# Learn, Grow, Eat & Go! East Texas Team

2<sup>nd</sup> Place NEAFCS – Mary W. Wells Memorial Diversity Educational Program















- > Encourages daily physical activity
- Increase exposure to vegetables
- > Encourages adoption of healthy beverages
- Expands knowledge in plant science and nutrition
- Reaches into the home to support positive family health practices





- Interdisciplinary agent team and volunteers
- > 10-week, 20 lesson researched-based curriculum enrichment program
  - science, reading, math, literature, writing, geography skill development
  - school gardens
  - nutrition education
  - physical activity





- > Diversity
- > SNAP-Ed
- > Volunteerism
- > Environmental Education
- > School Wellness
- > Family Health & Wellness
- > 4-H Youth Development





- > Title I Schools
  - receive federal funds for high concentrations of low-income students
- > Target audience
  - ➢ Hispanic, Asian, Native American and African American 3<sup>rd</sup> grade students
- Other youth-based entities without regard to race, color, sex, religion, national origin, age, disability, genetic information, sexual orientation or gender identity



- > Ethnicity, race, and physical disabilities
  - Literature based upon cultural and learning differences
- Unique family structures
  - divorce, grandparents, and child relationships
- Ethnic food tasting
  - Bok choy, mustard greens and cilantro





- > 6,782 volunteer hours
- > \$167,448 economic impact
- > Extension-based volunteer groups
  - Master Gardeners and Master Wellness Volunteers
- > Committed 40 hours each
- Assisted with incentive items, donations, garden beds, lessons and recipe demos





- Childhood Obesity rate in 17% in the US\*
- > 3x the rate one generation ago
- > Texas Childhood Obesity rate

33.3% 10-17 year old's

23.5% 8-10 year old's

14.9% 2-4 year old's

\*Centers for Disease Control 2017





- > Texas ranks 6<sup>th</sup> among the highest states in Childhood Obesity for children ages 8-10\*
- > 33.8% African American boys
- > 7.7% Latino boys
- Texas ranks 9<sup>th</sup> in the nation as the most physically inactive and 10<sup>th</sup> with highest obesity rate

\*National Institute for Health







TEXAS A&M
GRILIFE
EXTENSION





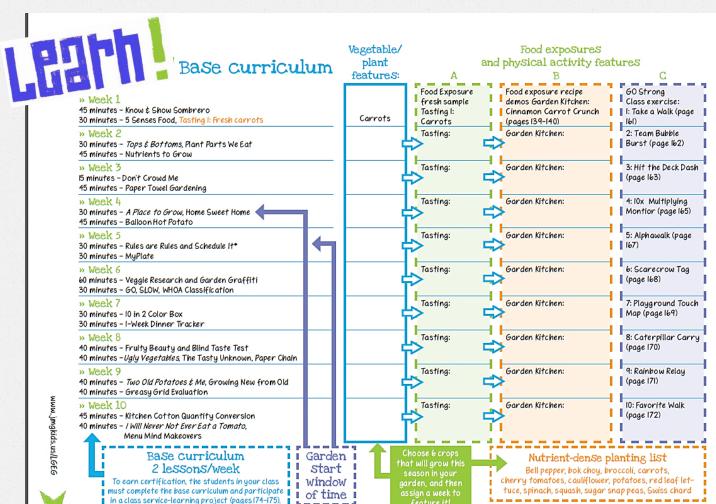




# **Classroom Instruction**

- > 10 weeks two sessions
- > Literature selections
- > Student journals





SALAN THE SALAN



# a. Know & Show Sombreros 45 minutes



Analyze what plants need and how they support people and animals.



1 assembled and decorated Know & Show Sombrero Large writing surface, such as a poster, dry-erase board, or smart board

Miscellaneous craft materials, such as balloons, feathers, and pipe cleaners For each student: 2 large, square sheets of newspaper; 1 pen or pencil;

For each group of 3 students: 1 roll of packing tape

Walk into the classroom wearing your Know &Show Sombrero. When the students ask about it, tell them that they will find out soon and will make one of their own. But first they must answer a few questions.

Begin a discussion about what people must have to be able to live. As the students call out needs, create a list on a poster or other large writing surface in front of the class. Include the five basic needs that all people share: air, clothing, food, shelter, and water.

Ask a student to circle the items that the group says plants must have in order to live.

Next ask: Is there anything that plants need that people do not? None need clothing; most need no shelter unless they have been moved from their natural homes.



Light

**N**utrients **Thirsty** 

TEXAS A&M **EXTENSION** 

## b. MyPlate 30 minutes



## Objectives

Use fraction names and symbols to describe MyPlate meals.



### Supplies

For each student: 1 9-inch paper plate; 1 4-inch paper plate; crayons or colored pencils; 1 stapler; Choose MyPlate page; 1 blank sheet of paper

Just as we plan to meet our plants' needs, we must also plan our meals to provide for our needs. Ask the questions below to guide the students in planning a meal that provides the right proportion of food groups and a variety of nutrients to meet our needs.

- ★ Why is it important to plan when and how to water, weed, and feed our garden? A plan helps us work together to complete all the garden tasks as often as needed. If we don't plan, we might run out of time or forget to water on a day that our plants need water. The plants could wilt and become unhealthy.
- ★ We know that if we do not plan, we might forget or run out of time to give our plants what they need.

Is it important to plan to provide for our own needs also?

Who in your house makes plans for meals?

Do you help decide what your family eats?



- ★ What should be on your plate at mealtime tomake sure that you are eating all the nutrients your body needs? Foods from all the food groups.
  - \* Display the Choose MyPlate page.



- ★ What are some of the benefits we get from the different food groups? Protein foods build our muscles; grains provide energy and give us fiber to clean our digestive systems; vegetables and fruits provide vitamins and fiber; and dairy foods build our bones and teeth.
- Give each student crayons, one 9-inch paper plate, and one 4-inch paper plate or piece of cardboard.

Fold the large paper plate into halves.

Then open the plate and draw a line down the crease.





# **Nutrition Education**



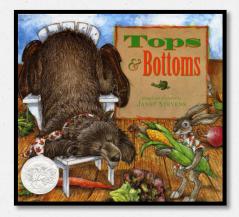


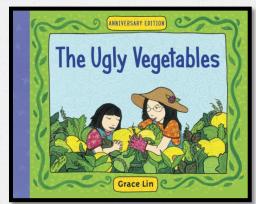


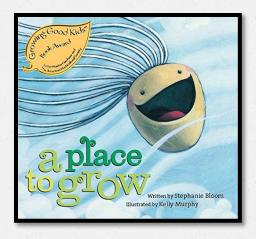


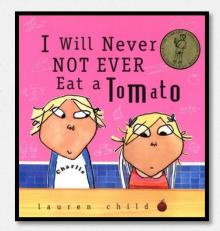
## Literature selections

- Relationships
- Cultures
- Morals

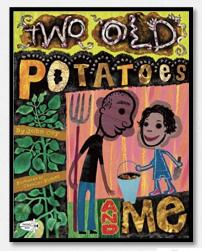








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LEATH



### This Week's lessons:

- a. Home Sweet Home 30 Mins
- b. Balloon Hot Potato 45 Mins

### Weekly Ala Carte Features:

Fresh Food Exposure, page # Garden Kitchen Recipe Demo, page # Quick Classroom Exercise, page #



### Tip of the Week

This curriculum involves students in every step of making a garden successful at your school. This week you will lead them in selecting the garden site, and in next week's lesson they will create garden rules and develop teams with specific responsibilities to make sure that the garden is cared for well,

Creating a new garden can be simple and inexpensive. If the soil is rich and well drained, you might be able to just plant into the existing ground. If not, a solution could be to make a small, easy-to-make and easy-to-maintain raised bed garden that's filled with purchased soil.

See page # for ways to make your garden a success with little effort and

## a. Home Sweet Home 30 minutes



### Objective

Determine, observe, evaluate, and describe the physical characteristics of

Select a garden area that will provide for the needs of vegetable plants.



### Supplies

A Place to Grow book

Poster

For each student: Home Sweet Home site evaluation page; clipboard; pen or pencil; several packets of other kinds of vegetable seeds

## Literature connection: A Place to Grow Synopsis

As it floats through the sky looking for a place to grow, a tiny seed lands in different places, looking for a home that provides for all its needs. Some places are too shady, too dangerous, or too crowded. Will the little seed ever find a place to grow?





# Week 1



Garden Journal



## Garden Journal: Week 1

Write a plant need beside each letter below:

P

L

NI

Т

S



Your teacher has given you a seed. What might it grow into if you plant it and give it everything it needs? Maybe it will grow into a tree, a flower, or some tasty new veggie that you've never even seen before.

- 1. Draw a picture of what you think this seed might become one day:
- Write 2 sentences to describe what you think the plant would look like when it's grown. (Include at least 3 describing words in these sentences.)
- Write one more sentence to tell how this grown plant might be useful to you.

## TASTING 1: Carrots

You've learned that eating something is not just tasting—it's using all 5 of your senses! Today you will give a report card to a carrot. Give it a separate grade for each sense—sight, smell, feel, sound, and taste.

Sight A B C D F

Smell A B C D F

Feel A B C D F

Sound A B C D F

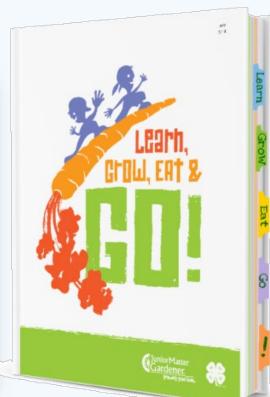
Taste A B C D F





# **School Gardens**









GARDENS - raised beds or container gardens

Grow featured nutrient-dense vegetables





- Carrot
- · Red leaf/loose leaf lettuce
- Broccoli
- Potatoes
- Swiss chard
- · Bell pepper
- Cauliflower
- Spinach
- · Oriental cabbage Bok Choy
- · Cherry tomatoes
- · Sugar snap peas
- Squash











# Quick & Easy Garden Kit

- Getting Materials: What are we growing?
  - growing 6 seasonal crops
  - 3 square ft. plantings of each
  - extra space for kids to choice plantings
  - simplicity of steps/supplies

Sample cool season 3x7 raised bed:

carrots	leaf lettuce	baby spinach	Caul i Flower	broccols	swiss chard	kids' choice	2
carrots	leaf lettuce	baby spinach	Caul if lower	procco14	swiss chard	kids' choice	Grou
carrots	leaf lettuce	baby spinach	aul i Flower	broccols	swiss chard	kids choic	F





# Raised Garden Beds









# Compost & Soil











# Planting Guide

## Garden Planting Chart



Crop	Recommended planting date	Number of days until emerging	Number of seeds or plants per paper towel	Planting depth	Number of days to harvest
Beans (bush)		5-10	9	Linch	45-60
Beans (pole)		5-10	8	2 inches	50-70
Beets		7-10	9	½ inch	55-70
Bell peppers		9-14	1	½ inch	110-120
Bok choy		3-10	4	% inch	45-50
Broccoli		Transplant	T	Transplant	60-80
Brussels sprouts		5-10	1	% inch	120-150
Cabbage		5-10	1	% inch	60-120
Carrots		12-18	16	% inch	70-80
Cauliflower		Transplant	1	Transplant	60-100
Collards		5-10	4	½ inch	45-80
Cucumbers		6-10	2	Linch	50-70
Garlic		5-10	16 cloves	Linch	100-200
Kohlrabi		6-9	1	½ inch	50-75
Lettuce (head)		5-8	4	½ inch	45-90
Lettuce (leaf)		6-8	4	% inch	45-60
Mustard greens		3-8	4	½ inch	30-50
Onions		10-14	16	Linch	80-I20
Potatoes		14-28	l seed potato piece	4 inches	<b>7</b> 0-90
Radishes		3-6	16	½ inch	25-40
Spinach		7-12	9	½ inch	40-60
Squash		4-6	I seed per 4 squares	Linch	45-90
Sugar snap peas		10-12	8	Linch	60-100
Swiss chard		7-10	4	Linch	45-80
Tomatoes		Transplant	I	Transplant	60-80
Turnip greens		4-8	4	½ inch	30-60
Turnips		4-8	9	½ inch	30-60

See page# for details of where to find recommended planting date information for your area,

Local Extension support to provide info on your local planting dates



# Tools & Planting Day









# Garden Maintenance









# **Pests**







# Happy Faces





# Funding

- > Donations
  - Local nurseries, landscapers, businesses, wish list sent home with students
- > Fundraisers
- > Grants







# Food Exposure







# Exposure to nutrient-dense vegetables



Fresh from the garden to snack-time

Food demonstration in the classroom





# Food tastings and recipe demos with your kids

Through the Learn, Grow, Eat, and Go! curriculum, teachers, school cafeteria personnel, and volunteers can expose kids to new foods by conducting raw vegetable tastings and recipe demon-

These demos and tastings can provide hands-on experiences that encourage students to try new foods. For some students, these tastings or recipes may give them their first experiences with differ ent varieties of vegetables.

Schools have found several ways to offer these opportunities:

- ★ School nutrition and cafeteria personnel lead the tastings and demonstrations for the students to sample and view during
- ★ These personnel include the fresh vegetables or recipes as a part of the lunch pro-
- ★ The students prepare the recipe along with the school personnel.
- ★ The tastings or recipes are prepared during classroom time by trained school volunteers, teachers, Extension volunteers, or Extension nutrition education assistants (all under the direction of an individual with appropriate food handler certifica-



The county Extension office can also train teachers, cafeteria workers, and volunteers on the best methods for conducting tastings, Contact information for your local Extension agent is available at www.jmgkids.us/MyCounty.

Follow these best practices from www.foodsafety. gov for handling raw vegetables:

- Refrigerate perishable fresh vegetables and all produce that has been cut or peeled.
- ★ Wash your hands before preparing fresh produce for the tasting or demonstration.
- \* Before cooking or eating any produce, wash it under running water, unless it has been bagged and labeled as pre-washed.
- ★ Have the students wash their hands before handling or tasting food.

During the tastings, the students will evaluate the look, smell, sound, texture, and taste of the foods. The evaluation process can help the students avoid automatically dismissing a vegetable or recipe before trying it.

Teachers can encourage students to try new veg-

- ★ Modeling the tasting of raw vegetables etables by:
  - ★ Modeling the tasting of new recipes
  - \* Encouraging students to avoid saying "yuck" or "ew" during tastings or demon-
  - ★ Leading classroom discussions on how food looks, tastes, feels, sounds, and smel

As the students taste more fresh vegetables at new recipes, their excitement level and willing ness to try new foods will grow.

## Swiss chard

Serving size: 1 cup

Raw nutrient amounts

 Vitamin A: 45% DV Vitamin C: 20% DV Vitamin K: 374% DV

Edible colors: Green, orange, red, white, yellow

Amount needed to provide 1 bite-size sample each for 20 students: 3 medium-size leaves

### Preparation tips

- · Cut away the base stems.
- Wash the leaves carefully under cold water.
- · Slice the leaves into thin, 1/2-inch-long slices, and give each student 1 or 2 strips.

Option: Give each student a few drops of low-fat ranch, vinaigrette, or other salad dressing for dipping the veggie sample.















## 2<sup>nd</sup> Exposure

12 Garden Kitchen recipe demonstrations in classroom with featured vegetable from sample

## 1st Exposure

Evaluation of 12 fresh vegetable samples in classroom

## TASTING 1: Carrots

You've learned that eating something is not just tasting—It's using all 5 of your senses! Today you will give a report card to a carrot. Give it a separate grade for each sense—sight, smell, feel, sound, and taste.

Sight	A	В	С	D	F
Smell	A	В	C	D	F
Feel	Α	В	C	D	F
Sound	A	В	C	D	F
Taste	A	В	С	D	F







## 12 take home recipes in English and Spanish



# C. Spinach Quesadillas

Prep time: 10 minutes

Serving size:

Colander

Spatula

Skillet/not plate or

electric skillet

Measuring spoons

Measuring cups

**Nutrition Facts** 

Paper towel

Plate

Knife Cutting board

Cook time: 5 minutes

1-1/2 pounds of fresh spinach I tablespoon of water 8 six-inch whole-wheat tortillo 1/1 cup of prepared salsa, drain I cup of shredded reduced-fat

- L. Wash your hands and cle 2. Place the spinach in a co greens. Drain them and
- 3. Chop the washed spinal 4. Add I tablespoon of wa quickly over medium hi then press it lightly u
- 5. Place 4 tortillas on a tortilla. Then top th 1/4 cup of cooked spir
- Add another 4s cup Top with the remai 7. Cook each quesadi
- melts and the tor about 4 minutes 8. Transfer the qui before serving.

## Kitchen ma What vitam

- 2. Drawlines 3. How many would you
- have if y 4. If you h whole t
  - 5. How m (Use t

spread the cheese, salsa, and sp Februarional programs of the Texas ASM Applicite Extensions Service are open



## C. Quesadillas de Espinaca



Tlempo de preparación: 10 minutos Tlempo de cocción: 5 minutos

Raciones: 4

Tamaño de la ración:

Utensilios necesarios Colador Cuchillo

Tabla de cortar Sartèn/hornilla elèctrica o sartèn elèctrico Espátula Cucharas medidoras

Tazas medidoras Toallas de papel Plato

## Datos de Nutrición Tamaño de Ración 1 Ques Raciones por Envase 4

Calorias 300 Calorias de G	rasa 60				
% Val	or Diario*				
Grasa Total 7g	11%				
Grasa Saturada 4g	20%				
Grasa Trans 0g					
Colesterol 15mg	5%				
Sodio 700mg	29%				
Carbohidrato Total 45g	15%				
Fibra Dietética 9g	36%				
Azücares 2g					
Proteina 18g					

/itamina A 330% • Vitamina C 809 Calcio 60% • Hierro 35%

www.jmgkids.us/LGEG

## Ingredientes

I-1/2 libras de espinaca fresca l cucharada de agua

8 tortillas de harina integral de seis pulgadas

1/4 taza de salsa preparada, escurridos

I taza de grasa reducida queso Monterey Jack rallado

- 1. Lavese las manos y limpie su area de cocina.
- 2. Coloque las espinacas en un colador en el fregadero y deje correr el agua sobre las hojas verdes. Escurra y seque ligeramente.
- 4. Añada l cucharada de agua a una sartèn y saltee las espinacas frescas rapidamente a fuego medio hasta que esten suaves. Deje que la espinaca se enfrie y a continuación, presione suavemente con una toalla de papel para eliminar el líquido adicional.
- 5. Coloque 4 tortillas sobre una superficie de trabajo. Extienda 4s taza de queso en cada tortilla. Luego cubra el queso con l cucharada de salsa, seguido de 1/4 taza de espinaca cocida.
- 6. Añada otra 4s taza de queso sobre la espinaca en cada tortilla.
- 7. Cubra con las tortillas restantes y presione firmemente. Cocine cada quesadilla en la sarten a fuego medio hasta que el queso se funda y las tortillas esten crujientes y doradas. Esto se llevara unos 4 minutos por cada lado. Use una espátula para voltear las quesadillas.
- 8. Transfiera las quesadillas a un plato. Corte cada quesadilla en cuartos

### Matemáticas en la Cocina

- I. ¿Las espinacas tienen mucha de cuál vitamina?
- 2. Dibuja lineas para cortar esta quesadilla en cuatro partes:/
- 3. ¿Cuantos pedazos de la quesadilla mostrada arriba tomarian usted y otro miembro de la familia si estuvieran dividiendo la misma de manera equitativa?
- 4. Si toma dos secciones de 1/4 de una quesadilla, ¿què fracción de toda la tortilla representa esto?
- ¿Cuantos gramos (g) de proteínas hay en I quesadilla? (Use la etiqueta de información nutricional para encontrar esta

Cómo los niños pueden ayudar: Lavar los productos, medir los ingredientes, esparcir el queso, la salsa y la espinaca en la tortilla y colocar otra tortilla encima





# What is GO?

## 10 activities to help include physical fitness

- Week 1 Take a Walk
- Week 2 Team Bubble Burst
- > Week 3 Hit the Deck Dash
- Week 4 10x Multiplying Monitor
- Week 5 AlphaWalk
- Week 6 Scarecrow Tag
- Week 7 Playground Touch Map
- > Week 8 Caterpillar Carry
- Week 9 Rainbow Relay
- Week 10 Favorite Walk





# Benefits of GO!

- > Settling a fidgety group of kids
- > Helping students refocus
- > Promoting creativity
- > Improving student performance
- > Re-energizing a droopy class after lunch

Research has shown that students who are physically active and fit are more likely to perform well in school than are their sedentary peers.





Substantial evidence shows that physical activity can help improve academic achievement, including grades and standardized test scores.\*

## Week 1: Take a Walk

Materials: I watch; optional: satellite photo of the school campus

## Time: 15 minutes

At midmorning and midafternoon, students' attention often wanders. A simple na miamorning and miadaternoon, students attention often wanders, a simple way to energize their minds and exercise their bodies is to go for a walk. Introduce the idea of the whole class walking around the school together. If possible, show the students a satellite view of their campus from an online map service,

Tell the class that they won't run or walk slowly but just walk at a nice medium pace that you will lead. Have the students predict the number of minutes that the out and take a walk!



Prompt a student to be the time keeper and record how long it takes to finish the walk. It could be the baseline time to compare to the next time your class walks, jogs, skips, hops, dances, or even runs around the building.

If your class would like to get more heart-pumping and brain-boosting exercise, consider walking across your whole state! Some states have their own "Walk Across programs (such as Walk Across Arizona, Walk MD, Walk Across Tennessee, and Walk Across Texas). In these programs, classes form teams and the students and teachers log the miles that they walk, jog, bike, dance or do other types of physical activity. Their goal is to cumulatively log a total mileage equivalent to the distance across their state,

To learn more about a Walk Across program in your state, see the resource links at www.jmgkids.us/LGEG,



# Weekly featured brain & body boosting activities



X. Commers for Disease Control and Prevention. The Association between School Based Physics. Atlanta, GA: U.S. Department of Bealth and Human Services; 2000. http://www.cdc.gov.

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# Team Bubble Burst



### Week 2: Team Bubble Burst

Materials: I balloon for each pair of students in the class

### Time: 15 minutes

Outside, choose a start line and a finish line about 25 to 30 feet apart. Pair up the students and have each pair stand at the starting line facing each other with their hands clasped behind their backs.

Place a balloon between each pair, and have the students hold it there with their chests.

When you give the signal, the students will work together to get their balloon to the finish line. The students may touch the balloon with their hands only if it drops. Then one student may pick it up and place it back in its starting position. Both players will then clasp their hands again behind their backs then continue the

race. If a balloon pops, that team must run back to the starting line, then to the finish line, and sit until all other teams have also crossed the finish line.

The winning team will be the first to cross the finish line and pop the balloon by stomping, squeezing, or sitting on it.

The race continues until all teams cross the finish line,









# Walk Across (Your State)

"Across the United States, Extension agencies have developed 'Walk Across ...' programs in which students, teachers, and families get active to accrue mileage that equals the distance across their respective states."









# Walk Across Texas











- > 10 counties collaborated
- 33 schools and sites in rural eastern Texas
- → 3,592 survey eligible participants (3<sup>rd</sup>+)
- Over 5,000 youth reached







Family & Community Health Agents
Agriculture/Natural Resource Agents
4-H Youth Development Agents
Horticulture Agents
Better Living for Texans Extension Educators
Prairie View A&M Cooperative Extension Agent





# Thank you!

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