic from the menu should be selected and discussed during group time each day.

• The next 20 pages or so are the actual lessons*. Each day there will be one featured P.L.A.N.N.T. activity that corresponds with an existing learning center in the classroom environment (blocks, science, art, dramatic play, and music).

• Teachers should read ahead and plan for the week’s lessons the week before to ensure a complete understanding of the objectives and to prepare any materials needed for the activity.

• Every day, all children should be provided with at least 15 minutes of garden-exploration. Ideally this happens outdoors in the garden, however if weather does not permit this, then at least 15 minutes of indoor gardening should be substituted for this. Every Monday, a Garden Check will remind teachers of this daily gardening requirement.

• Every week, teachers should provide a new raw vegetable snack for the children to try. Ideally this will be something grown in your outdoor garden, but during off seasons, these items can be purchased. Every Friday, a Snack Attack will remind teachers of this weekly vegetable tasting requirement.

• Theme-related books that correspond with each unit should be used as part of the group time experience. Suggested books can be found on the “Circle Time Activities Menu” pages at the beginning of each month. They are only suggestions and others can be substituted!

*Note: each unit is designed on a 4-week per month basis, although some months contain 5. Please see the “Supplemental Activities” section in the back of the manual for additional activities.
Plant & Flower Discovery

**Materials List:**
- Plastic or silk flowers and plants
- Plastic watering cans
- Plastic garden tools
- Chart Paper
- Marker

**Purpose:**
Encouraging the children to explore new things on their terms is very important to their development and confidence. Make time for “child-initiated” choice every day.

**Instructions:**
Place the flowers, plants, watering cans, and plastic tools in the dramatic play area. Allow the children to explore the items as they choose. Observe how they use the tools and record your observations on the chart paper. Display the chart in the classroom.

**What they learn:**
When children are encouraged to explore freely they gain confidence and decision making skills. Allowing them to touch and manipulate the fake flowers and tools will provide an opportunity for them to share their own thoughts and ideas.
Sample Daily Schedule

6:30 - 7:30  Arrival/Sign in
7:30 - 8:30  Family Style Breakfast
8:30 - 10:00 Child Initiated Discovery*
10:00 - 10:30 Outdoor Discovery**
10:30 - 11:00 Circle/Group time***
11:00 - 11:45 Family Style Lunch****
12:00 - 2:00 Quiet Rest Time
2:00 - 2:45 Family Style Snack
2:45 - 4:00 Child Initiated Discovery
4:00 - 4:30 Outdoor Discovery
4:30 - 5:00 Circle/Group time
5:00 - 6:00 Departure/Sign out

*The Child initiated discovery times are a great opportunity to introduce the PLANNT lesson for the day!

**The Outdoor Discovery times are great for your garden exploration!

***The circle and group time experience is where you will want to introduce a topic from the “circle time menu” or reflect on what the children are learning in the garden! These are also good times for vegetable tasting activities!

****It is important to take advantage of meal times and participate with the children “family style” so that you can encourage the tasting of new things, where food comes from, and role model healthy eating!

Remember, you will want to make the schedule work for your particular classroom; this is only a basic sample. You may find that in warmer months or during the planting season, you spend more time outdoors in the garden because there’s more work to be done! Also, during colder months, you’ll want to substitute some indoor gardening if you cannot go outside.
Vegetable Planting Guide

Cool Season Vegetables
These vegetables prefer cool growing temperatures (60º to 80º) and lose quality in hot weather. They are often replanted mid-summer for fall harvest.

Hardy Vegetables
Crops: broccoli, cabbage, kohlrabi, onions, lettuce, peas, radish, spinach, turnips
These vegetables grow with daytime temperatures as low as 40 degrees and may survive a frosty nip.

When to plant:
Based on soil temperatures
Plant as soon as soil adequately dries in the spring.
These crops may be planted as early as 2-4 weeks before the date of the average last spring frost.

Semi-Hardy Vegetables
Crops: beets, carrots, cauliflower, parsley, parsnips, potatoes, and Swiss chard
These vegetables grow with minimum temperatures of 40º to 50º, but are less tolerant of a frosty night.

When to plant:
Based on soil temperature.
Plant as soon as soil adequately dries in the spring.
These crops may be planted as early as 0-2 weeks before the date of the average last spring frost.
**Warm Season Vegetables**
These crops require daytime temperatures above 60º. They prefer summer like weather with temperatures between 70º and 95º. They are intolerant of frost and may be sensitive to cool spring winds.

**Tender Vegetables**
Crops: beans, celery, corn, cucumbers, New Zealand spinach, summer squash

**When to plant:**
Based on soil temperature.
Soil is adequately dry to work.

These crops may be planted (from seed) around the date of the average last spring frost. Transplants of cucumbers and summer squash should be delayed until the time listed for the very tender group below.

**Very Tender Vegetables**
Crop: lima beans, cantaloupe, eggplant, pepper, pumpkin, winter squash and pumpkins, tomato, and watermelon

These crops are not only intolerant of frost, but also cool spring winds. A week of daytime temperatures below 55º may stunt the crop.

**When to plant:**
Based on soil temperature.
Soil is adequately dry to work.

These crops are typically planted two plus weeks after the average last spring frost date.

Weather is becoming summer-like, (i.e., consistently above 55º (daytime) and breezes should have lost any cool nip.
Vegetable Planting And Harvesting Tips

(Taken From "The Growing Classroom")

**Beans, Bush**
Keep sowing every 2 weeks for constant supply of beans. Plants may stop producing beans during extreme heat but will begin again when temperatures decrease.

Pick beans before you can see bean swelling in pod. Be sure to pick beans frequently (3-5 days) so the crop keeps producing.

Sensitive to transplanting, consider sowing directly in garden.

Eat raw, steamed, boiled, or pickled in vinegar.

**Beans, Pole**
A pole bean is a climbing variety and needs support of a pole, trellis or fence to grow.

Pole beans often produce for a longer period than other beans.

Pick beans before you can see bean swelling in pod.

Pick beans frequently (every 3-5 days) for continual harvest.

Sensitive to transplanting, consider sowing directly in garden.

Eat raw, steamed, boiled, or pickled in vinegar.

**Beans, Shelling**
Shelling beans are grown until the bean and pod is dry. Let the beans completely dry on the stem before harvesting.

Place dried bean pods on tarp and have kids stomp on them to remove pod or place in sack and strike sack to break beans from shell. Some kids like to hand shell each pod.

These beans need to be cooked to eat.

**Beets**
Sow seed directly in garden every 10 days for continual harvest.

Thin plants when they are young.
Vegetable Planting And Harvesting Tips

When beets are 1-2.5 inches in diameter, pull the roots.

Beets will get woody when overly mature. Beets will keep in ground during frosts.

Eat raw, pureed, marinated, stewed, or pickled in vinegar. Beet greens may be cooked like spinach.

**Broccoli**

Broccoli is a cool season crop that grows best in full sun.

Pick broccoli when heads form into tight, firm clusters.

Cut off the head with 6 inches of stem attached. Side heads will form after first head is cut.

Eat florets and stems raw, boiled, or steamed.

**Brussels sprouts**

Plant Brussels sprouts in spring for a fall harvest. Exposure to frost improves flavor and sweetness.

To harvest, twist sprouts off the stem when 1.5” wide and start with lower ones first. Remaining sprouts will keep on plants through part of winter.

Eat boiled or baked.

**Cabbage**

Plant in mid-summer for a fall harvest. In mild areas sow in fall for a early spring harvest.

Harvest cabbage heads when they have formed tight, firm heads.

Eat raw, boiled, steamed, or pickled as sauerkraut.

**Carrots**

Sow seed directly in the garden. Thin crowded plants when small.

Harvest carrots at almost any time in the growth cycle. Carrots will keep in the garden after the first frost, right up until ground freezes in winter.

If needed, loosen carrots with digging fork before pulling.

Eat raw, boiled, baked, pureed, or pickled in vinegar.
Vegetable Planting And Harvesting Tips

**Cauliflower**
Tie outer leaves around head to protect cauliflower from the sun.

Cauliflowers are cool season crops that are ready to harvest when the flowerets are tightly formed and dense. Cut the head off the main stem.

Eat raw, cooked, boiled, or pureed.

**Celery**
Requires a lot of nutrients and water.

Harvest after the stalks have reached a foot or more.

The inner stalks are more tender and taste best uncooked.

**Chard**
Cut the outer leaves close to ground when 8-10” tall. Make sure to leave 4-6 leaves on the plant so it can continue to grow.

Refrigerate chard for up to two weeks.

Cook by boiling, steaming, or stir-frying.

**Corn (sweet)**
Sensitive to transplanting, consider sowing directly in garden.

For good pollination plant in blocks at least 4 feet by 4 feet.

Ears are ready to harvest about 20 days after the silks appear or when they turn brown.

Peel back the husk to and puncture a kernel with your fingernail. If the kernels are fat and juice is milky - white, the ear is ready for eating.

Eat raw, steamed, or boiled.

**Corn (pop)**
Sensitive to transplanting, consider sowing directly in garden.

Do not plant sweet corn in same garden with popcorn; the quality of sweet corn will be reduced if cross - pollinated by popcorn.

Allow the kernels to dry in field as long as possible before winter rains.

Harvest kernels when hard and the husks dry. Remove the husks and place the ears in mesh bags and hang in a warm, dry location.

Once a week, shell a few kernels and try popping them; when test kernels are popping well store ears in cool dark dry place or remove kernels and store in airtight containers.
**Cucumbers**
Mound soil into hills; plant 3 seeds per hill.

Try growing cucumbers vertically on a trellis to increase air circulation and sunlight.

Cucumbers are tastiest when harvested young before the seeds fully develop.

Harvest lemon cucumbers when they are light green with just a blush of lemon color.

Eat raw.

**Eggplant**
In northern gardens where growing season is short, start with large transplants.

Eggplant may develop a bitter flavor when grown in stressful conditions. Pick them while the skins are glossy and before seeds form inside.

Cut stem, rather than pull from plant.

Soak eggplant in water for 15 minutes or salt and let sit before cooking to reduce bitterness. Eat baked, pureed, stuffed, or roasted.

**Garlic**
Harvest when half to three-quarters of the leaves turn yellow - brown.

Remove flower stalks to encourage efficient bulb growth.

Loosen soil beneath bulb before pulling.

Tie garlic together in bundles of 6 to 10 bulbs; hang them for four to six weeks in shaded, dry, area to cure.

Mince and use in any dish as flavoring.

**Kale**
Pluck leaves of kale on the outside of plant when leaves are 10” or longer.

To keep the plants in production, avoid cutting center bud or leaves. Frost enhances the flavor.

Eat pureed, boiled, steamed, or baked in a casserole.
Vegetable Planting And Harvesting Tips

**Kohlrabi**
For best texture, harvest kohlrabi bulb when it reaches 2-3 inches in diameter. Bulbs become tougher as they grow and age.
Pull or slice at base. Bulbous stem and leaves are edible, peel off skin around bulb before eating.
Eat raw, steamed, boiled, or pureed.

**Leeks**
Plant transplants when 4” high.
Harvest leeks when they are about 1 inch in diameter and before they make their flower stalk.
Slice open lengthwise and rinse inner leaves.
Eat in soups, salads, baked dishes, or as a substitute for chive.

**Lettuce**
Lettuce prefers cooler weather, in hot weather plant lettuce may go to seed prematurely (bolting).
Harvest outer leaves of leaf lettuce early to encourage growth.
Head lettuce is ready to harvest when heads are firm and tight.

**Onion**
Harvest when tops fall over and tips of leaves start to turn brown.
Pull onions, shake off any soil, but do not wash them or pull off outside wrapper leaves. Store in dry area to cure for about a week.
Use raw, blanched, boiled, baked, or just about any dish.

**Parsley**
Long germination and growth period.
Soak seeds over night before planting.
Harvest parsley as soon as plants are growing vigorously.
Snip outer stems from plants; they will produce new growth.
Parsley dries and freezes well. Can be eaten dried or fresh.
**Peas**
Sensitive to transplanting, consider sowing directly in garden. Harvest peas daily to encourage vines to keep producing.

Shelling Peas: Pick them when the pods are rounded and the peas have filled in pod, but before they grow tough. Pods are not edible.

Snap Peas: Pick when their edible pods begin to grow rounded, plump and juicy, but before they get tough.

**Snow Peas**:
Pick them when the pods have grown to 2-3 inches but are still flat.

Eat raw, boiled, steamed, or stir-fried.

**Peppers**
Sensitive to cold and harsh sun. In extreme heat, shade peppers by planting in a dense block.

Peppers are edible when they’re green, but most don’t develop full flavor and mineral content until they turn from green to orange, yellow, or red.

Eat raw, boiled, baked, stuffed, or stir-fried.

**Potatoes**
When foliage starts to wither and die, the tubers should be fully grown and ready to harvest in a couple of weeks. Let soil dry down a bit to help cure potato skin and dig up with a spading fork before first frost. Do not wash potatoes before storing; rather just brush off dirt.

Potatoes that are nicked or bruised during harvest don’t store well, so eat as soon as possible.

“New potatoes” can be harvested before the plant begins to die back. New potatoes should be washed and eaten shortly after harvest.

Always cook potatoes, the raw starch is mostly indigestible. Boil, steam, or bake. Leaves are not edible.
**Vegetable Planting And Harvesting Tips**

**Pumpkin**
Pumpkins prefer to be sown directly from seed in hills, 3 - 4 seeds per hill. Leave plenty of room for vine sprawl (6 feet for bush types and 10 to 12 feet between vining sorts).

Do not pick pumpkins until the vine begins to turn brown and dry. Then cut vine 3 - 4 inches above pumpkin.

Leave pumpkin in sun for a week or two to cure. Eat baked, boiled, or pureed. It is easiest to remove pumpkin flesh from skin after baking.

**Radish**
Sow seed directly in garden every 10 days for continual harvest.

Spring radishes should be checked frequently because of quick maturation. Will get woody when over-mature. Pull radish roots when 1-2 inches in diameter.

Eat raw, stir-fried, or pickled in vinegar.

**Spinach**
Sensitive to transplanting, consider sowing directly in garden.

Plant every two weeks for continual harvest.

Harvest larger outer leaves early in morning when crisp, or cut whole plant at base.

Keep cool. Will “bolt” and go to seed in hot weather.

Wash well. Eat raw, pureed, stir-fried, steamed, boiled, or in baked dishes.

**Squash, Summer**
Sensitive to transplanting, consider sowing directly in garden.

Pick frequently when fruits are small. Skins should be tender enough to poke a fingernail through.

Pick zucchini no larger than 6-7”, patty pan squash at 2-3”, and round zucchini at 3-4”.

Skin can be eaten along with the inside. Eat raw, boiled, baked, roasted, or in soups.
**Squash, Winter**
Sensitive to transplanting, consider sowing directly in garden.

Grow throughout the season and harvest when plant materials die back in fall and the squash skin is hard.

Most winter squash store well. After harvest, store in cool dry.

Eat boiled, baked, or pureed in soups. It is easiest to remove squash flesh from skin after baking.

**Tomatoes**
Prefers warm weather although nighttime temperatures over 90 degrees can prevent fruiting.

Harvest when fruits are full color.

Eat raw, stuffed, stewed, boiled, baked, or pureed. Leaves are not edible and are considered toxic if large amounts are ingested.

Great crop to comparative taste fresh vs. store bought.
Even if you are not an experienced gardener, this curriculum is very easy to teach. There are a few things, however that you need to know before you get started.

There are two main kinds of garden plants, annuals and perennials. Annual plants start from seeds, grow, and flower, and then produce a fruit for one season. Examples of annuals are tomatoes, lettuce, corn, and beans. Perennials grow from seeds, develop a plant in the first year, and then flower and produce fruit for each year thereafter. Examples of perennials are rhubarb, strawberries, and apple trees.

Technically many vegetables are actually fruits but for the sake of this curriculum, we will still classify them as vegetables. Some examples of vegetables that are really fruits are tomatoes, zucchini, and pumpkins. Why? Because when they grow, the part we eat actually starts as a flower. Any plant part that develops from a flower is technically a fruit and any plant part that is the leaf, stem, or root is technically a vegetable! (remember, because most children commonly recognize these items as vegetables, we will assume that these items are vegetables)

Here are some basic steps to vegetable gardening.

1. Draw a plan (to scale) of the garden area

2. Decide what vegetables you will grow and do a little research on them to find out when they are best planted (some of this can be found in the vegetable planting guide on page x).

3. Plant with at least 20 inches between rows and 2-4 inches between each plant. You can and should start many vegetable seeds indoors as most are slow growing during the seedling stage. When they sprout, you can transplant them to the outdoor garden area.

4. Find out which direction your garden faces (north, south, east, west) and plant taller growing plants on the north side so that light won’t be shut out from the lower growing plants. You can also utilize the space in between your rows for quickly growing crops. For example, you could plant beet seeds in two rows and then plant lettuce (that have been started indoors) in between because lettuce grows much faster than beets! Make sure you thin out the plants as they grow to always ensure at least 2-4 inches between individual plants and prevent overcrowding.
What About Greenhouse Gardening?

If you are lucky enough to have an on-site greenhouse or if you decide to create one, here are a few tips to growing vegetables in a greenhouse.

Carrots, beets, turnips, and other root crops do well in deep boxes, which fit well under benches.

Tomatoes, peas, cucumbers, and pole beans need tub-type containers. Lettuce, or other low leafy vegetables may be planted in the tub with the taller vegetables.

Plant corn directly in the floor of the greenhouse, in a bed prepared for it. Plant pumpkin between the rows of corn to save space.

Water your indoor plants with room temperature water, so not to injure your plants. Tap water should stand for 1 day to rid water of chlorine. This will avoid brown tips on plants.

For good drainage, use any of the following in the bottom of your boxes or pots: broken clay pots, cracked walnuts, marbles, charcoal, or gravel. Clay pots should be soaked in water a few minutes before using. This will prevent the clay from absorbing the moisture from the potting soil.

Indoor trellises can be made out of coat hangers. Bend to any shape you desire (heart, star, or other) and insert into pot.

Herbs are nature’s insecticides. Be sure to include a variety of them in your garden. Make an effective and natural insecticide by adding onions and garlic to a jar of water. Let it stand for a week and then spray your plants.

Throw crushed eggshells on your garden for plant growth. To add acid to the ground, use dried coffee grounds (you will learn more about composting in the summer unit).
Check your classroom for items that will aid your children in nutrition, gardening, and science discovery!

- Plastic magnifying glasses
- Containers for collecting
- Large terrarium
- Gravel
- Flower pots
- Potting soil
- Bean seeds
- Spray bottles
- Plastic hand tools
- Clipboards, paper, pencils
- Tongue depressors
- Measuring tape
- Field guides, books about flowers and plants
- Shoe boxes
- Bug collectors
- Plastic bugs
- Artificial flowers and plants
- Plastic watering cans
- Large plastic tubs or sensory table
- Seed packets
- Rulers
- Notepads
- Nutrition posters
- Plant themed puzzles
- Nutrition themed puzzles
- Textured items
Vegetables Rainbow

Here's a handy list of vegetables by color. Remind children to “eat their colors”!

**Purple**
- Purple asparagus
- Purple cabbage
- Purple carrots
- Eggplant
- Purple Belgian endive
- Purple peppers
- Potatoes (purple fleshed)

**Red**
- Beets
- Red peppers
- Radishes
- Radicchio
- Red onions
- Red potatoes
- Rhubarb
- Tomatoes

**Yellow**
- Yellow beets
- Yellow peppers
- Yellow potatoes
- Yellow tomatoes
- Yellow winter squash
- Sweet corn
- Yellow summer squash

**Orange**
- Butternut squash
- Carrots
- Pumpkin
- Rutabagas
- Sweet potatoes

**Green**
- Artichokes
- Arugula
- Asparagus
- Broccoflower
- Broccoli
- Broccoli rabe
- Brussels sprouts
- Chinese cabbage
- Green beans
- Green cabbage
- Celery
- Chayote squash
- Cucumbers
- Endive
- Leafy greens
- Leeks
- Lettuce
- Green onions
- Okra
- Peas
- Green peppers
- Snow peas
- Sugar snap peas
- Spinach
- Watercress
- Zucchini

**White**
- Cauliflower
- Garlic
- Ginger
- Jerusalem artichokes
- Jicama
- Kohlrabi
- Onions
- Mushrooms
- Parsnips
- Potatoes (white fleshed)
- Shallots
- Turnips
Helpful Resources for Teachers

National Gardening Association
www.garden.org
1100 Dorset Street,
South Burlington, VT 05403
Phone: 802-863-5251

KidsGardening!
www.kidsgardening.com
National Gardening Association
1100 Dorset Street
South Burlington, VT 05403
Phone: 800-538-7476 (800-LETSGRO)
Fax: 802-864-6889

LifeLab Science Program
www.lifelab.org
1156 High Street, Santa Cruz, CA, 95064
Phone: 831-459-2001
Fax: 831-459-3483

MyPyramid
www.mypyramid.gov

Dietary Guidelines
www.nutrition.gov

P.L.A.N.N.T. Program website
www.plannt.ning.com
Suggested Reading for Teachers

Small Wonders: Nature Education for Young Children
by Linda Garrett and Hannah Thomas

Discovering Nature with Young Children
by Ingrid Chalufour and Karen Worth

The Growing Classroom: Garden-based Science
by Roberta Jaffe and Gary Appel

Kids Garden! The Anytime, Anyplace Guide to Sowing and Growing Fun
by Avery Hart and Paul Mantell