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/](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
Other Resources
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
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 found 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 nutritious benefits of fruits and vegetables.

Life Skills: Analyzing, applying, collaborating, computing, similarities and differences, contrasting, categorizing, identifying, observing, sharing observations, sorting and understanding causes and effects.

Materials Needed:
- Plants for students to dissect.
- Plastic knives to use for dissection.
- Paper towels to use 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 "Fruits and Pla" - 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 parodying.
- "The Train and the Barnyard" by Janet Stevens.

Time:
- Activity One: 45 minutes, plus time for student work.
- Activity Two: 45 minutes.
- Activity Three: 30-45 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:
- Fruits: apple, orange, pear, banana, grapefruit.
- Vegetables: carrot, zucchini, broccoli, squash, cucumber.

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? For adults, it could be answered 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 it is sweet or served as dessert, we have considered it a fruit. Actually, there is a scientific botanical designation of fruit. In Layman's terms, if it has a seed or if a seed is included, botanically the fruit of the...
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 he 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
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?
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 cup 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)
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

<table>
<thead>
<tr>
<th>Plants Don’t Eat!</th>
<th>Plants Don’t Eat!</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plants don’t eat!</td>
<td>Plants don’t eat!</td>
</tr>
<tr>
<td>Plants don’t need to eat!</td>
<td>Plants don’t need to eat!</td>
</tr>
<tr>
<td>Plants make their own food.</td>
<td>Plants make their own food.</td>
</tr>
<tr>
<td>We can’t do it.</td>
<td>We can’t do it.</td>
</tr>
<tr>
<td>We need plants.</td>
<td>We need plants.</td>
</tr>
<tr>
<td>Plants make their own food.</td>
<td>Plants make their own food.</td>
</tr>
<tr>
<td>And food for us, too!</td>
<td>And food for us, too!</td>
</tr>
<tr>
<td>Plants don’t eat!</td>
<td>Plants don’t eat!</td>
</tr>
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<tr>
<td>And food for us, too!</td>
<td>And food for us, too!</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Garden/MyPlate Word</th>
<th>Rhyming Word</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bread</td>
<td>Clean</td>
</tr>
<tr>
<td>Fruit</td>
<td>Merry</td>
</tr>
<tr>
<td>Berry</td>
<td>Head</td>
</tr>
<tr>
<td>Celery</td>
<td>Wash</td>
</tr>
<tr>
<td>Bean</td>
<td>Root</td>
</tr>
<tr>
<td>Squash</td>
<td>Belly</td>
</tr>
</tbody>
</table>

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)
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)
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)
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!!