

GARDENING FOR NUTRITION



This webinar was recorded. Link
for viewing:

<http://ufifas.adobeconnect.com/p16kup7tin3/>

Florida Agriculture in the Classroom, Inc.

- We are a non-profit organization
- Funded by the Ag Tag
- Provide educational resources, workshops & grant money to teachers & volunteers
- “The mission of Florida Agriculture in the Classroom is to increase agricultural literacy through K-12 education in Florida.”



Our Programs

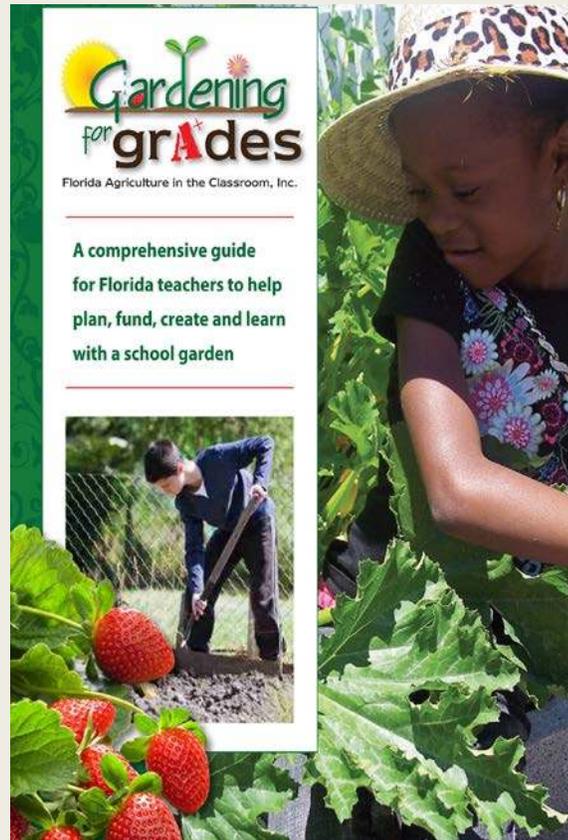
- Teacher & Volunteer Grant Programs - <http://faitc.org/grants/>
 - *Teacher Grant (2015-16)– Over \$30,000*
 - *Volunteer Grant (2016) – Over \$15,000*
- Mini Garden Grants (100-\$500 Mini)
- Excellence in teaching about agriculture awards



Our website – www.agtag.org or www.faitc.org

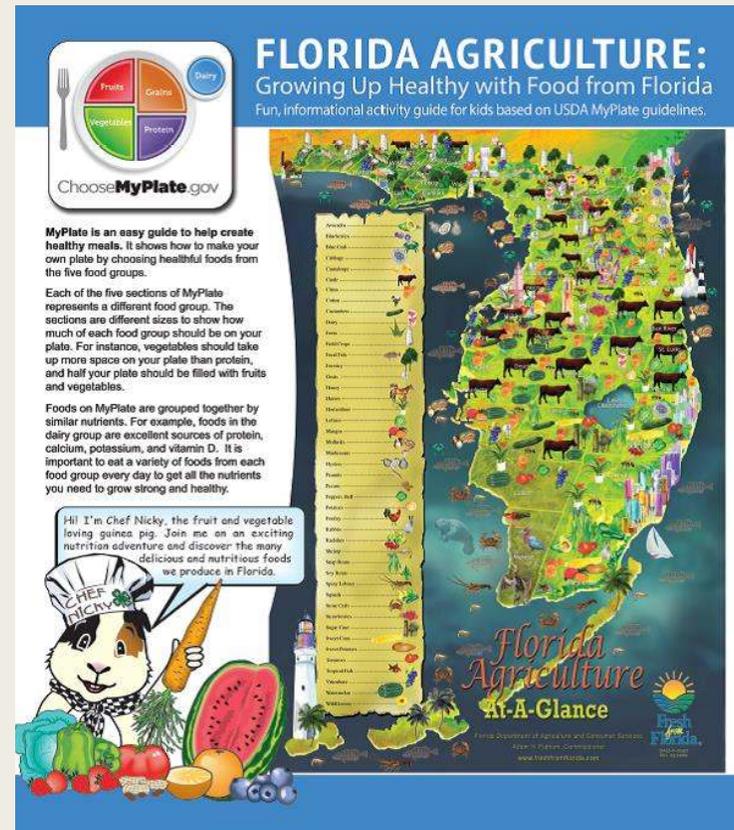
The screenshot shows the website for Florida Agriculture in the Classroom (FAITC). The browser address bar displays "faitc.org". The page header includes a navigation menu with links for Home, About FAITC, E-News, Contact Us, News, and Photos. The main content area features the Florida Agriculture in the Classroom logo on the left and a prominent banner on the right that reads "Teacher Award Application Deadline Extended to Nov. 30th" with an "APPLY ONLINE" button. Below the navigation menu is a green menu bar with options: AG TAG, TEACHER CENTER, VOLUNTEERS, KIDS, WORKSHOPS, AG LITERACY DAY, AWARDS, and GRANTS. The central part of the page is dominated by a large graphic that says "MONTH AGRICULTURE YEAR" at the top, followed by "IAM 4AG" in large green letters, a sun and field icon, and "KEEPS FLORIDA GREEN" at the bottom. Below this graphic is a green box with the text "Support Educating Students about Agriculture" and "Get Your Ag Tag Today". To the right of the main graphic is a search bar with the placeholder "To search type and hit enter" and a "DONATE TO FAITC" button. Further down, there is a section titled "Friends of FAITC" featuring the logo of the Florida Farm Bureau, which is a blue triangle with "FLORIDA FARM BUREAU" and "VOICE OF AGRICULTURE" written on it. At the bottom of the page, there is a section for the "Fall Teacher Workshop and Farm Tour" with a "READ MORE" button. The browser's taskbar at the bottom shows various application icons and the system clock indicating 2:19 PM on 11/21/2016.

Other Resources



Gardening for Grades
Florida Agriculture in the Classroom, Inc.

A comprehensive guide for Florida teachers to help plan, fund, create and learn with a school garden



FLORIDA AGRICULTURE:
Growing Up Healthy with Food from Florida
Fun, informational activity guide for kids based on USDA MyPlate guidelines.

ChooseMyPlate.gov

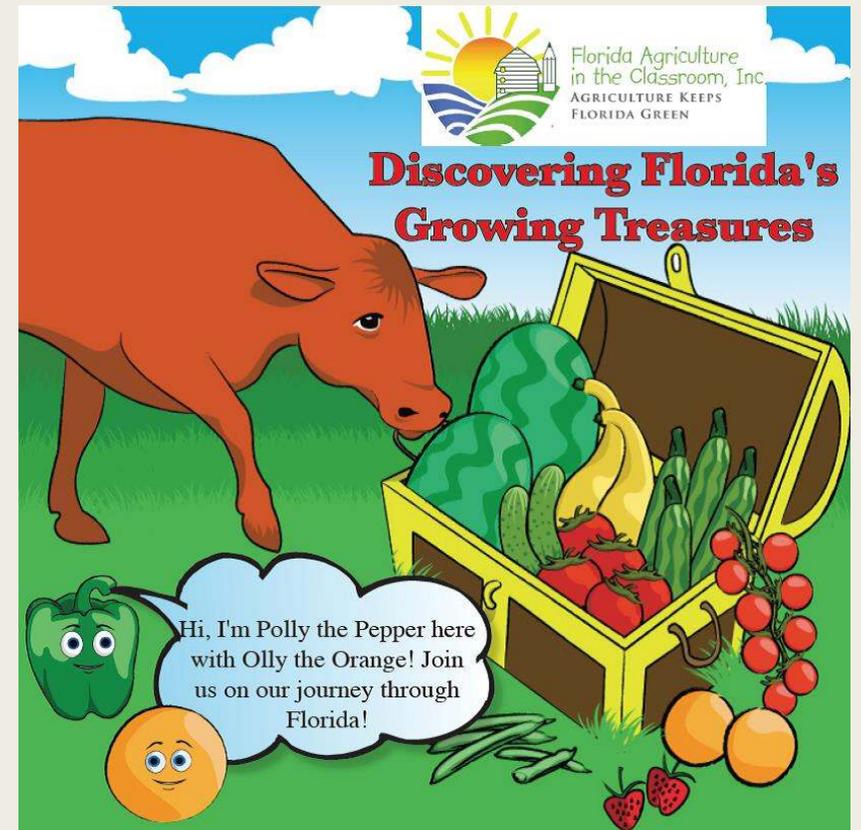
MyPlate is an easy guide to help create healthy meals. It shows how to make your own plate by choosing healthful foods from the five food groups.

Each of the five sections of MyPlate represents a different food group. The sections are different sizes to show how much of each food group should be on your plate. For instance, vegetables should take up more space on your plate than protein, and half your plate should be filled with fruits and vegetables.

Foods on MyPlate are grouped together by similar nutrients. For example, foods in the dairy group are excellent sources of protein, calcium, potassium, and vitamin D. It is important to eat a variety of foods from each food group every day to get all the nutrients you need to grow strong and healthy.

Hi! I'm Chef Nicky, the fruit and vegetable loving guinea pig. Join me on an exciting nutrition adventure and discover the many delicious and nutritious foods we produce in Florida.

Florida Agriculture At-A-Glance
Florida Department of Agriculture and Consumer Services
Approved by Florida's Commissioner of Education
www.floridagrill.com



Florida Agriculture in the Classroom, Inc.
AGRICULTURE KEEPS FLORIDA GREEN

Discovering Florida's Growing Treasures

Hi, I'm Polly the Pepper here with Olly the Orange! Join us on our journey through Florida!

Chapter Breakdown – TOC page 3-4

- Chapter 1 – Starting Your Nutritious Garden
- Chapter 2 – Selecting Your Nutritious School Garden
- Chapter 3 – Importance of Your Nutritious School Garden
- Chapter 4 – Lessons for “Seedlings” Kindergarten-Second Grade
- Chapter 5 – Lessons for “Sprouts” Third-Fifth Grade
- Chapter 6 – Lessons for “Plants” – Sixth-Twelfth Grade
- Chapter 7 – Connecting the Garden to Classroom Instruction
- Chapter 8 – Planting, Growing and Nutrition Tips
- Chapter 9 – Florida Standards Spelled Out
- Chapter 10 - Resources

Chapter 4 – Kindergarten-2nd

- What We Eat – Part 1
- My Garden, MyPlate
- Salad Rap – Part 1
- Vegetable Relay

What We Eat - Part 1

Subjects Taught: Science, Nutrition, Language Arts

Grade Levels: Kindergarten - 2nd Grade

Brief Description: Students will sort fruits and vegetables by examining plants - grown in the school garden, purchased in the market, or featured in models or pictures - into the parts of the plant eaten as food, identify a serving size, and locate where on MyPlate the food belongs.

Objectives: The students will:

1. Identify the parts of the plant.
2. Sort fruits and vegetables by plant part.
3. Sort images of produce into botanically correct fruits and vegetables.
4. Place sorted fruits and vegetables into *MyPlate*.
5. Describe and provide a general explanation of the nutrients provided by fruits and vegetables.

Life Skills: Analyzing, applying, collaborating, comparing similarities and differences, contrasting, categorizing, identifying, observing, sharing observations, sorting and understanding cause and effect

Materials Needed:

- Plants for students to dissect
- Plastic knives to use for dissection
- Paper towels to dissect on
- Fruits and vegetables from the school garden, pictures of fruits and vegetables, models of fruits and vegetables and/or purchased fruits and vegetables
- Copies of student handout *Parts of the Plant* – one per student

- Copies of student quiz *What We Eat* – one per student
- Grocery store advertisements with fruits and vegetables listed and pictured
- Scissors
- Tape or glue
- Music for parading
- *Tops and Bottoms* by Janet Stevens

Time:

Activity One: 45 minutes, plus time for student work

Activity Two: 45 minutes

Activity Three: 30-40 minutes

Activity Four: 30 minutes

Preparation:

1. Decide what portion of the background information is appropriate for your students.
2. Make copies of the student handouts and quiz, one per student.
3. Collect grocery store flyers and seed catalogs for pictures.

Vocabulary:

Flower, food, fruit, leaf, produce, root, stem

Background Information:

What are we eating? Is it a root? Is it a stem? Is it a leaf? Is it a fruit? Is it a seed? Is it actually a vegetable? Few adults could answer correctly. Some of the confusion is due to common use terminology versus the correct scientific designation between what is a fruit and what is a vegetable. If a food is sweet or served as dessert, we have considered it a fruit. Actually, there is a scientific botanical designation of fruit. In laymen's terms, if it has a seed or is a seed it is, botanically, the fruit of the

Florida Standards Met At-A-Glance

National Next Generation Science	K-LST-a., K-PSI-c
English /Language Arts	K.W.1.2, K.W.3.7, K.W.3.8, 1.W.3.8, 2.W.3.8, K.SL.1.1, K.SL.1.2, K.SL.1.3, K.SL.2.4, K.SL.2.5, 1.SL.1.2, 1.SL.1.3, 1.SL.2.4, 1.SL.2.5, 2.SL.1.2, KL.3.5, KL.3.6, 1L.3.5, 1L.3.6
Mathematics	K.MD.2.3
Social Studies	SS.K.E.1.4
Physical Education	PE.1.L.2.8, PE.1.R.1.3, PE.2.L.2.11
Science	SC.K.L.14.3, SC.1.L.14.2, SC.1.L.17.1, SC.2.L.17.1

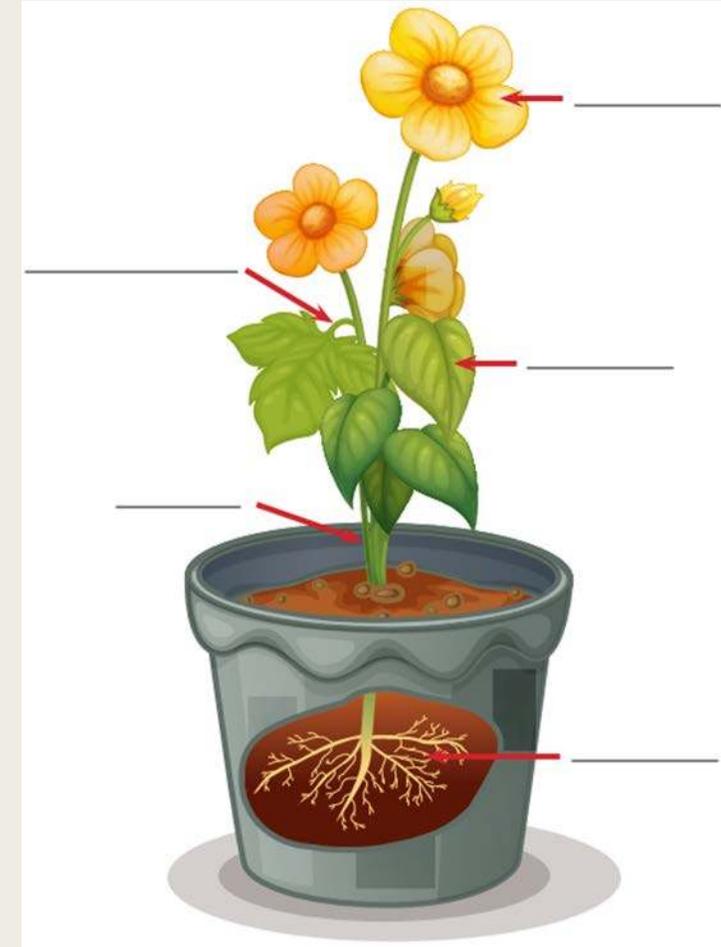
What We Eat – Part 1 – Pg 50

PREPARATIONS:

- Introduction talks about germination and photosynthesis – All depends on grade level and appropriate standards. You may want to familiarize yourself with the standards in the grade you are presenting to.
- Get grocery store advertisements – you will need ads for vegetables and this is seasonal
- Make a large parts of the plants poster
- Get (cheap) plants from store or yard that you can pull apart with students (or teachers)
- Create a T-Chart with Fruit on one side and Vegetable on the other side

Activity 1:

- Read the book [*Tops and Bottoms*](#) by Janet Stevens.
 - “What difference would it have made if Bear knew more about the food plants in the garden?”
 - Supplemental activity on webpage
- Display large plant and briefly discuss what each of the parts does. Using post it notes label the parts of your large plant and then have students label theirs. (End 30 minutes)
- (Use this to review from first 30 minutes) Give each group of students (or teachers) a *Parts of the Plant* handout and a flower or plant.
 - *Dissect plant and correctly place each part on the handout and write a brief description of what the plant part does.*



Activity 2:

- Create a list with students (or teachers) of fruits and vegetables they like and eat.
- Explain the difference between fruits (botanically) and vegetables:
 - *If it is a seed or has a seed botanically it is a fruit. If it is a leaf, stem, flower or root of a plant it is a vegetable.*
- Use T Chart to place some fruit and vegetable to show students what really are fruits and vegetables
- Have students brainstorm fruits and vegetables to add to the T Chart (End 30 minutes)
- (Use this as a review) Have students create their own T Charts and use grocery store ad to cut out produce and glue them onto the paper in the correct category

Fruits	Vegetables
	
	
	

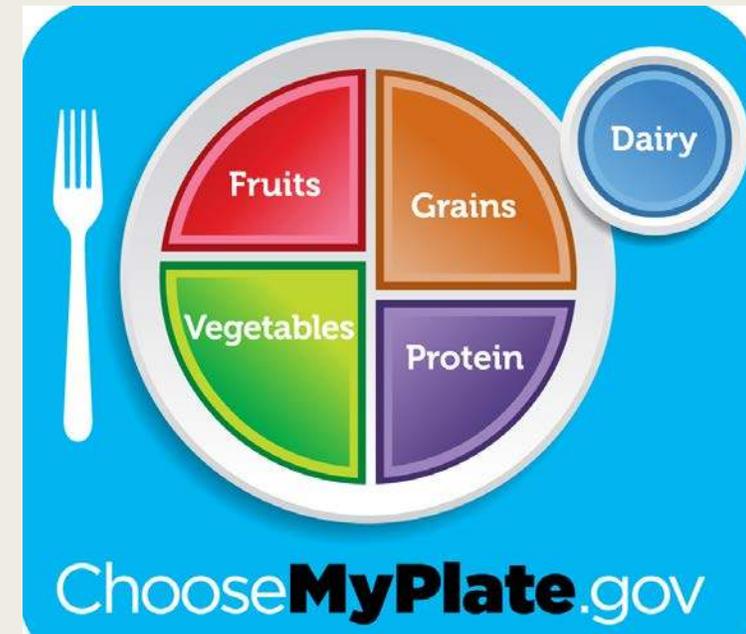
Activity 3:

- Put up the large Plant Parts poster
- Brainstorm the plants we eat and put it on a post it and place it on the correct plant part
- Use plastic vegetables, real vegetables from the store, or cut out vegetables from the grocery store ad to show various plant parts we eat
- As a review cut out vegetables from grocery store ad
 - Split the group in half
 - One half of the group gets a picture of a vegetable from the grocery store ad
 - The half with pictures are the inside circle, the other half is the outside circle
 - Play music, inside circle goes one way, outside circle the other
 - When music stops they partner up and the person without the picture guesses what part of the plant the vegetable is (End 30 minutes)



Activity 4: (Could skip this)

- Where do fruits and vegetables fit on MyPlate?
- Brainstorm a list with students (or teachers) of all the seeds or foods from seeds we eat
- Ask “Where do these foods from seeds fit into MyPlate?”
 - *Depends: corn (botanically a fruit, eating as a vegetable), corn chips (grain), edamame (vegetable and protein), soymilk (dairy)*
- Discuss serving sizes for items discussed throughout lesson.
- Create own poster or illustration with favorite foods from items discussed, where does that food come from? And where does it fit on MyPlate?



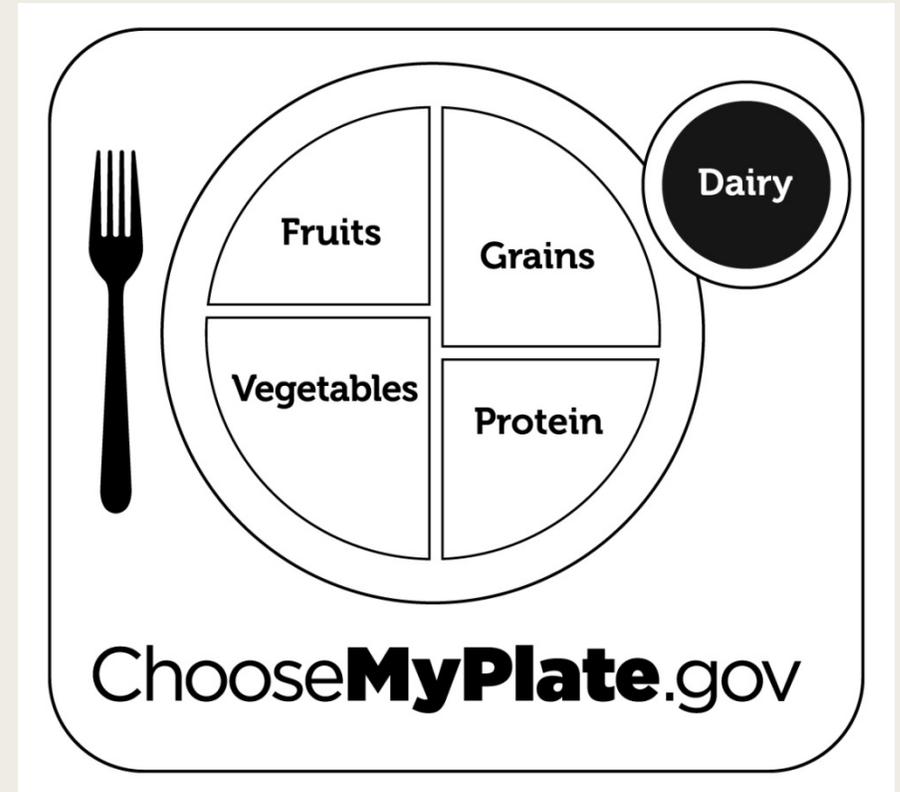
My Garden, MyPlate – Pg 59

PREPARATIONS:

- Create a large MyPlate poster
- You will need small post-its
- You will need 8.5x11 MyPlate handouts for each group or student
- Magazines to cut up

Activity 1:

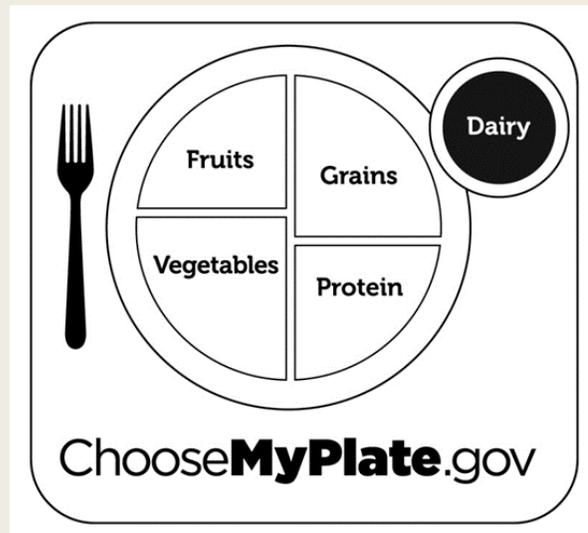
- What did you eat for breakfast?
 - *Place each item on a separate post-it.*
- Where does it fit on MyPlate?
- Students can talk with their neighbor about food items before having to put their post-it up.
- Now in pairs or groups have students look through magazines and find a food item for each part of MyPlate (depending on class size and length of discussion this would end 30 minutes)



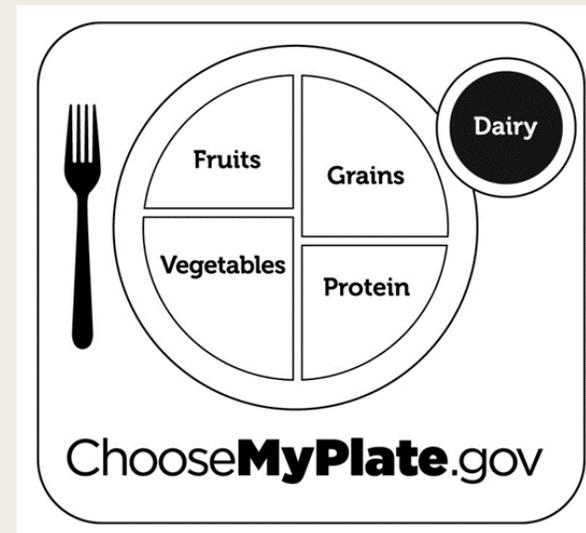
Activity 2:

- Start with a review from the day before
- Visit garden and make a list of foods grown in garden, come back to classroom and place the items on MyPlate
- Before (what you ate) and after (what you should eat) MyPlate (this is the end of this lesson so you may not quite be at 30 minutes)

Before



After



Salad Rap – Part 1 – Pg 63

- PREPARATIONS:

- *Create large Wants and Needs Rap template – page 67*
- *Create large Sensing Garden Rap template – page 68*

- Suggest completing “What We Eat Part 1”

- Complimentary Activity – [Poetry of Agriculture](#)



Activity 1:

- We are going to be creating our own raps based on gardens and healthy living.
- Have students (or teachers) repeat the “Plants Don’t Eat” chant – pg 64

Plants Don't Eat!	
(Teacher)	(Students Repeat)
Plants don't eat!	Plants don't eat!
Plants don't need to eat!	Plants don't need to eat!
Plants make their own food.	Plants make their own food.
We can't do it.	We can't do it.
We need plants.	We need plants.
Plants make their own food.	Plants make their own food.
And food for us, too!	And food for us, too!
Plants don't eat!	Plants don't eat!
Plants make their own food.	Plants make their own food.
And food for us, too!	And food for us, too!

- Explain to the class that at the end of the next few activities that they will be creating their own raps or chants.
- To start students will practice rhyming words. Create a T Chart with garden and MyPlate words on one side and matching words jumbled on the other
- Model by matching a word on the right to a matching word on the left
- Have students think for a few seconds of another rhyming pair, share with a partner and then share with the class (answers are on page 64)
- Now have students talk with their neighbor and come up with a junk food they like. Write a few up on the board.

Garden/MyPlate Word	Rhyming Word
Bread	Clean
Fruit	Merry
Berry	Head
Celery	Wash
Bean	Root
Squash	Belly

COOKIES
 CANDY
 ICE CREAM
 CHIPS
 SODA

- Give each student (or teacher) a Wants and Needs Rap template. Fill out the first two blanks with them.
- If they need help with rhyming words have them use the words from the rhyming chart to fill in the rhyming words.
- You can choose to match all the rhyming words before they fill and wants and needs or after depending on student skill level.
- Students (or teachers) share their raps. (End 30 minutes depending on how many students share, or you could start day 2 with sharing)

Wants and Needs Rap

By: _____

I want CANDY but I need wheat **bread**.
junk food word

I need to always use my HEAD.
rhyming partner word

I want _____ but I need **berries**.
junk food word

That way I can be _____.
rhyming partner word

I want _____ but I need peanut butter and **celery**.
junk food word

Which fills up my happy _____.
rhyming partner word

Activity 2:

- Write on the board or on tablet paper – Walk Through Garden
- Feel free to add pictures of gardens or salads if you do not currently have a garden
- As students (or teachers) walk through the garden tell them to look around at the plants, smell them and touch them when appropriate.
- When you get back to the room ask the students to record 3 colors they saw in the garden, 2 smells and 1 unique touch (such as hard, soft, prickly, smooth)
- Demonstrate how to fill out Sensing Garden Rap, have students share their first sentence with their partner and then fill out the rest on their own.
- Once everyone is done have them walk around the room with their raps while music plays, when music stops students share their rap with closest classmate. (End of lesson so hopefully 30 minutes)

Walk Through the Garden

3 colors –

2 smells –

1 unique touch –

Sensing Garden Rap

By: _____

The _____ garden was so pretty.
color

All of the _____ vegetables could feed a city!
smell

The _____ lettuce was so crisp.
touch

It's no wonder junk food won't be missed.

_____ and _____ veggies are great ingredients,
color smell

for a _____ salad, but that's no secret.
color

Vegetable Relay – pg 69

PREPARATIONS:

- Create seed cards with names– You can make them any size you like
- Create relay seed cards without names (2 sets)
- Create a large Seed Connection/Food Facts Poster
- Create relay race bags using seed packets and/or pictures of fruits or vegetables
- Print out Seed Connection/Food Facts Student Worksheet for each student or pair of students
- Create review seed/fruit card



Activity 1

- If you have already presented MyPlate lesson, review with students the importance of fruits and vegetable and where they fit into MyPlate. If not start this discussion.
- Talk to the students about how their lives would be affected if there were no fruits or vegetables.
 - Tomatoes – no pizza or spaghetti
 - Holidays – Thanksgiving with no pumpkin pie!
- Pass out the student Seed Connections worksheets, glue and seeds
- Ask aloud “Which fruit or vegetable is good for your eyes?” And go through each one with the class. As they answer the question place the seed card you have created with the seed next to the fruit or vegetable it coordinates with.
- Using seed cards to help students, go through each fruit or vegetable and review why that plant is good for them and have them place and glue the seed on their paper in the appropriate box. (End 30 minutes)

Seed Connections /Food Facts Student Worksheet

Name: _____

Why are fruits and vegetables good for you? The benefit of the fruit or vegetable is described next to it. Tape the seed of that plant next to the image of the fruit or vegetable.

Watermelon 	➔	Cool snack on a hot summer day, and promotes weight loss 
Carrot 	➔	Helps eyesight 
Collard Greens 	➔	Makes bones stronger 
Pepper 	➔	Gives you energy to play and vitamin C Comes in a wide variety of colors 
Cantaloupe 	➔	Vitamin A, wards off illness 
Radish 	➔	Spices up a salad 
Tomato 	➔	Good fresh on a sandwich or cooked into a sauce 
Squash 	➔	Comes in a variety of sizes, shapes and colors 
Peas 	➔	High in fiber 
Onion 	➔	Flavors many foods, can make you cry when you slice it and lowers cholesterol 

Activity 2

- Start with a review. Ask students to think for a few seconds about one fruit or vegetable they learned about and how it helps our bodies. Ask students to share.
- Put all 10 seeds on one plate together
- Tell the students we are going to organize and categorize the seeds. Give the students about 5 minutes to move their seeds around into categories. Students will share how they have grouped their seeds.
- Depending on students you can take it one step farther and have them choose 2 compare and contrast and create a Venn diagram. (Activity 2 and 3 may take closer to 45 minutes but there is not a good split)



Activity 3

- Start this activity with a discussion on the student's fruit and vegetable likes. Ask the following questions (on page 71):
 - *When do you like to eat _____?*
 - *Do you like to eat _____ raw?*
 - *Do you like to eat _____ cooked as _____?*
 - *Do you like to eat _____ mixed into _____.*
 - *Is there a holiday or season when you eat _____?*
 - *How does _____ help your health?*
 - *What flavor does _____ have?*

- Check knowledge by giving everyone either a picture of a seed or a picture of a fruit or vegetable.
- When told to start everyone must find their partners. Seeds find your plants.
- THE RELAY!!

