# September

**Tomatoes** 

### SUGGESTED SCHEDULE

Week 1: Fruits & Vegetables from A to Z

Week 2: Tomatoes Grow on a Vine

Week 3: Exploring Tomatoes

Week 4: Tomato Discovery Lab

**Optional Activities** 







### Week 1: Exploring Fruits and Vegetables from A to Z

### **MATERIALS**

- ☐ Plant Parts Diagram
- ☐ Fresh Fruit and Vegetable Photo Cards
- ☐ Eating the Alphabet: Fruits and Vegetables from A to Z by Lois Ehlert

### **LESSON**

- 1) Read the book Eating the Alphabet.
- 2) As you read the book, ask the class questions about the fruits and vegetables in the book such as:

Students will...

- \* identify familiar fruits and vegetables.
- \* learn about new fruits and vegetables.
- \* learn the different parts of plants we eat.

#### LEARNING STANDARDS

### **Head Start Learning Domains**

- -Language Development; Receptive, Expressive
- -Literacy Knowledge & Skills; Book Appreciation & Knowledge
- -Logic & Reasoning; Reasoning & Problem Solving
- -Science Knowledge & Skills; Conceptual Knowledge of the Natural & Physical World
- -Social Studies Knowledge & Skills; People & the Environment

### **DRDP-PS**

- Language and Literacy Development; LLD1, LLD2, LLD6, LLD7
- -English Language Development; ELD1, ELD3
- -Cognitive Development; COG1, COG3, COG4
- -Mathematical Development; MATH1, MATH6

What colors of fruits and vegetables do you see?

Who has eaten a fruit today? Which one(s)?

Who has eaten a vegetable today? Which one(s)?

What is your favorite fruit or vegetable? What color(s) is it?

Ask for a show of hands: Who eats broccoli? Cabbage? Cauliflower? Brussels sprouts? Collards? Kale?

Where do these fruits and vegetables come from? Where can you buy them?

Make sure that <u>farmers' markets</u> or <u>farms</u> are mentioned. A farmers market is an outdoor market where farmers sell fruits and vegetables they have just picked at their farm. Emphasize that although we can find these foods in stores, they are <u>fresher</u> and <u>taste better</u> when they come directly from farmers.

3) Explain that fruits and vegetables are an important to eat to keep our bodies healthy. Discuss with the class how we eat different parts of the plants. Use a Fresh Fruit and Vegetables Photo Card for each vegetable or fruit you mention and the Plant Parts Diagram to discuss how:

Sometimes we eat the **root** (such as beets, carrots, radishes)

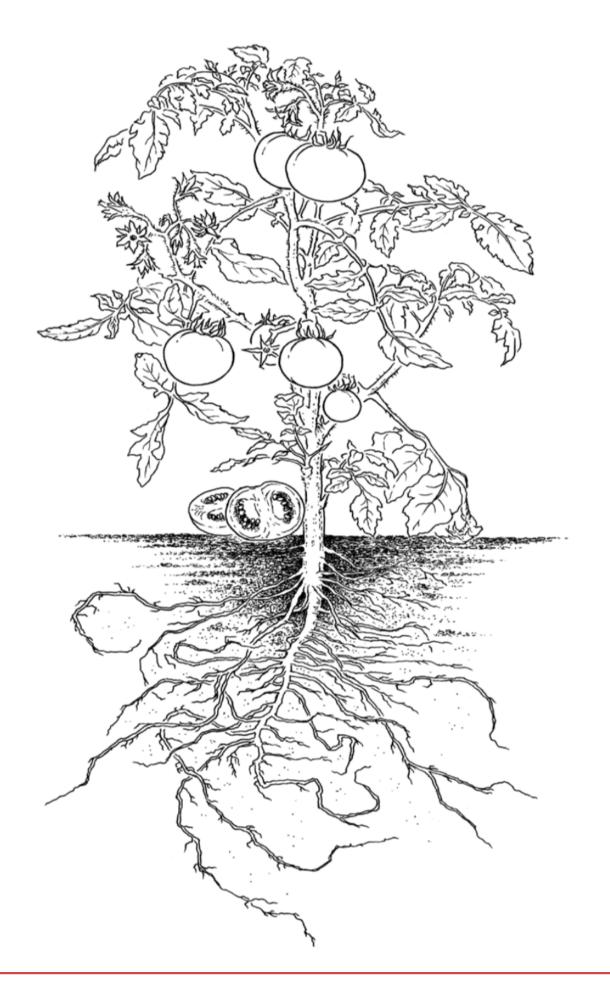
Sometimes we eat the **flower** (such as broccoli and cauliflower)

Sometimes we eat the **leaf** (such as cabbage and lettuce)

Sometimes we eat **stems** (such as asparagus and celery)

Sometimes we eat the **fruit** (such as blueberries, cherries and apples)

Sometimes we eat the **seed** (such as pomegranates and pumpkin seeds)





### Week 2: Tomatoes Grow on a Vine

### **MATERIALS**

- ☐ *Tomatoes Grow on a Vine* by Mari Schuh
- □ Paper and crayons (for 4 drawings of the tomato lifecycle)

#### LESSON

In Preparation:

Draw a simple drawing of each stage of the tomato lifecycle: 1) Seeds 2) Seedlings 3) Flowers 4) Tomatoes (see page 6 of *Tomatoes Grow on a Vine*).

In Class:

- 1) Read the book Tomatoes Grow on a Vine.
- 2) Ask the children if they have ever grown tomatoes at home.
- 3) Explain that as a class you will review the lifecycle of a tomato. A lifecycle is the stages a plant or animal goes though as they grow up. People begin as babies then grow into a child and become an adult that is our lifecycle.

Students will...

seed.

\* understand the a tomato

\* be able to describe the

lifecycle of a tomato.

plant grows from a tomato

- 4) Ask for 4 volunteers to stand in front of the class.
- 5) Give each volunteer a picture of one of the stages of the tomato lifecycle (out of order).
- 6) Name each of the stages seeds, seedlings, flowers and tomatoes.
- 7) Ask the children to determine which stage goes first and move the children around until the students are in the correct order.
- 8) That's right tomato seeds grow into seedlings that make flowers which grow into the tomatoes we eat.
- 9) Thank the students for their participation.
- 10) If possible, do the optional Creative Movement activity "The Lifecycle of a Tomato" as a class.

#### LEARNING STANDARDS

### Head Start Learning Domains

- -Language, Literacy and Communication
- -Literacy Knowledge and Skills
- -Logic and Reasoning
- -Mathematics Knowledge and Skills
- -Science Knowledge and Skills

### **DRDP-PS**

- -Language and Literacy Development; LLD1, LLD2, LLD6, LLD7
- -English Language Development; ELD1, ELD3
- -Cognitive Development; COG1, COG3, COG4
- -Mathematical Development; MATH1, MATH6

### **Week 3: Exploring Tomatoes**

### MATERIALS

☐ Food Experience ingredients

### LEARNING STANDARDS

### **Head Start Learning Domains**

- -Physical Development and Health
- -Approaches to Learning
- -Logic and Reasoning
- -Mathematics Knowledge and Skills
- -Science Knowledge and Skills

### **DRDP-PS**

- -Self and Social Development; SSD1
- -Language and Literacy Development; LLD3
- -Cognitive Development; COG4
- -Mathematical Development; MATH3, MATH4, MATH5
- -Health; HLTH2

#### **LESSON**

- 1) Explain to the students that today we will be tasting different kinds or varieties of tomatoes.
- 2) Show the children the different varieties, noting colors, size and how/where they grew.
- 3) Ask the children to determine which tomato is the smallest and which is the largest, and arrange in order from smallest to largest.

Students will...

tomatoes.

\* compare the different varieties of tomatoes to

determine size order.

\* be able to describe the colors and shapes of the

different varieties of

\* taste different varieties of

- 4) Ask the children to name another fruit or vegetable of the same color, something that is round or oval like a tomato, something bigger than a tomato, something smaller than a tomato, and something the same size as a tomato.
- 5) Slice one tomato of each variety and place on separate plates.
- 6) With the students compare what the tomatoes look like on the outside and inside.
- 7) Next, explain that we will taste the different types of tomatoes but that whenever we eat, we first need to wash our hands.
- 8) In small groups, have the students wash their hands.
- 9) As a group, taste one tomato variety at a time. Discuss the similarities and differences: taste (which one is the sweetest?), smell (which one smells the best? What does it smell like?), color, and texture (soft, crunchy, mushy?) of the fruit.
- 10) Ask the class, what are the small round things inside the tomato? Those are the seeds. Each seed can grow into a new tomato plant. Explain that some seeds are okay to eat like seeds in a tomato and cucumbers but some seeds are not okay to eat, like apple and orange seeds.
- 11) Refer to **Conducting an In-Class Taste Test** for ideas on how to engage the class. Have students put a sticker on either the "I Like This" or "I Don't Like This Yet" columns of the taste test sheet, or have them write or initial their names if they are able to do so.

Serves 10 · Prep time: 10 minutes · Cook time: None



Nutrition Facts Serving Size 1/2 cup (231g)			
Servings per Recipe 10			
Amount Per Serving			
Calories 60 Calories from Fat 15			
% Daily Value			
Total Fat 2g			3%
Saturated Fat	t Og		1%
Trans Fat	0g		
Cholesterol Omg		0 %	
Sodium 60mg		3 %	
Total Carbohydrate 11g		4 %	
Dietary Fiber 3g 11		11%	
Sugars 4g			
Protein 3g			
Vitamin A	4%	Vitamin C	45 %
Calcium	4%	Iron	6%
Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.			

- **MATERIALS NEEDED**
- □ Knife
- ☐ Cutting board
- □ Plates
- □ Tablespoon

### **CHEF'S NOTES**

• Small tomatoes, such as cherry or grape tomatoes, can be a choking hazard. Cut tomatoes in half to prevent choking.

### Ingredients:

4 Roma Tomatoes

10 Tbsp Hummus

- 4 Yellow Tomatoes (if available)
- 4 Tomatoes on the vine
- 20 Cherry or Grape Tomatoes\*

#### **Directions:**

- 1) Gently wash the tomatoes with warm water.
- 2) Slice each tomato into approximately 5 slices, cut cherry/grape tomatoes in half.
- 3) Serve each student 2 slice of each tomato, 2 grape or cherry tomato and 1 Tbsp of hummus.
- 4) Have children try one of each tomato, then eat the rest with hummus.
- 5) Enjoy!

Recipe developed by Network for a Healthy California

	Snack	
Fruit		
Vegetable	1/2 cup	1
Grain/Alternative		
Meat/Alternative	1 Tbs	1
Milk		

A indicates that this food group qualifies for CACFP crediting. If two categories are checked off, then the recipe qualifies for CACFP reimbursement. The nutrition facts are provided to you for CACFP creditable recipes.

<sup>\*</sup>Other tomatoes varieties can also be used, try to offer at least 3 different varieties

"I LIKE THIS"



"ME GUSTA"

"I DON'T LIKE THIS YET"



"NO ME GUSTA TODAVÍA"

### **Week 4: Tomatoes Discovery Lab**

### **MATERIALS**

- ☐ A variety of tomatoes
- ☐ A knife and cutting board
- ☐ Scientific tools such as:
  - □measuring tapes/rulers
  - □a scale
  - □magnifying glasses
  - □tweezers
  - □Paper and crayons

### LEARNING STANDARDS

### **Head Start Learning Domains**

- -Approaches to Learning
- -Language Development
- -Literacy Knowledge and Development
- -Logic and Reasoning
- -Mathematics Knowledge and Skills
- -Science Knowledge and Skills

### **DRDP-PS**

- -Language and Literacy Development;
- -Cognitive Development; COG1, COG4
- -Mathematical Development; MATH 2, MATH 3, MATH 4
- -Physical Development: PD3

#### **LESSON**

In Preparation:

Set a table (or tables) with various tomatoes, scientific tools, paper and crayons.

### In Class:

- 1) Explain to the class that today we will be scientists exploring tomatoes:
  - \* We will use our senses of sight, sounds, touch and smell to observe how the tomatoes are the same and different. We will also compare the outside to the inside of tomatoes.

Students will...

tools.

tomato.

compare the different varieties of tomatoes using

\* be able to describe the

inside and outside of a

\* record their observations

and create a class book.

their senses and scientific

- \* We will use scientific tools to measure and weigh which tomatoes are larger, smaller, lighter or heavier.
- \* You will record your observations on your paper with pictures or words.
- \* We will create a book of our "Tomato Observations" and place it in our library.
- 2) In small groups allow the students to explore the tomatoes on their own. You can guide them to use the scientific tools appropriately.
- 3) Ask guiding questions that will encourage them to further explore- which one is the largest? Do they have the same shape? Color? How do they feel?
- 4) Encourage students to draw their observations. Teachers can write down the students' observations on each of their papers.
- 5) Ask students to *hypothesize* (guess) what will be inside the tomato.
- 6) Next, cut open a tomato. Ask students to compare the inside from the outside how is the inside different from the outside? Does it feel the same? Smell the same? Look the same?
- 7) Encourage students to separate the seeds from the tomatoes and examine them. You can place some on a paper plate in the window to dry and have the students examine them later that week.
- 8) Continue to remind students to draw their tomato observations, and when students are done, staple the pages together to create a book titled "Tomato Observations" and place in your library.

## **Extending the Learning Experience**

### **Optional Supplemental Lessons**

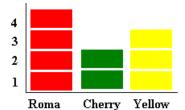
### WEEK 1 (optional)



WEEK 2 (optional



WEEK 3 (optional)



WEEK 4 (optional)



### My Favorite Fruits and Vegetables

- \* After discussing the different parts of the plants we eat, ask the students to draw their favorite fruit and vegetables.
- \* This can be done individually on their own sheets of paper or collectively on large paper to make a class collage.
- \* As they draw and color, help them identify which part of the plant they are drawing.
- \* Write down any observations the students make next to their drawing.
- \* Display their drawings in the classroom.

### **Creative Movement: Lifecycle of a Tomato**

(If possible have at least one adult model the movement)

- \* Ask the students to crouch down into a ball to become tiny "seeds."
- Pretend to spray them with water.
- Have them begin to sprout by slowly stretching their legs.
- \* Tell them to reach their face to the sun to grow strong.
- \* Make their legs and feet firm to make strong roots.
- \* Slowly stretch their arms up with their fists closed.
- \* Slowly open their "flowers" (hands) to create fruits.
- \* The fruit drops its seed.
- \* They plop back down and start the process over.
- \* You can also incorporate a slide whistle as they "grow

### After the Tomato Taste Test, consider creating a Class Tasting Chart:

- Draw a tasting chart on a large paper or board.
- \* On bottom of the chart draw and write the name of the tomato tasted (i.e. Roma, Cherry, Yellow, on the Vine, etc).
- \* On the left side of the chart # 1- 20 or as many students that are in the class; be sure to include your-self and other teachers in the classroom.
- Ask the students which tomato was their favorite and record it in the chart.
- \* Discuss the results: "More students like Roma than Cherry."
- Display the chart for the children and parents to see.

### Seed Card Matching Game:

- \* Let the tomato seeds from the taste test or science discovery lab dry out a little.
- \* Save and dry seeds from another vegetable or fruit such as a cucumber, bell pepper or apple.
- \* Glue the seeds onto a picture card of a tomato and any another vegetable or fruit you have seeds for (a simple drawing is fine).
- \* Cover the picture and seeds with clear contact paper or tape to make a sturdy picture card.
- Make smaller cards that have the seeds without the pictures.
- \* See if the children can match the seed cards to the picture/seed cards.
- \* Do taste tests of other fruits and vegetables over the next few months and save their seeds to make more cards- apples, oranges, peas, etc.
- \* Leave the cards in the science area for children to look at and talk about.
- Provide magnifying glasses so children can see the seeds more clearly.

Adapted from Nutritional Activities for Preschoolers

Serves 20 · Prep time: 15 minutes · Cook time: 5-8 minutes



Nutrition Facts			
Serving Size 1/2 bagel (87g) Servings per Recipe 20			
Amount Per Serving			
Calories 90 Calories from Fat 25			
% Daily Value			
Total Fat 2.5g 4%		4 %	
Saturated Fat 1g		6 %	
Trans Fat Og			
Cholesterol less than 5mg 1 %			
<b>Sodium</b> 240mg 10 %		10 %	
Total Carbohydrate 13g 4 9		4 %	
Dietary Fiber 3g 10 %		10%	
Sugars 4g			
Protein 4g			
Vitamin A 0%	Vitamin C	8 %	
Calcium 8%	Iron	4 %	
Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.			

### **MATERIALS NEEDED**

- ☐ Knife
- ☐ Cutting board
- ☐ Baking sheet
- □ Plates
- □ Mini oven

### **CHEF'S NOTES**

 Allow pizzas to cool for a few minutes after taking them out the oven before serving.

### Ingredients

- 10 mini 100% whole wheat 3" bagels, sliced in half
- 4 Large Roma tomatoes, thinly sliced
- Italian seasoning (dry thyme, oregano, basil, or tsp of each)
- 2 ½ cups (40 Tbsp)of pizza sauce
- 1 ¼ cup (10 oz.) of low fat Mozzarella cheese, grated

### **Directions:**

- 1. Pre-heat oven/toaster oven to 400 degrees.
- 2. Place mini bagel halves on a baking sheet.
- 3. Spread 2 Tbsp of pizza sauce on top of each bagel half.
- 4. Lightly sprinkle Italian Seasoning over the pizza sauce.
- 5. Place on tomato slice on each bagel half.
- 6. Sprinkle approximately 1 Tbsp of cheese on top of the tomato slice.
- 7. Bake for 5-8 minutes, until cheese is melted.
- 8. Serve warm and taste!

Recipe adapted from 2006 California Tomato Commission

	Snack	
Fruit		
Vegetable		
Grain/Alternative	1/2 serving	1
Meat/Alternative	.5 oz	1
Milk		

A indicates that this food group qualifies for CACFP crediting. If two categories are checked off, then the recipe qualifies for CACFP reimbursement. The nutrition facts are provided to you for CACFP creditable recipes.



Serves 12 (1/2 cup each) · Prep time: 15 minutes · Cook time: None



Nutrition Facts			
Serving Size 1/2 cup (123g) Servings per Recipe 12			
Amount Per Serving			
Calories 90 Calories from Fat 30			
% Daily Value			
Total Fat 3g 5%		5%	
Saturated Fat .5g 3		3 %	
Trans Fat Og			
Cholesterol Omg 0 %		0 %	
<b>Sodium</b> 105mg 4 %		4 %	
Total Carbohydrate 15g 59		5 %	
Dietary Fiber 2g 9 %		9%	
Sugars 3g			
Protein 2g			
Vitamin A 0%	Vitamin C	30 %	
Calcium 2%	Iron	4 %	
Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.			

### **MATERIALS NEEDED**

- ☐ Knife
- $\hfill\square$  Cutting board
- ☐ Medium bowl
- □ Plates
- □ Spoon

### **CHEF'S NOTES**

- Chop onions and garlic finely to reduce exposure to strong taste and orders
- Use purple onions to add color

### **Ingredients:**

- 6 medium Roma tomatoes, chopped
- 1 cup chopped red onion
- 4 cloves garlic, minced
- ½ teaspoon salt

- 1 fresh jalapeno pepper, seeded and finely chopped (optional)
- 4 tablespoons lime juice (approximately 4 limes)
- 2/3 cup chopped fresh cilantro
- 1 (6 oz) reduced-fat tortilla chips (or celery sticks)

### **Directions:**

- 1) Combine all of the ingredients except for the tortilla chips or celery sticks in a medium bowl.
- 2) Serve immediately or cover and refrigerate for up to 3 days.
- 3) Serve on plates with the tortilla chips or celery sticks.
- 4) Enjoy!

Recipe adapted from Healthy Latino Recipes Cookbook- Network for a Healthy California

	Snack	
Fruit		
Vegetable	1/2 cup	1
Grain/Alternative	0.5 oz	1
Meat/Alternative		
Milk		

A indicates that this food group qualifies for CACFP crediting. If two categories are checked off, then the recipe qualifies for CACFP reimbursement. The nutrition facts are provided to you for CACFP creditable recipes.

