



Cooking with Kids

2017-18 Professional Development Workshop Series

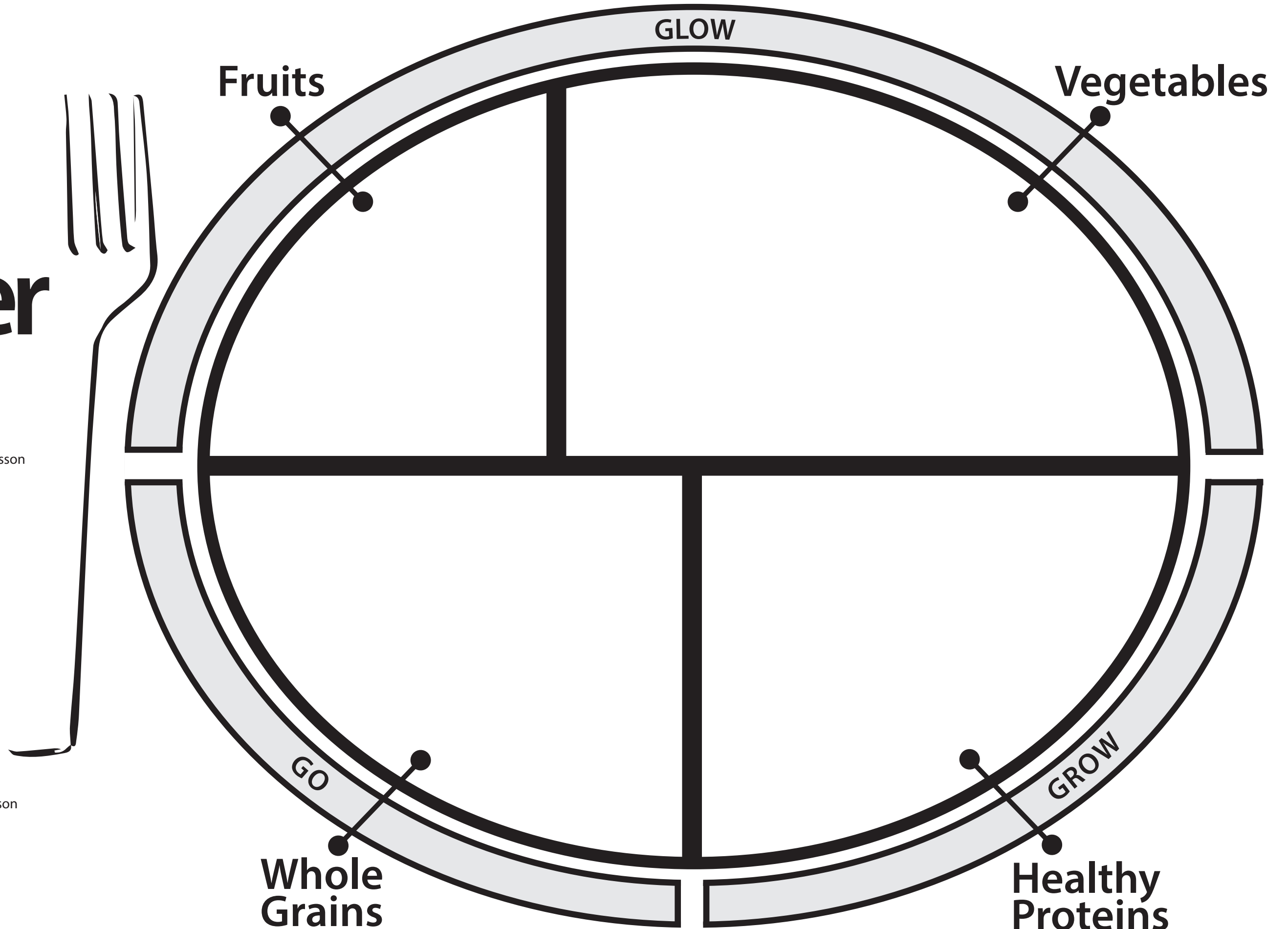
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WEST COUNTY DIGS
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Power Plate

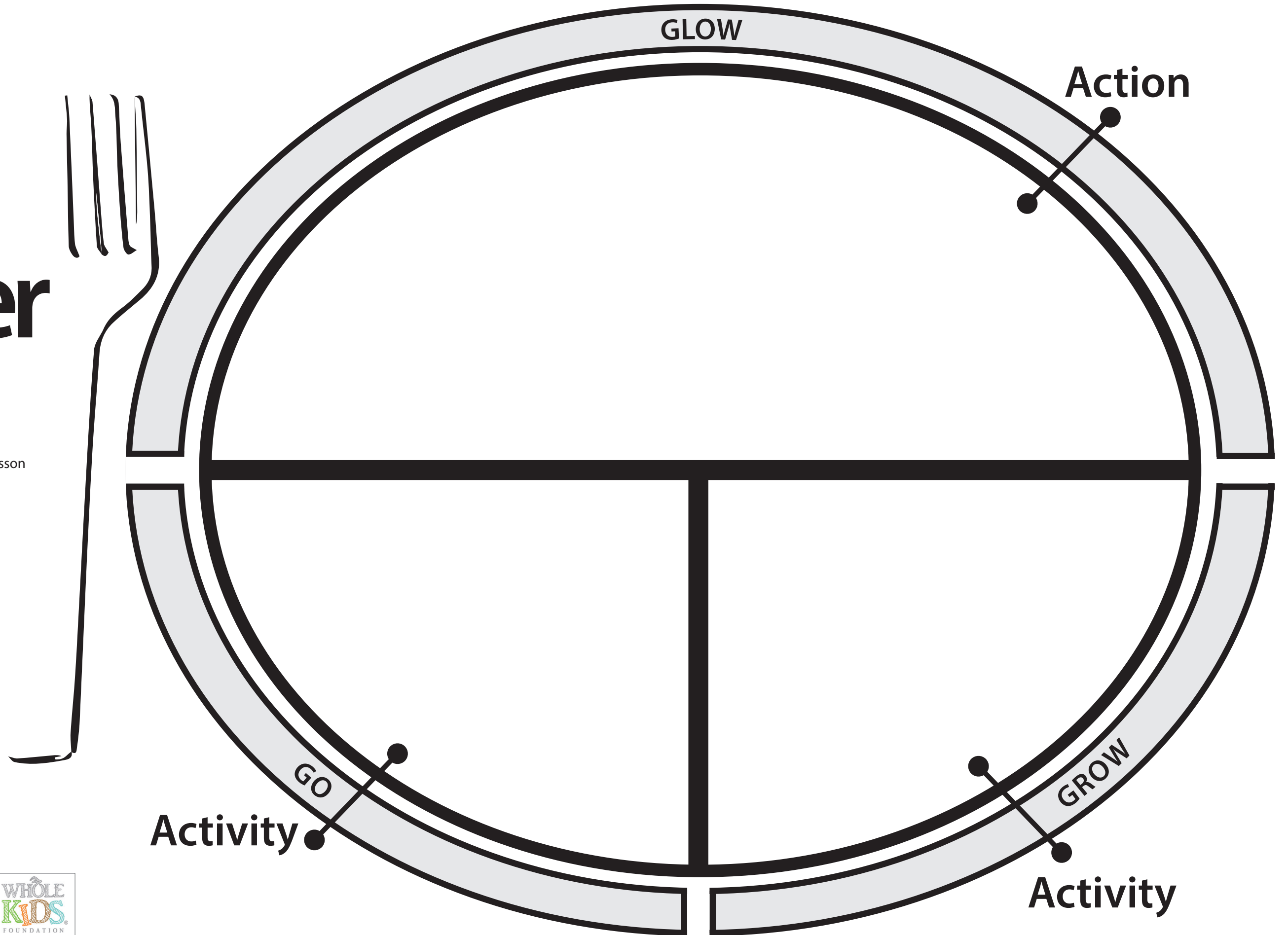
Adapted from LifeLab Power Plate Lesson



Adapted from LifeLab Power Plate Lesson

Power Plate

Adapted from LifeLab Power Plate Lesson



Plant Parts Salad

Overview: Our common fruits and vegetables represent different parts of the plant including roots, stems, leaves, flowers, fruit and seeds. Make a Plant Parts Salad to explore the different plant parts we eat.

Materials:

- The book *Oliver's Vegetables* by Vivian French or *Tops and Bottoms* by Janet Stevens
- Common vegetables representing different parts of plants
- Food preparation materials: cutting board, knife, vegetable peeler, and bowls

Approximate Time to Complete: - 30 minutes

Location: Indoor

Ages: All ages

Season: Any season

Instructions:

1. Read the book *Oliver's Vegetables* or *Tops and Bottoms*. As you read, point out the different plant parts represented in the text. Explain that the vegetables we eat come from different parts of plants. However, make sure to point out to students that not all the parts of every plant are edible and some may parts even make them sick.
2. Make a salad that includes all the different plant parts. Here is a list of some of the more common parts we eat in salad:
 - Roots - carrots and radish
 - Stems- asparagus
 - Leaves - lettuce, spinach, cabbage and parsley
 - Flowers - broccoli and cauliflower
 - Fruits - apples, avocados, cucumbers, green beans, peppers, and tomatoes
 - Seeds – sunflower seeds, corn and garden peas
3. Wash each fruit or vegetable in cold water and dry thoroughly. Cut them up into bite sized pieces using a knife.
4. Toss all ingredients in a bowl and then put into individual dishes. Top with salad dressing if desired.
5. Finally, enjoy your plant parts salad!



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PD Workshop #3 2018



Science

- The chemistry of cooking
- Plant growth and development
- Seasons and climate
- Experimentation with plant growth and cooking
- The science of nutrition

Art

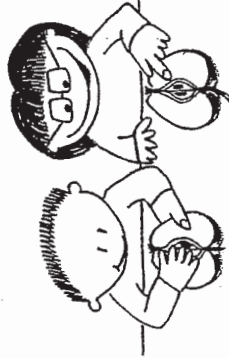
- Appreciation of food: color, shape, texture, smell, taste, sound
- Poetry, music, visual art about food and gardens
- The art of garden design
- Creating a beautiful meal

Social Studies

- The origins and movement of foods
- Foods of different cultures
- Agriculture through the ages and across the globe
- Food systems and consumerism

Physical Education

- Physical fitness
- Aerobics
- Understanding how the body uses nutrients
- Gardening as exercise
- Using tools safely



Garden-Based Nutrition Curricular Connections

Math

- Multiplying, dividing recipes
- Measuring in cooking (volume, weight, temperature, time)
- Measurement and geometry in gardening
- Comparing nutrient quantities
- Counting: seeds, potatoes, leaves, etc.
- Graphing and charting (food preferences, height of peas, size of pumpkins, etc.)

Community Building

- Working together
- Creating a place of value in the community
- Stewardship
- Sharing the bounty

Language Development

- Vocabulary
- Journal writing
- Letter writing
- Literature connections
- Recipe reading
- Oral communication
- The art of conversation

Common Core Math and English Language Arts Standards We Can Frequently Reinforce in Gardening, Cooking and Tasting Activities

Language Arts

K.W.3: Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.

K.W.8: With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

K.SL.1: Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.

K.SL.6: Speak audibly and express thoughts, feelings, and ideas clearly.

K.L.5.a: Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.

K.L.5.c: Identify real-life connections between words and their use (e.g., note places at school that are colorful).

1.L.5.c: Identify real-life connections between words and their use (e.g., note places at home that are cozy).

1.W.3: Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.

1.SL.1: Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.

1.SL.6: Produce complete sentences when appropriate to task and situation.

2.W.7: Participate in shared research and writing projects (e.g. ...record science observations)

2.SL.1: Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.

2.SL.3: Asks and answers questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.

2.SL.6: Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

2.L.5.a: Identify real-life connections between words and their use (e.g., describe foods that are spicy or juicy).

2.L.5.b: Distinguish shades of meaning among closely related verbs (e.g., toss, throw, hurl) and closely related adjectives (e.g., thin, slender, skinny, scrawny).

2.L.5.d: Distinguish shades of meaning among verbs differing in manner (e.g., look, peek, glance, stare, glare, scowl) and adjectives differing in intensity (e.g., large, gigantic) by defining or choosing them or by acting out the meanings.

3.SL.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.

3.SL.4: Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.

4.SL.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.

5.SL.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.

Math

K.CC.4: Understand the relationship between numbers and quantities; connect counting to cardinality.

K.CC.5: Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

K.CC.6: Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. (Groups with up to 10 objects)

K.OA.1: Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

K.OA.2: Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

K.MD.1: Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

K.MD.2: Directly compare two objects with a measureable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter

K.MD.3: Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

K.G.1: Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.

2.MD.1: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.

2.MD.2: Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.

2.MD.3: Estimate lengths using units of inches, feet, centimeters, and meters.

2.MD.4: Measure to determine how much longer one object is than another expressing the length difference in terms of a standard length unit.

2.MD.10: Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.

3.NF.1: Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.

3.MD.2: Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

3.MD.8: Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.

5.MD.1: Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05m), and use these conversions in solving multi-step, real world problems.

Eat a Rainbow

Description: In this lesson, students will discuss the colors of vegetables and fruits and why eating a rainbow of colors is important for the body.

Materials:

- *Eat Lots of Colors* by Helen Marsteller
- Food Picture Cards and Food color cards
- Butcher paper for tracing a human body
- Markers
- Vegetables from the garden
- Food picture coloring cards
- Eat a Rainbow body worksheet
- Homework paper listing what color foods they eat in each meal at home.

Lesson:

1. Remind students that fruit and veggies are GLOW foods. All fruits and vegetables contain important vitamins and minerals that keep our body healthy. They also contain fiber to keep the gut strong and help get rid of toxins in the body. Fruit and vegetables contain antioxidants and phytonutrients which protect plants from pests and disease. When we eat them, these phytonutrients can also protect us from disease, promote healthy aging and boost our immunity. Phytonutrients give plants their vibrant colors. When we eat fruits and vegetables in a variety of colors, we are getting a variety of essential vitamins, minerals and nutrients that are important for our body.
2. Read the story *Eat Lots of Colors*.
3. Pass out food picture cards. Have students sort their cards and put them in the correct food color group. Students tell what their card is and why that color is important for the body.
4. Draw a figure of a human body, or trace an outline of a student or project the Eat a Rainbow body worksheet. Color the parts of the body with the color food group that it benefits. Ex. *Green vegetables like Kale are good for your bones and teeth. I'm going to draw in bones and teeth with a green marker.*
5. Have students color in food picture coloring cards. Children can make a poster or book with their own set of coloring cards.
6. Make a snack using a rainbow of colors of fruit and veggies from the garden.
7. Have students draw sample plates of meals that use all of the colors of the rainbow.

This lesson can be done all in one day or spread out over a few days.
Lessons are adapted from LifeLab: *The Growing Classroom* and other curriculum



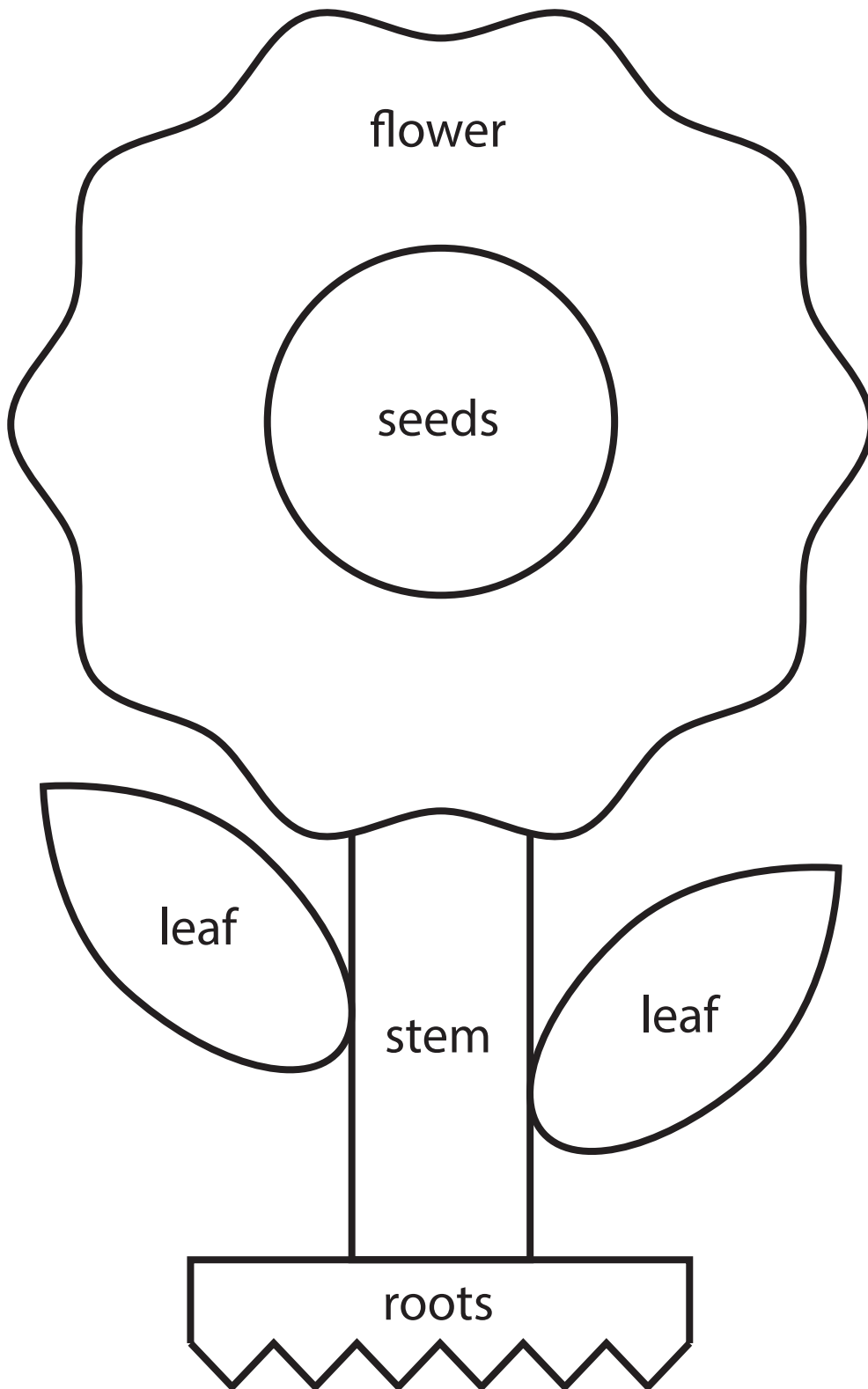
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I can eat a whole plant!



flower

seeds

leaf

stem

roots

The basic parts of most land plants are roots, stems, leaves, flowers, fruits and seeds.

Roots anchor plants in the soil and absorb nutrients and water that are needed by the rest of the plant.

Stems support the upper part of the plant and act as a transport system for nutrients, water, sugar and starches.

Leaves are the parts of the plant where photosynthesis usually occurs – where food for the plant is made. Chlorophyll, the green substance, captures light energy and uses it to convert water and carbon dioxide into plant food and oxygen.

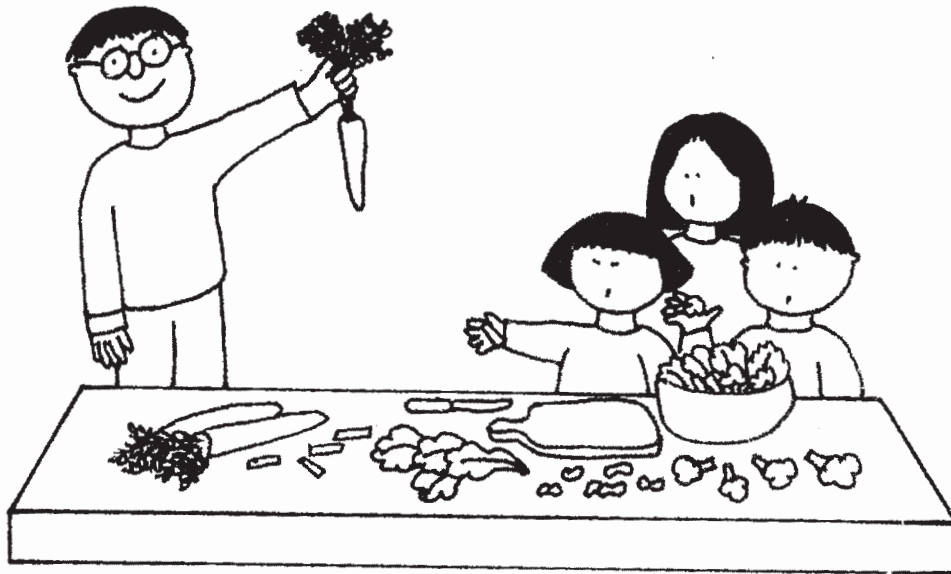
Flowers are the reproductive parts of plants. They often have showy petals and fragrances to attract pollinators such as birds, bees and other insects. Most flowers have four main parts: petals, stamen (anther and filament), pistil (stigma, style and ovary), and sepals. After flowers are pollinated and fertilized, they produce seeds in the ovary of the flower.

Fruits are the fleshy substances that usually surround seeds. They protect the seeds and attract animals to eat them. This helps in seed dispersal.

Seeds contain plant material that can develop into another plant. This plant material is called an embryo. Seeds are covered with a protective seed coat and have one or two cotyledons. Cotyledons are the food for the baby plant until it can make its own food from light and are often the first embryonic leaves of the plant.

Healthy Eating Tips from Life Lab

- ✓ Eat a balanced diet, including all of the food groups.
- ✓ Cover about half of your plate in fruits and veggies.
- ✓ Choose whole and minimally processed foods, including whole grains.
- ✓ Eat a variety of natural colors.
- ✓ Maintain energy balance by exercising daily.
- ✓ Reduce the amount of salt, sugar, and unhealthy fats you eat.
- ✓ Get to know foods by reading nutrition labels.
- ✓ Balance health, preference, and tradition.
- ✓ Put flowers on the table, have a seat, and enjoy meals with family and friends.



[The Growing Classroom](#), Fourth Edition, Lifelab ©2016 KidsGardening.org

COLORFUL FRUITS AND VEGGIES

red

red fruits and vegetables help keep your heart healthy and help with digestion

blue

and purple fruits and vegetables are good for your brain and heart

orange

orange fruits and vegetables help your eyes so you can see, keep you strong so you don't get sick and helps your skin

green

green fruits and vegetables help your digestion, help your muscles work and builds strong bones

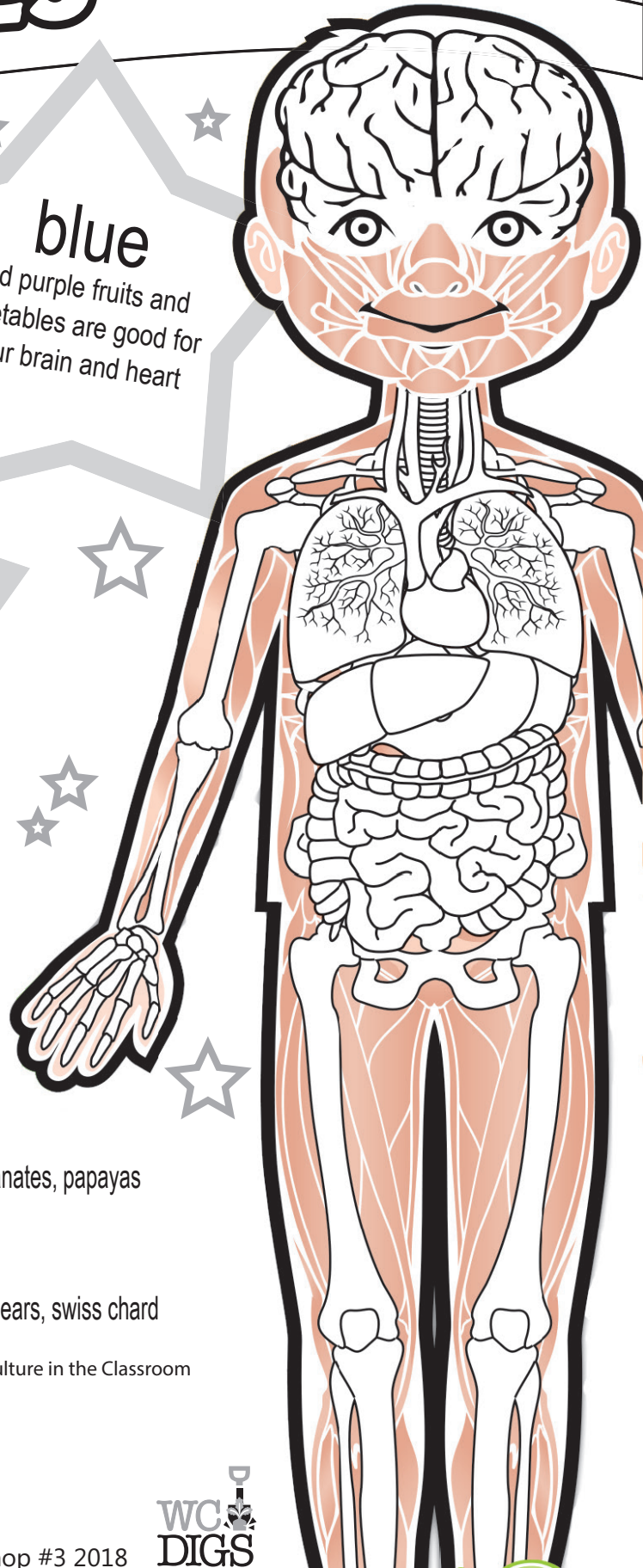
RED - red bell peppers, tomatoes, pomegranates, papayas

BLUE - plums, blueberries, eggplant

ORANGE - pumpkins, carrots, apricots

GREEN - broccoli, kale, kiwifruit, spinach, pears, swiss chard

Adapted from California Foundation for Agriculture in the Classroom



'Eat a Rainbow' Cards

from The Growing Classroom

Red

BODY PARTS: heart, skin

BENEFITS: can improve heart and skin health

EXAMPLES: apples, tomatoes, strawberries, watermelons, beets, cherries

Deep Yellow / Orange

BODY PARTS: eyes, heart, skin

BENEFITS: can promote strong vision, prevent cancer, and prevent heart disease

EXAMPLES: oranges, carrots, cantaloupe, sweet potatoes, squash, corn, yellow apples

Yellow / Brown / White

BODY PARTS: heart

BENEFITS: can lower cholesterol

EXAMPLES: cauliflower, brown pear, onions, garlic, bananas, mushrooms, potatoes

Green

BODY PARTS: gut (intestines), bones, brain

BENEFITS: can strengthen gut, bones, teeth and memory

EXAMPLES: leafy greens, broccoli, cabbage, green beans, avocado, kiwi

Blue / Purple

BODY PARTS: brain

BENEFITS: can improve memory and healthy aging

EXAMPLES: grapes, raisins, purple cabbage, eggplant, plums, blueberries, blackberries

*All Fruits and Vegetables Provide:

- essential vitamins and minerals (vital daily body functions)
- antioxidants & phytochemicals (anti-aging, cancer prevention, immunity boosting)
- fiber (gut and heart health)
- energy for your body

**In general they all can prevent diseases such as cancer and boost immunity*



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Hearty Vegetable Soup

- 1 Tablespoon Olive Oil
- 1 Large Onion, diced
- 4 Medium Carrots, peeled and sliced
- 3 Ribs Celery, chopped
- 2-4 Cloves Garlic, finely chopped
- 2 Cups Cauliflowerettes
- 1 Bunch Swiss Chard cut into one inch pieces
- 1 cup Red or Green Cabbage
- 1 28 ounce can San Marzano diced Tomatoes
- 1 19 ounce canned Cannelini Beans, drained of liquid
- 1 32 ounce Vegetable Broth
- 2 Bay Leaves
- 2 Sprigs Fresh Thyme
- 4 Sprigs Fresh Oregano, leaves chopped
- 6 Sprigs Flat Leaf Italian Parsley, leaves only chopped
- 1/4 Teaspoon Crushed Red Pepper Flake
- 1 Teaspoon Sea Salt or to taste

Place a 3 quart pot over medium heat, add the olive oil.

Add the mirepoix mixture (onion, celery, carrot) the red pepper flake, bay leaf and thyme sprigs. Sauté until onions begin to look somewhat translucent. Add the white beans, San Marzano tomatoes and vegetable broth. Bring to a simmer and add cauliflower, Swiss chard, oregano, parsley, garlic and salt. Simmer for 4-5 minutes. Check seasoning, serve.

Garden Greens with Vegan Magic

Washed and trimmed, ribs removed, hearty greens of choice:
Kale, collards, chard about 2 bunches ripped into 1-2 inch pieces
2-3 heaping Tablespoons Vegan Magic
1/8 cup water

Cook in electric skillet about 5 minutes. Add a light sprinkle of smokey flavored salt, serve.

Ladlolemono Greek Lemon and Olive Oil Sauce

2 Lemons Juiced
1/2 Cup Extra Virgin Olive Oil
1/4 Teaspoon Sea Salt

Optional:

1 Garlic Clove finely minced
1 Teaspoon of fresh herbs of choice, dill, thyme, oregano, parsley, chervil

Place ingredients in a jar and shake vigorously. Pour over cooked or raw vegetables, chicken or fish.