

## Educator Curriculum





## TX Sprouts Curriculum Table Of Contents

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## **LESSON 1: INTRODUCTION, SAFETY, AND RULES**

**Recipes:** Corn & Black Bean Salad and Cucumber Lemon Agua Fresca

### **LEARNING OUTCOMES**

1. Describe the TX Sprouts program
2. Identify garden safety and expectations
3. Identify kitchen/knife safety and expectations
4. Explore garden and work in cooking groups for first time

### **TEKS/CURRICULUM CONCEPTS**

<b>TEKS Concept</b>	<b>Subject</b>	<b>3<sup>rd</sup></b>	<b>4<sup>th</sup></b>	<b>5<sup>th</sup></b>
Demonstrate safe practices and use of safety equipment.	Science	3.1A	4.1A	5.1A
In all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student.	Science	3.3A	4.3A	5.3A
Describe ways in which peers and families can work together to build a healthy community.	Health	3.8B		

**PREPARATION**

<b>Prep Beforehand</b>	<input type="checkbox"/> Cucumber-Lemon Agua Fresca (1.5 gallons water/class) <input type="checkbox"/> Wash all vegetables <input type="checkbox"/> Recipe prep - see below for details <input type="checkbox"/> Clipboards with nametags/post-it on each stump
<b>Other Items to Bring</b>	
<b>General</b>	<input type="checkbox"/> Lesson report form <input type="checkbox"/> Pencils <input type="checkbox"/> Trash bags <input type="checkbox"/> Vinegar cleaning solution <input type="checkbox"/> 2 tables for instruction <input type="checkbox"/> 4 hand towels <input type="checkbox"/> Compost and Recycling buckets <input type="checkbox"/> Texas Sprouts workbooks <input type="checkbox"/> Dry erase markers/eraser <input type="checkbox"/> Paper towel roll <input type="checkbox"/> Tape <input type="checkbox"/> First aid kit <input type="checkbox"/> Hornet spray
<b>Discussion 1</b>	<input type="checkbox"/> Markers <input type="checkbox"/> Nametags
<b>Activity 1</b>	<input type="checkbox"/> Post-it notes
<b>Activity 3</b>	<input type="checkbox"/> Bell pepper for demonstration
<b>Agua Fresca</b>	<input type="checkbox"/> 3 gallons cold water <input type="checkbox"/> Pitcher <input type="checkbox"/> Cups
<b>Cooking Activity</b>	<input type="checkbox"/> 5 student tables <input type="checkbox"/> Cooking directions <input type="checkbox"/> Recipe cards <input type="checkbox"/> Strainer <input type="checkbox"/> 20 knives <input type="checkbox"/> 5 medium bowls <input type="checkbox"/> 1 large cooking/serving spoon <input type="checkbox"/> Voting beans & jars <input type="checkbox"/> Vegetable peeler <input type="checkbox"/> Citrus juicer <input type="checkbox"/> Hand sanitizer <input type="checkbox"/> Table numbers <input type="checkbox"/> 15 cutting boards <input type="checkbox"/> Can opener <input type="checkbox"/> Plates and utensils <input type="checkbox"/> 1 large bowl <input type="checkbox"/> Measuring spoons and cups <input type="checkbox"/> Hose/bucket/sink for washing veggies <input type="checkbox"/> Sharp adult knife  <u>Recipe ingredients:</u> <input type="checkbox"/> 1 can of black beans <input type="checkbox"/> 2 avocados <input type="checkbox"/> 2 cucumbers <input type="checkbox"/> 1 can of corn <input type="checkbox"/> 1 bunch cilantro <input type="checkbox"/> Salt & pepper <input type="checkbox"/> 2 bell peppers <input type="checkbox"/> 2 limes <input type="checkbox"/> 1 bunch green onion
<b>To Set Up/Prep in the Garden</b>	<input type="checkbox"/> Set up tables: number tables & set out recipe cards, plates, utensils and cups for each student <input type="checkbox"/> Teacher table: stack of post-it notes, pencils <input type="checkbox"/> Write objectives/recipe/agua fresca on the board
<b>Workbook</b>	<input type="checkbox"/> Knife Safety True/False

## DISCUSSION 1: PROGRAM OVERVIEW AND EXPECTATIONS

1. Teacher introduces self and welcomes students.
2. Teacher reviews signal to get their attention and listening rule.
3. Make nametags: Everyone writes their name on a sticker nametag and puts it on.
4. Tell students what to expect each week:
  - a. Focus on either the garden or healthy eating in each lesson
  - b. Cook a recipe (students help cook!) or enjoy a taste-test from the garden
  - c. Spend time connecting with the environment and with our food
5. Ask students: Why is eating healthy important?
  - a. Call on students to share aloud with the group.
  - b. *Possible answers:*
    - i *Helps you feel better and have more energy*
    - ii *It can reduce obesity (give definition-health condition when you're overweight and have health issues because of it)*
    - iii *Helps you do better in school because a healthy body and mind can focus better*
    - iv *Improves physical fitness*
    - v *Live longer, what you eat now while you're growing and developing will affect you for the rest of your life!*
    - vi *Feel better*
6. Ask students: Why is gardening important?
  - a. *Possible answers:*
    - i. *Helps us increase our access to tasty fruits and vegetables all the time*
    - ii. *Helps us appreciate where our food comes from and how it makes its way to our plates*
    - iii. *Understand the many living things around us and how we depend on them*

## ACTIVITY 1: GARDEN RULES

1. Teacher draws the outline of a garden on white board.
2. Tell students: We want everyone to have fun and be safe when we go out to the garden. What kind of things should we remember to do/not do while we are out here together and working in the garden? For example, does "listening to the teacher" go inside or outside the garden?
3. Put that sticky note on the inside of the garden. Give another example of something that would go outside of the garden (example: running).
4. Ask students to think about what else belongs inside or outside the garden.
5. Divide the class in half – one half writes things that go *inside* the garden and the other half writes things that go *outside*. When they are finished, each student goes up to the board and places their sticky note *inside* or *outside* the garden.

6. Summarize and read the most important rules out loud, reminding students that we will follow these rules for all of the lessons in the future.
  - a. No walking in the garden beds.
  - b. Respect all living things in the garden including plants and insects.
  - c. No picking plants or eating vegetables without permission from the teacher.
  - d. Use tools as they are meant to be used (inappropriate use will mean exclusion from activity).
  - e. Be respectful to classmates and teacher.
  - f. Leave the garden as clean as you found it or better.
  - g. Raise your hand if you have a question/comment.
  - h. Have FUN!

\*Teacher takes picture of rules and makes laminated poster of rules later to bring to future classes.

### **ACTIVITY 2: KITCHEN SAFETY/RULES FOR COOKING**

1. Draw outline of cooking pot on whiteboard.
2. Remind students that we will be cooking as a part of almost every lesson together.
3. Tell students that most of the rules for the garden will apply to the cooking portion of the lesson.
4. Ask students if they can think of anything else to add for kitchen safety.
  - a. Give example if necessary to get them going.
5. Add sticky notes or write on board as students mention them. Include the following:
  - a. Wash hands with hand sanitizer.
  - b. Always wash vegetables (mention that most vegetables will be pre-washed to save time).
  - c. All tools including knives should be used with care; inappropriate use of tools will result in exclusion from the activity.
  - d. Clean any spills immediately.
  - e. NO tasting ingredients while prepping.
  - f. Everyone participates in prep, not just one or two people doing everything.
  - g. Be open to trying new things. No saying YUCK before you try.

### **TEXAS SPROUTS WORKBOOK**

1. Pass out Texas Sprouts workbook and explain to students that we will use these workbooks every week to do activities and make some notes. Also, it contains all of the recipes of the foods and aguas frescas that we will cook each week.
2. The workbook will stay in their teacher's classroom – *do not take home*. Students will need the workbook and a pencil every week they come out to the garden.
3. Ask students to write their name in their workbooks.

### ACTIVITY 3: KNIFE SAFETY

1. Ask students to open to **page 2** of their workbooks and write TRUE (T) or FALSE (F) for the following statements about how to use a knife. Go over the correct answers and elaborate briefly on each one if necessary and demonstrate.
  - a. A knife is a toy (FALSE)
  - b. Always cut on a cutting board (TRUE)
  - c. Never run with a knife (TRUE)
  - d. You fingers should be under the blade when cutting (FALSE)
  - e. Always keep your eyes closed when cutting (FALSE)
  - f. Pick up knives by their handle (TRUE)
  - g. Do not point a knife at anyone (TRUE)
  - h. Always try to catch a falling knife (FALSE)
  - i. When cutting fruits and vegetables, first cut a flat side or a base so it lays flat and doesn't wobble (TRUE)
    - i. **DEMONSTRATION:** teacher cuts round bell pepper as an example, showing back and forth cutting motion

### COOKING ACTIVITY

Ask students to open their workbooks to the Corn & Black Bean Salad recipe on **page 3**. Talk about the meal they will prepare by going over ingredients, quantities and basic preparation. To keep students engaged, ask them to point to ingredients as you say them. Encourage all children to at least “try” the recipe. Children who try the recipes will be our super tasters.

### STUDENT PREP

Table #	Item to Prep	Materials Needed	Directions on Table
1	Beans and Corn	1 cutting board 1 can opener 1 strainer 1 medium bowl	1. Open cans. 2. Strain over compost bin. Add to bowl. *Students may need help using can opener.
2	Bell Pepper (2)	4 cutting boards 6 knives 1 medium bowl	1. Cut off stem 2. Remove seeds 3. Cut in half, then strips. Final pieces about ¼ inch long.
3	Green Onions	4 cutting boards 6 knives 1 medium bowl	1. Cut off root. 2. Cut in ½ inch pieces.
4	Cucumber (2)	4 cutting boards 6 knives 1 vegetable peeler 1 medium bowl	1. Peel cucumber. 2. Cut into four even pieces. 3. Then, cut each piece in half and into small cubes.
5	Cilantro	2 cutting boards 1 medium bowl	1. Tear leaves off of the stems. If leaf is really big, tear in half. 2. Discard stems into compost bucket.

**Cooking Assistant Directions:** While students are doing their chopping, chop avocado, and slice limes in half and set aside. When students are finished, collect all of their ingredients; combine in large bowl with avocado. Juice limes into bowl, toss, and serve.

### **RECIPE & AGUA FRESCA TASTING**

Assistants should serve a small sample on each plate, pour a serving of the agua fresca in each cup, and help distribute to students.

### **VOTING ON THE RECIPE & AGUA FRESCA**

1. Pass out two beans to each student.
  
2. Assistant walks around to each table with two cups and instructs the students to place the bean in the “yes” cup if they liked the recipe and in the “no” cup if they did not like the recipe.
  - a. Repeat for voting on the agua fresca.

### **CONCLUSION**

Based on learning outcomes, ask students to tell a partner what they learned in the lesson today. Then ask the following questions as a whole group and elaborate/clarify as necessary.

1. What is the TX Sprouts program?
2. Name 2 ways to be safe in the garden.
3. Explain how to use a knife safely.
4. What did you see in the garden for the first time today?

### **CLASSROOM CONNECTIONS**


1. Decorate your personal TX Sprouts workbook.




COOKING INSTRUCTIONS FOR EACH TABLE

Table 1	
Supplies	Directions
<ul style="list-style-type: none"> <li>• Beans and corn</li> <li>• 1 cutting board</li> <li>• 1 can opener</li> <li>• 1 strainer</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Open cans.</li> <li>2. Strain over compost bucket.</li> <li>3. Add to bowl.</li> </ol>




Table 2	
Supplies	Directions
<ul style="list-style-type: none"> <li>• 2 bell peppers</li> <li>• 4 cutting boards</li> <li>• 4 knives</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut off stem and cut in half.</li> <li>2. Remove seeds.</li> <li>3. Slice into strips and then into cubes, as pictured.</li> </ol> 



<b>Table 3</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• Green onions</li> <li>• 4 cutting boards</li> <li>• 4 knives</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut off root.</li> <li>2. Cut into small pieces, as pictured.</li> </ol> 







<b>Table 4</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• 2 cucumbers</li> <li>• 4 cutting boards</li> <li>• 4 knives</li> <li>• Vegetable peeler</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Peel cucumber.</li> <li>2. Cut into 4 even pieces.</li> <li>3. Then cut each piece in half and into cubes, as pictured.</li> </ol> 



<b>Table 5</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• Cilantro</li> <li>• 2 cutting boards</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Tear leaves off of the stems.</li> <li>2. Discard stems into compost bin.</li> </ol>



 <h2 style="text-align: center;">Corn &amp; Black Bean Salad</h2>	
<p><b>Ingredients</b></p> <p>1 cup cooked sweet corn          1 cup cooked black beans          1 red bell pepper, chopped          2 cucumbers          1 avocado, chopped          ½ cup green onions, chopped          Cilantro          Juice of 1 lime          Salt and pepper, to taste</p> <p><b>Time:</b> 15 minutes  <b>Serving size:</b> ½ cup  <b>Servings per recipe:</b> 8</p>	 <p><i>Per serving:</i>  <b>Carbohydrates:</b> 11 grams  <b>Fiber:</b> 4 grams  <b>Added Sugar:</b> 0 grams  <b>Protein:</b> 3 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>Combine all ingredients in bowl, and toss.</li> </ol>	

 <h2 style="text-align: center;">Cucumber-Lemon Agua Fresca</h2>	
<p><b>Ingredients</b></p> <p>1 pitcher of filtered water          1 cucumber          2 lemons</p> <p><b>Time:</b> 10 minutes  <b>Serving size:</b> 1 cup (8 fluid ounces)  <b>Servings per recipe:</b> one pitcher</p>	 <p><i>Per serving:</i>  <b>Carbohydrates:</b> 0 grams  <b>Fiber:</b> 0 grams  <b>Added Sugar:</b> 0 grams  <b>Protein:</b> 0 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>Cut cucumber in half, slice it lengthwise into 4 sections, and place in pitcher.</li> <li>Cut lemons into thin slices, and add to pitcher.</li> <li>Fill pitcher with water, and chill in refrigerator.</li> <li>To serve, pour water into glasses, leaving the lemon and cucumber in pitcher. Refill the pitcher and reuse the lemon and cucumber a few times. They will stay fresh for 2 days if kept cold.</li> </ol>	

## LESSON 2: WHOLE VS. PROCESSED FOOD & FOOD SYSTEMS

**Recipe:** Watermelon Basil Water

**Garden Taste Test**

### LEARNING OUTCOMES

1. Define the meaning of “whole food”
2. Describe the difference between whole food and processed food
3. Discuss why whole food is healthier than processed food

### TEKS/CURRICULUM CONCEPTS

TEKS Concept	Subject	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
Apply mathematics to problems arising in everyday life, society, and the workplace.	Math	3.1A	4.1A	5.1A
Determine liquid volume (capacity) or weight using appropriate units and tools.	Math	3.7E		
Identify types of nutrients (3.1C); Identify foods that are sources of one or more of the six major nutrients (5.1C).	Health	3.1C		5.1C
Identify information on menus and food labels (4.1B); Apply information from the food guide pyramid to making healthy food choices (5.1B).	Health		4.1B	5.1B
Identify the benefits of six major nutrients contained in foods.	Health		4.1A	
Draw inferences and evaluate accuracy of product claims found in advertisements and labels such as for toys and food.	Science	3.3B	4.3B	5.3B
Collect information by detailed observations and accurate measuring.	Science			5.2C

## PREPARATION

<b>Prep Beforehand</b>	<input type="checkbox"/> Lemon-Lime Agua Fresca (1.5 gallons water/class) <input type="checkbox"/> Clipboards <input type="checkbox"/> Prep 2 apple and 3 carrot bags as follows: <ol style="list-style-type: none"> <li>a. Apples, pre-sliced apples, freeze dried apples with cinnamon/sugar, apple sauce, apple-flavored jolly rancher</li> <li>b. Real carrot, baby carrots, canned carrots, V8 Splash with less than 100% juice, box of carrot cake mix or mini carrot cake pastry</li> </ol>	
<b>Other Items to Bring</b>		
<b>General</b>	<input type="checkbox"/> Lesson report form <input type="checkbox"/> Pencils <input type="checkbox"/> Trash bags <input type="checkbox"/> Vinegar cleaning solution <input type="checkbox"/> 2 tables for instruction <input type="checkbox"/> 4 hand towels <input type="checkbox"/> Compost and Recycling buckets	<input type="checkbox"/> Texas Sprouts workbooks <input type="checkbox"/> Dry erase markers/eraser <input type="checkbox"/> Paper towel roll <input type="checkbox"/> Tape <input type="checkbox"/> First aid kit <input type="checkbox"/> Hornet spray
<b>Activity 1</b>	<input type="checkbox"/> 2 apple bags	<input type="checkbox"/> 3 carrot bags
<b>Agua Fresca</b>	<input type="checkbox"/> Lemons <input type="checkbox"/> 3 gallons cold water <input type="checkbox"/> Pitcher	<input type="checkbox"/> Limes <input type="checkbox"/> Cups
<b>Garden Taste Test</b>	<input type="checkbox"/> 5 student tables <input type="checkbox"/> Knife <input type="checkbox"/> Plates and utensils <input type="checkbox"/> Garden shears	<input type="checkbox"/> Hand sanitizer <input type="checkbox"/> Cutting board <input type="checkbox"/> Hose/bucket/sink for washing veggies
<b>To Set Up/Prep in the Garden</b>	<input type="checkbox"/> Set up tables: recipe cards <input type="checkbox"/> Write objectives & agua fresca on the board <input type="checkbox"/> Close versus Far game on tables or on the ground	
<b>Workbook</b>	<input type="checkbox"/> Flamin' Hot Cheetos	<input type="checkbox"/> Definition of Whole vs. Processed Foods

**INTRODUCTION:** Welcome students back and go over objectives for the lesson, give a refresher of the rules for the class (if you feel necessary) and point out the agua fresca for the day.

### GARDEN GLANCE

1. Tell students: During the weeks when we don't cook, we will begin our lesson by walking around the gardens and observing what we see, especially if you see something different like bigger plants, new plants, bugs, etc. This is our Garden Glance time- time for you to transition from being indoors to out in the garden and also to have a moment to check out what might have changed since the last time you were here.

2. Tell students: Open to **page 4** of your workbook. Your workbook has an observation page for every time you come out to the garden. Use these during our Garden Glance time to record things you see, draw a picture, record the temperature, etc.
3. Allow time for the Garden Glance. Call students back to the group, and call on a few students to share aloud.

### **DISCUSSION 1: ORIGIN OF FOOD**

1. Where do foods like fruits and vegetables come from? Do they appear magically in our grocery stores, all wrapped in packages or in plastic wrap?
  - a. *Answer: No, they come from a garden or farm. Then it is often transported to a grocery store to be bought by you or perhaps to a factory to be combined with other ingredients.*
2. Today, we are going to see how close to its original form much of the food we eat is. Food can also change a lot from the time it is picked on the garden/farm to when we eat it. Today we are going to see how much some of the food we eat changes from its original form after it leaves the farm/garden.

### **ACTIVITY 1: CLOSE OR FAR GAME**

1. Divide the class into five evenly numbered groups.
2. Give bags with apple/apple products to two groups.
  - a. Apples, pre-sliced apples, freeze dried apples with cinnamon/sugar, apple sauce, apple-flavored jolly rancher
3. Give bags with carrots/carrot products to three groups.
  - b. Real carrot, baby carrots, canned carrots, V8 Splash with less than 100% juice, box of carrot cake mix or mini carrot cake pastry
4. At each table, have a copy of the following things to think about when doing this activity:
  - a. How much has this food changed from its original form?
  - b. How has it changed? (Pureed, cooked, ingredients added, etc.)
  - c. Look at the ingredients on the food label. How many are there? Do you recognize all of them?
5. Have students line up foods from closest to farthest from a whole food on their tables. Tell students: A whole food is closest to its original form.
6. Ask a couple of volunteers from the carrot or apple group to present their order and why they made these choices.

### **ACTIVITY 2: FLAMIN' HOT CHEETOS**

1. Open workbooks to Flamin' Hot Cheetos activity on **page 6**.
2. Ask students how many ingredients are in this food.
3. Ask them to circle the ingredients they don't recognize. Ask students: does this surprise you?

4. Call on a student to read the final statement: Try to choose foods that have few ingredients. If they have fewer ingredients, they are less processed.

### ACTIVITY 3: WHOLE VS. PROCESSED FOOD DEFINITONS

1. Ask students to open their workbooks to **page 7**. Ask them to look at the statements and write a W next to the whole foods or a P next to the processed foods.
2. Read each description aloud, randomly alternating between the columns, and ask ALL students to hold up a red card for processed foods or a green card for whole foods.

Whole Food	Processed/Packaged Food
<ul style="list-style-type: none"> <li>• Simple and fresh</li> <li>• Doesn't have artificial (or "fake") flavors or ingredients</li> <li>• Has more nutrients per serving</li> <li>• Doesn't have a long ingredient list</li> <li>• Better for your health</li> </ul>	<ul style="list-style-type: none"> <li>• Comes in a package</li> <li>• Has preservatives added so it stays fresher longer</li> <li>• Has a lot of unknown or unnatural ingredients to increase flavor</li> <li>• Has fewer nutrients per serving</li> </ul>

3. Teacher reads descriptions of whole versus processed foods aloud in a random order. Ask students to hold up one finger for whole foods and two fingers for processed foods. Elaborate as needed.

### GARDEN TASTE TEST & AGUA FRESCA TASTING

1. Tell students they will have a garden taste today that will be a whole food. Depending on what there is an abundance of, choose something that students can have a taste of from the garden (supplement with grocery items as needed).
  - a. Each table group will pick ONE vegetable and take it to the assistant who will wash and cut up in smaller pieces for students to try.

### VOTING ON THE TASTE TEST & AGUA FRESCA

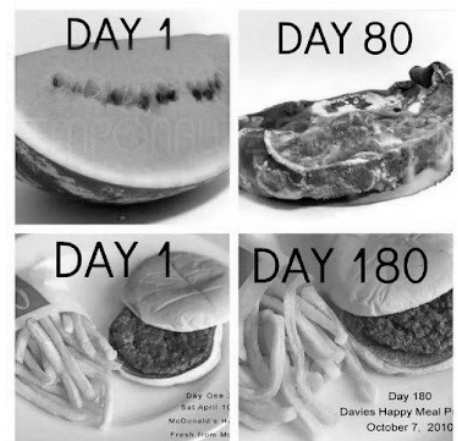
1. Pass out two beans to each student.
2. Assistant walks around to each table with two cups and instructs the students to place the bean in the "yes" cup if they liked the taste test and in the "no" cup if they did not like the taste test.
  - a. Repeat for voting on the agua fresca.

### CONCLUSION

Based on learning outcomes, ask students to tell a partner what they learned in the lesson today. Then, ask the following questions as a whole group and elaborate/clarify as necessary.

1. What does "whole food" mean?
2. What is the difference between whole and processed food?
3. Why is whole food healthier than processed food?
4. How can you incorporate whole food into your meals?
5. What do you think of when you see the picture on the right? \*


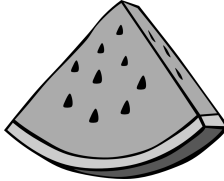
\* Enlarged image cutout on last page of lesson



**CLASSROOM CONNECTIONS**

1. Write a description of this picture.  
OR
2. Write in your workbook about whole foods and processed foods in your pantry at home. How do you know if they are whole or processed?

**RECIPE**

 <b>Watermelon Basil Water</b>	
<p><b>Ingredients</b>          1 pitcher filtered water          2 slices of watermelon          Handful of basil leaves          Ice</p> <p><b>Time:</b> 10 minutes  <b>Serving size:</b> 1 cup (8 fluid ounces)  <b>Servings per recipe:</b> one pitcher</p>	 <p><i>Per serving:</i>  <b>Carbohydrates:</b> 0 grams  <b>Fiber:</b> 0 grams  <b>Added Sugar:</b> 0 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Cut watermelon slices into cubes and place in pitcher.</li> <li>2. Add basil leaves, water, and ice to pitcher, and serve.</li> </ol>	



CONCLUSION IMAGE CUTOUT

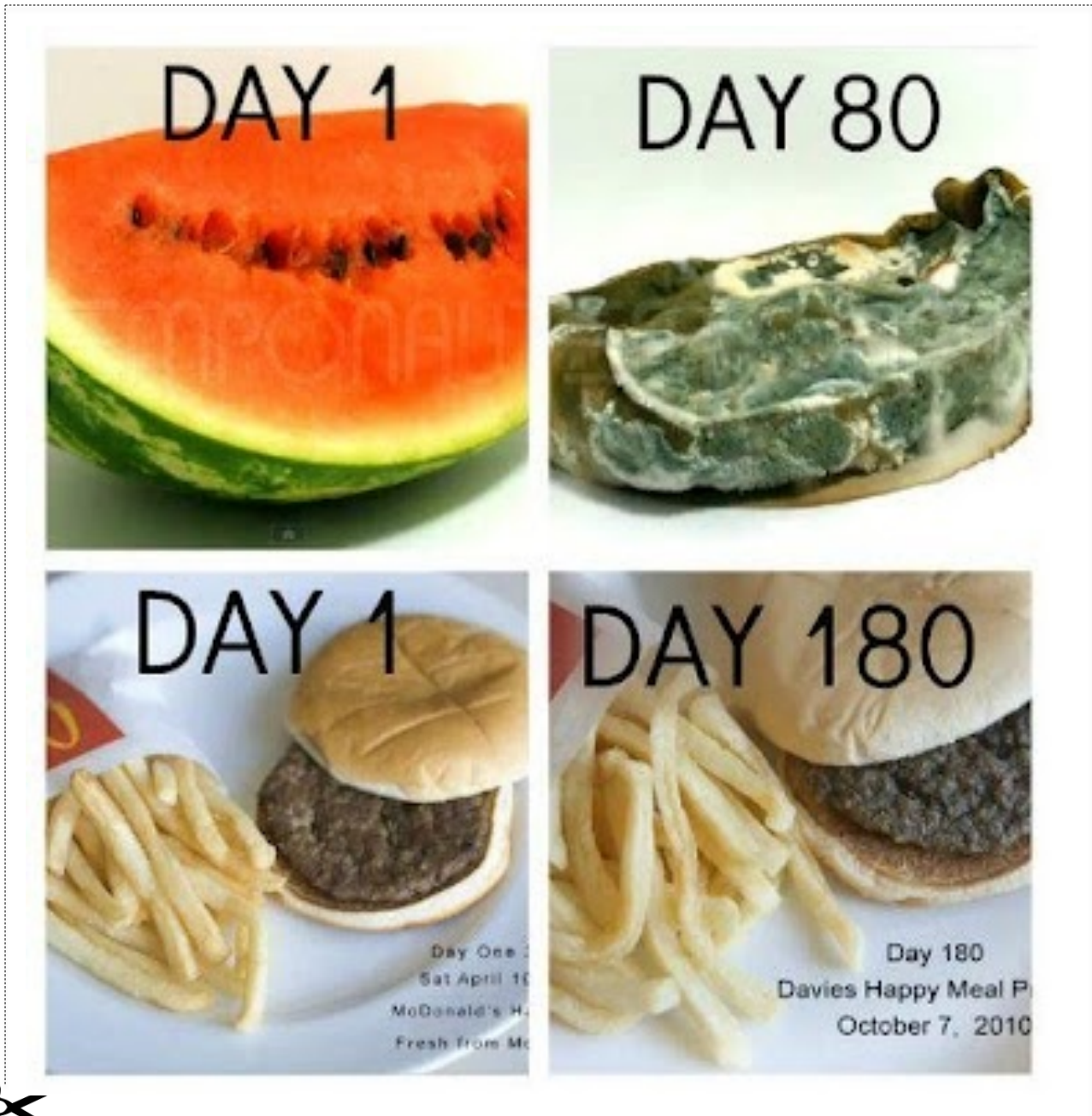


Image Credit: [ecovegangal.com](http://ecovegangal.com)

## LESSON 3: SOIL AND PLANTING

**Recipes:** Lime Toasted Pepitas and Mint, Lime, Club Soda Agua Fresca

### LEARNING OUTCOMES

1. Describe what plants need to grow
2. Identify the elements that are in healthy garden soil
3. Explain the importance of depth in planting different seeds for successful germination and growing

### TEKS/CURRICULUM CONCEPTS

TEKS Concept	Subject	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
Examine properties of soils, including color and texture, capacity to retain water, and ability to support the growth of plants.	Science		4.7A	
Explain how structures and functions of plants and animals allow them to survive in a particular environment.	Science	3.10A		
Explore and recognize that a mixture is created when two materials are combined such as gravel and sand and metal and plastic paper clips.	Science	3.5D		
Describe and classify samples of matter as solids, liquids and gases.	Science	3.5B		
Demonstrate safe practices and the use of safety equipment as described in the Texas Safety Standards during classroom and outdoor investigations.	Science	3.1A	4.1A	5.1A

**PREPARATION**

<b>Prep Beforehand</b>	<input type="checkbox"/> Mint, Lime, and Club Soda Agua Fresca <input type="checkbox"/> Lime Toasted Pepitas <input type="checkbox"/> Clipboards with numbers	
<b>Other Items to Bring</b>		
<b>General</b>	<input type="checkbox"/> Lesson report form <input type="checkbox"/> Pencils <input type="checkbox"/> Trash bags <input type="checkbox"/> Vinegar cleaning solution <input type="checkbox"/> 2 tables for instruction <input type="checkbox"/> 4 hand towels <input type="checkbox"/> Compost and Recycling buckets	<input type="checkbox"/> Texas Sprouts workbooks <input type="checkbox"/> Dry erase markers/eraser <input type="checkbox"/> Paper towel roll <input type="checkbox"/> Tape <input type="checkbox"/> First aid kit <input type="checkbox"/> Hornet spray
<b>Activity 1</b>	<input type="checkbox"/> Large plastic container <input type="checkbox"/> Pea gravel <input type="checkbox"/> Watering can	<input type="checkbox"/> Golf balls to fill container <input type="checkbox"/> Bag of flour
<b>Activity 2</b>	<input type="checkbox"/> Seed packets/transplants <input type="checkbox"/> Compost <input type="checkbox"/> 5 seed posters	<input type="checkbox"/> Yard sticks <input type="checkbox"/> Shovels/trowels <input type="checkbox"/> Parmesan shaker with lettuce seeds
<b>Agua Fresca</b>	<input type="checkbox"/> 3 liters cold club soda <input type="checkbox"/> Pitcher <input type="checkbox"/> Mint	<input type="checkbox"/> Cups <input type="checkbox"/> Lime <input type="checkbox"/> Ice
<b>Cooking Activity</b>	<input type="checkbox"/> 5 student tables <input type="checkbox"/> Table numbers <input type="checkbox"/> Plates and utensils <input type="checkbox"/> 1 large cooking/serving spoon <input type="checkbox"/> Hose/bucket/sink for washing veggies  Recipe ingredients: <input type="checkbox"/> Lime Toasted Pepitas	<input type="checkbox"/> Hand sanitizer <input type="checkbox"/> Recipe cards <input type="checkbox"/> Voting beans & jars
<b>To Set Up/Prep in the Garden</b>	<input type="checkbox"/> Set up tables: number tables & set out recipe cards, plates, utensils and cups for each student, seed poster (poster with different-sized seeds, labeled) <input type="checkbox"/> Teacher table: stack of post-it notes, pencils <input type="checkbox"/> Write objectives/recipe/agua fresca on the board <input type="checkbox"/> Beds/space for each group	
<b>Workbook</b>	<input type="checkbox"/> Knife Safety True/False	

**INTRODUCTION:** Welcome students back and go over objectives for the lesson, refresher of rules for the class (if you feel necessary) and point out the recipe and agua fresca for the day.

## DISCUSSION 1: WHAT DOES A GARDEN NEED TO GROW

1. Tell students: Today we will be planting our cool season vegetable garden, so it's important to know what is necessary for plants to grow. Who can tell me what a plant needs to grow?
2. Ask a few students to share aloud.
  - a. *Answers: air, sun, soil, nutrients, water*
3. Tell students: An easy way to remember this is to think of the word PLANT. Each letter stands for something a plant needs to grow.
4. Ask students to open their notebooks to **page 11**. Write each letter on the white board and what it stands for, and ask students to write these in their workbooks as well.

P-Place = soil

L-Light

A-Air

N-Nutrients

T-Thirsty = water

5. Tell students: We choose a location for our garden to make sure we get sun and air. Our daily care of the garden allows us to add water and nutrients when needed. Once our garden is in place, we then need to make sure we have healthy soil. But what makes up healthy soil?
  - a. Have students raise their hands and share with the group what they think makes a good garden soil.
    - i. *Answers: drainage, compost, nutrients, earthworms and other living organisms (soil is alive!), fluffy or has an airy texture*

## ACTIVITY 1: SOIL EXPLORATION MODEL

1. Tell students: Soil is made up of many sizes of particles. The main particles are sand, silt and clay. Sand is the largest of the three, silt is next largest and clay is the smallest. To understand more about soil, we are going to build a model of soil. A model is something that represents another thing and can help us understand it better. Ask students to open their workbooks to **page 11**. For a visual, write each of these words on the board – sand, silt and clay (making the font smaller with each one). Students should write down names of soil particles as you write them on the board.
2. Ask for two volunteers to come up to the front table: We are going to make a model of how soil is a mixture of different things. First, fill this container with golf balls. Golf balls represent sand in our model – Write this in your workbook. Ask the class: Is the container full now? (*Students usually answer yes*).
3. Call on two different volunteers. Now let's add pebbles to the container (shake if necessary to let the pebbles fill the spaces in between balls). Pebbles represent silt in our model. How did the pebbles fit in when we said the container was full already?
  - a. *Answer: They filled the in between spaces - they are smaller.*
  - b. Ask students: Is the container full now? (*Some might say yes, some might say no*).

4. Call on two different volunteers. Now, let's add flour to the container (shake if necessary to let the flour fill the spaces in between balls). Flour represents clay in our model. How does the flour fit if the container was full with the balls and pebbles?
  - a. *Answer: They filled the in between spaces- the grains are very small.*
  - b. Ask students: Is the container full? (Some might say yes, many will now say no)
5. Call on one more volunteer. Now we are going to add water to our soil model. (Have a student pour water into the container until it is full). How does the water fit into the container?
  - a. *Answer: Water filled the spaces left in between all the other stuff*
6. Can anyone explain what this model shows about soil?
  - a. Let students describe in their own words in partners. Write key points down on board if available.
7. We can see from our model that soil is made up of many sizes of particles – mainly sand, silt and clay. Sand (golf balls) is the largest of the three, silt (pebbles) is next largest and clay (flour) is the smallest.
8. Was there more open space between the golf balls or the flour?
  - a. *Answer: The golf balls because larger particles have more space between them.*
9. Discuss with the students that the more space between the particles, the faster water will drain through. The less space between the particles, the slower the water will drain through. Most plants need something in between – they need water to hang around long enough to be absorbed by roots but not so long that it causes the roots to sit in the water and begin to rot. Having all three-sized particles present in your soil means that the soil can hold water but not stay wet all the time, because the large particles will let the water through quickly but the smaller ones will hold onto it for a longer period of time.

## ACTIVITY 2: PLANTING

1. Tell students what plant they will be planting today (each class will plant a different plant\*).
2. Look at seed poster on tables and ask them to find “their” seed.
3. Ask them to compare “their” seed to the others.
4. Ask students: How do you think that will affect how we plant the seeds?
  - a. *Answer: Bigger seeds will be planted deeper than smaller seeds.*
5. Ask students: Do you think the size of the plant will correspond to the size of the seed?
  - a. *Answer: It does not. Point out the sizes of the lettuce and beet seeds as an example.*
6. Tell students: The good news is that all the information you need to plant a seed correctly is on the back of a seed packet.
7. Show students seed packet. It tells you how deep to plant the seed in the soil and how far apart to plant them from each other.

8. Let's see what it says about the seeds your class will be planting. Review depth of seed, seed spacing, days to germination, and days to harvest.
9. Tell students: Do we need to get a ruler out to measure how deep our holes are? No, we can just use our fingers as a measure. Ask students to hold up their index fingers and explain what one-inch, ½ an inch, ¼ inch, etc. looks like in relation to their finger (approx. 1/2" to first knuckle, 1" to second knuckle).
10. Take students to the garden and show them where they will be planting. Add compost and have groups of students work the soil first by using the simple digging and flipping technique to soften and level it. Use yard sticks to help students know where to plant their seeds.
11. Tell students: Normally, we would be watering our plants, but since several classes are planting, we will be watering at the end of the day.

\*Procedures for each crop:

Plant	Seed Depth	Seed Spacing	Notes
Beets	½ inch	1 inch apart	Soak overnight before planting to help germination.
Broccoli	Transplant	18 inches apart	In groups, students will divide tasks of preparing soil, digging hole, putting in plant, and filling in soil
Carrots	¼ inch	1 inch apart	Hollow out one long trough and let students drop seeds in.
Kale	½ inch	4 inches apart	
Lettuce	1/8 inch	-----	Soil for this area should be well dug and then leveled but loose. Put seeds in Parmesan shaker, fill with play sand (very fine) and have students each do five shakes in garden area designated for lettuce. Have students lightly pat hands over area to give seeds good soil contact.
Snap Peas	1 inch	12 inches apart	Plant around the base of trellises. Dig trough and have students place seeds in at appropriate spacing.
Radishes	¼ inch	4 per cinder block square	Plant inside cinder block holes – can plant 4 to a hole. Explain to students to spread them apart but not all the way in corners.
Swiss Chard	½ inch	4 inches apart	Soak overnight before planting to help germination.

### RECIPE & AGUA FRESCA TASTING

Students are released by table to taste recipe and agua fresca. Assistants should serve a small sample on each plate and help distribute to students.

### VOTING ON THE RECIPE & AGUA FRESCA


1. Pass out two beans to each student.
2. Assistant walks around to each table with two cups and instructs the students to place the bean in the “yes” cup if they liked the recipe and in the “no” cup if they did not like the recipe.
  - a. Repeat for voting on the agua fresca.


## **CONCLUSION**

1. What do plants need to grow? Remember P-L-A-N-T.
2. What can we find in healthy garden soil?
3. Why is it important how deep you plant seeds?

## **CLASSROOM CONNECTIONS**

1. Design a garden! Draw it in your workbook and selectively place certain vegetables as far apart as they should go. Make sure that your picture has everything a PLANT would need.

<h2 style="text-align: center;">Lime Toasted Pepitas</h2>	
<p><b>Ingredients</b></p> <p>1 1/2 cups pepitas (raw hulled green pumpkin seeds)          1/8 teaspoon cayenne pepper          1/8 teaspoon freshly ground black pepper          1 teaspoon salt          3 tablespoons freshly squeezed lime juice</p> <p><b>Time:</b> 10 min  <b>Serving size:</b> ¼ cup  <b>Servings per recipe:</b> 6</p>	 <p><i>Per serving:</i>  <b>Carbohydrates:</b> 17 grams  <b>Fiber:</b> 3 grams  <b>Added Sugar:</b> 0 grams  <b>Protein:</b> 4 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Mix lime juice, pepper, cayenne and salt in a small bowl, and stir until dissolved.</li> <li>2. Heat a large skillet over medium heat.</li> <li>3. Add pepita seeds and toss frequently until seeds begin to turn light golden.</li> <li>4. Add seasoned lime juice all at once and stir well to coat all seeds.</li> <li>5. Remove from heat and cool in the pan. Serve at room temperature.</li> </ol>	

<h2 style="text-align: center;">Mint, Lime &amp; Club Soda Agua Fresca</h2>	
<p><b>Ingredients</b></p> <p>Club soda          Juice from 3 limes          Handful of mint leaves          Ice</p> <p><b>Time:</b> 10 minutes  <b>Serving size:</b> 1 cup (8 fluid ounces)  <b>Servings per recipe:</b> one pitcher</p>	 <p><i>Per serving:</i>  <b>Carbohydrates:</b> 0 grams  <b>Fiber:</b> 0 grams  <b>Added Sugar:</b> 0 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Crush or mull mint leaves.</li> <li>2. Combine club soda, lime juice, and crushed mint leaves with ice and mix.</li> </ol>	



## LESSON 4: SUGAR & SUGAR-SWEETENED BEVERAGES

**Recipes:** 1) Orange Basil Agua Fresca 2) Mint, Lime, & Club Soda Agua Fresca 3) Mint Cucumber Water 4) Cinnamon Spice Herbal Tea 5) Agua de Jamaica

### LEARNING OUTCOMES

1. Describe the difference between natural and added sugars
2. Explain why it is important to limit added sugar and how it affects the body
3. Identify beverages high in added sugar
4. Calculate the teaspoons of sugar in different foods and beverages
5. Recognize alternatives to sugar-sweetened beverages and how to make naturally sweetened drinks without sugar

### TEKS/CURRICULUM CONCEPTS

TEKS Concept	Subject	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
Apply mathematics to problems arising in everyday life, society, and the workplace.	Math	3.1A	4.1A	5.1A
Solve with fluency one- and two-step problems involving multiplication and division, including interpreting remainders.	Math		4.4H	
Explain how personal-health habits affect self and others.	Health	3.1A		
Identify types of nutrients.	Health	3.1C		
Identify information on menus and food labels (4.1B); examine and analyze food labels and menus for nutritional content (5.1A).	Health		4.1B	5.1A
Describe how health behaviors affect body systems.	Health		4.2A	
Identify changes that can occur in the physical properties of the ingredients of solutions such as dissolving salt in water or adding lemon juice to water.	Science			5.5D
Communicate valid conclusions supported by data in writing, by drawing pictures, and through verbal discussion.	Science	3.2F		
Draw inferences and evaluate accuracy of product claims found in advertisements and labels such as for toys and food.	Science	3.3B	4.3B	
Communicate valid, oral, and written results supported by data.	Science		4.2F	
C) Collect information by detailed observations and accurate measuring; (D) analyze and interpret information to construct reasonable explanations from direct (observable) and indirect (inferred) evidence; (F) communicate valid conclusions in both written and verbal forms; and (G) construct appropriate simple graphs, tables, maps, and charts using technology, including computers, to organize, examine, and evaluate information.	Science			5.2C 5.2D 5.2F 5.2G
(A) In all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student; (B) evaluate the accuracy of the information related to promotional materials for products and services such as nutritional labels.	Science			5.3A 5.3B

**PREPARATION**

<b>Prep Beforehand</b>	<input type="checkbox"/> Steep Cinnamon Tea (8 regular-sized bags) <input type="checkbox"/> Steep Jamaica leaves (1 cup dried leaves) <input type="checkbox"/> Clipboards with numbers			
<b>Other Items to Bring</b>				
<b>General</b>	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Lesson report form  <input type="checkbox"/> Pencils  <input type="checkbox"/> Trash bags  <input type="checkbox"/> Vinegar cleaning solution  <input type="checkbox"/> 2 tables for instruction  <input type="checkbox"/> 4 hand towels  <input type="checkbox"/> Compost and Recycling buckets               </td> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Texas Sprouts workbooks  <input type="checkbox"/> Dry erase markers/eraser  <input type="checkbox"/> Paper towel roll  <input type="checkbox"/> Tape  <input type="checkbox"/> First aid kit  <input type="checkbox"/> Hornet spray  <input type="checkbox"/> Conclusion image cutout               </td> </tr> </table>		<input type="checkbox"/> Lesson report form <input type="checkbox"/> Pencils <input type="checkbox"/> Trash bags <input type="checkbox"/> Vinegar cleaning solution <input type="checkbox"/> 2 tables for instruction <input type="checkbox"/> 4 hand towels <input type="checkbox"/> Compost and Recycling buckets	<input type="checkbox"/> Texas Sprouts workbooks <input type="checkbox"/> Dry erase markers/eraser <input type="checkbox"/> Paper towel roll <input type="checkbox"/> Tape <input type="checkbox"/> First aid kit <input type="checkbox"/> Hornet spray <input type="checkbox"/> Conclusion image cutout
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<b>Discussion 1</b>	<input type="checkbox"/> Piece of fruit and soda for demo <input type="checkbox"/> Pictures of foods with natural and added sugars			
<b>Activity 2</b>	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> 20-oz coca cola  <input type="checkbox"/> 7-Eleven Super Big Gulp  <input type="checkbox"/> Measuring spoons  <input type="checkbox"/> Nutrition labels               </td> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> 20-oz Gatorade  <input type="checkbox"/> Can of Arizona Lemon Iced Tea  <input type="checkbox"/> Colored paper plates               </td> </tr> </table>		<input type="checkbox"/> 20-oz coca cola <input type="checkbox"/> 7-Eleven Super Big Gulp <input type="checkbox"/> Measuring spoons <input type="checkbox"/> Nutrition labels	<input type="checkbox"/> 20-oz Gatorade <input type="checkbox"/> Can of Arizona Lemon Iced Tea <input type="checkbox"/> Colored paper plates
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<b>Agua Fresca</b>	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> 2 liters cold club soda  <input type="checkbox"/> 5 pitchers (3 with cold water)  <input type="checkbox"/> 3 sprigs mint  <input type="checkbox"/> Cinnamon tea bags  <input type="checkbox"/> 1 cucumber  <input type="checkbox"/> 4 oranges  <input type="checkbox"/> Jamaica tea steeped  <input type="checkbox"/> 1 piece of ginger  <input type="checkbox"/> 5 pitchers to mix drinks  <input type="checkbox"/> 5 large plastic spoons for stirring  <input type="checkbox"/> Voting beans &amp; jars               </td> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Cups  <input type="checkbox"/> Ice  <input type="checkbox"/> 3 limes  <input type="checkbox"/> 1 sprig Basil  <input type="checkbox"/> 1 Cinnamon stick  <input type="checkbox"/> 20 cutting boards  <input type="checkbox"/> 2 peelers  <input type="checkbox"/> 4 forks  <input type="checkbox"/> 30 knives  <input type="checkbox"/> Preparation directions               </td> </tr> </table>		<input type="checkbox"/> 2 liters cold club soda <input type="checkbox"/> 5 pitchers (3 with cold water) <input type="checkbox"/> 3 sprigs mint <input type="checkbox"/> Cinnamon tea bags <input type="checkbox"/> 1 cucumber <input type="checkbox"/> 4 oranges <input type="checkbox"/> Jamaica tea steeped <input type="checkbox"/> 1 piece of ginger <input type="checkbox"/> 5 pitchers to mix drinks <input type="checkbox"/> 5 large plastic spoons for stirring <input type="checkbox"/> Voting beans & jars	<input type="checkbox"/> Cups <input type="checkbox"/> Ice <input type="checkbox"/> 3 limes <input type="checkbox"/> 1 sprig Basil <input type="checkbox"/> 1 Cinnamon stick <input type="checkbox"/> 20 cutting boards <input type="checkbox"/> 2 peelers <input type="checkbox"/> 4 forks <input type="checkbox"/> 30 knives <input type="checkbox"/> Preparation directions
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<b>To Set Up/Prep in the Garden</b>	<input type="checkbox"/> Set up tables: number tables & set out recipe cards, utensils and cups for tasting for each student <input type="checkbox"/> Write objectives/recipe/agua fresca on the board			
<b>Workbook</b>	<input type="checkbox"/> How much sugar in drinks? <input type="checkbox"/> Taste test response sheet			

**INTRODUCTION:** Welcome students back and go over objectives for the lesson, refresher of rules for the class (if you feel necessary) and point out the recipe and aguas frescas for the day.

### DISCUSSION 1: SUGAR IN DRINKS

1. Hold up a piece of fruit in one hand and a soft drink in another. Tell students: Both of these have sugar in them, but one is a natural sugar and the other has added sugar. Tell the person next to you which one you think has the natural sugar.
2. Ask students to raise their hands to show which one they 'voted' had natural sugar.
3. Tell students: All fruit has natural sugar and that type of sugar is not bad for you. Other foods with natural sugar include milk, plain yogurt, raisins and frozen fruit. However, added sugar is not good for you. In a soda, for example, sugar is added to make it very sweet-this is called added sugar. Basically, if something doesn't have a nutrition facts label, it's a natural sugar.
4. Show students pictures of foods with natural and added sugar and have them raise their hands and say 'natural' or 'added' based on what they think.

### DISCUSSION 2: WHY ADDED SUGAR IS BAD FOR YOUR HEALTH

1. Ask students: Why do you think drinking soda is bad for you? What do you think it does to your body?
2. Write down answers on the board as students give them. Fill in with answers they do not give.
  - a. *Answers:*
    - i. *Gives "false" energy, which is very quick (sugar rush) and goes away quickly leaving you feeling tired*
    - ii. *Soda calories are "empty" which means they do not have any nutritional benefit yet it takes up space in your body making you feel as if you don't need to eat anything that would give you nutrition.*
    - iii. *Sugar and acidity in soda is very bad for your teeth (rot, cavities), skin (break out) and stomach (stomach ache)*
    - iv. *Difficult to learn and concentrate, can lead to bad behavior*
    - v. *Headaches*

*Drinking soda can actually make you feel thirstier. (Soda is a diuretic, meaning it dehydrates you and makes you urinate, causing you to get rid of MORE fluid than you put in. The more soda you drink the thirstier you feel.)*

### COOKING ACTIVITY

1. Review knife safety from Week 1 with students ([page 5 of educator curriculum](#)).
2. Ask students to open to [pages 19-21](#) of their workbooks and silently read over the recipes. Ask students which of these vegetables/fruit they have tried before and hold up each one as you go over them. Review knife safety. Release them to their cooking prep tables. Ask them to read the directions on the tables and sanitize their hands.

**STUDENT PREP**

<b>Table #</b>	<b>Item to Prep</b>	<b>Materials Needed</b>	<b>Directions on Table</b>
1	Agua de Jamaica	4 cutting boards 6 knives 1 pitcher 1 orange 1 sprig mint leaves Large plastic spoon	<ol style="list-style-type: none"> <li>1. Cut oranges in half, and juice into pitcher (with pre-prepared Jamaica tea).</li> <li>2. Crush mint leaves to release oil by pressing with fork, and add to pitcher.</li> <li>3. Stir mixture with spoon.</li> </ol>
2	Mint-Cucumber	4 cutting boards 6 knives 1 pitcher Large plastic spoon 1 cucumber 1 peeler 1 sprig mint leaves	<ol style="list-style-type: none"> <li>1. Peel cucumber. Cut in half.</li> <li>2. Cut cucumber into ½ inch thick slices and add to pitcher.</li> <li>3. Crush mint leaves to release oil by pressing with fork, and add to pitcher.</li> </ol>
3	Mint-Lime	4 cutting boards 6 knives 4 forks 1 pitcher 1 citrus Large plastic spoon 2 juicers 3 limes 1 sprig mint leaves 2 liters club soda	<ol style="list-style-type: none"> <li>1. Cut limes in half and juice into pitcher.</li> <li>2. Crush mint leaves to release oil by pressing with fork, and add to pitcher.</li> <li>3. Combine club soda, juice from limes and mint leaves.</li> <li>4. Stir mixture with spoon.</li> </ol>
4	Orange-Basil	4 cutting boards 6 knives 4 forks 1 pitcher 1 citrus juicer Large plastic spoon 1 sprig basil leaves 2 oranges	<ol style="list-style-type: none"> <li>1. Cut oranges in half and juice into pitcher.</li> <li>2. Crush basil leaves to release oil by pressing with fork and add to pitcher.</li> <li>3. Add water to pitcher.</li> <li>4. Stir mixture with spoon.</li> </ol>
5	Cinnamon Spice Tea	4 cutting boards 6 knives 1 pitcher Large plastic spoon 1 orange 1 cinnamon stick 1 piece of ginger, 3 inches long 1 peeler	<ol style="list-style-type: none"> <li>1. Cut oranges in half and juice into pitcher (with pre-prepared cinnamon tea).</li> <li>2. Peel ginger and cut into ½ inch pieces.</li> <li>3. Put ginger into pitcher.</li> <li>4. Stir mixture with a spoon.</li> </ol>

- After each group has made their drinks, they can go back and sit down to let them steep and be more flavorful. Tell students they will get to try their drinks after a couple more activities.

**ACTIVITY 1: HOW MUCH SUGAR IN SUGARY DRINKS?**

- Tell students: Now we are going to see just how much sugar is in our drinks.
- Tell students to open their workbooks to **page 16**. Ask them to look at the sample nutrition label and circle the serving size and where it says ‘sugars.’ Since it’s hard to tell how much a gram is, we are going to do some math to convert grams into teaspoons. Hold up a teaspoon and tell students that 4 grams equals 1 teaspoon of sugar. Ask them to write that into their workbooks.
- Do the example of a bag of M&M’s on the board together, showing them how to convert the total amount of grams to teaspoons of sugar. Have students do the calculations for the other beverages and write the answers in the workbook.
- To transition to making the aguas frescas, tell students that today we are going to make some beverages that have NO added sugar, are tasty, and quench your thirst. Emphasize to students that these aguas frescas may be different from ones they have before with a lot of added sugar.

**ACTIVITY 2: VISUAL OF HOW MUCH SUGAR IS IN SODA**

- Ask students to come up to the front, one at a time, to measure out the teaspoons of sugar in the Coca-Cola can onto a colored plate. Continue doing this for all the beverages in Activity 1. Students will take turns adding teaspoons and counting as a class until they reach the number they calculated.

Beverage	Grams of Sugar	Teaspoons of Sugar
Coca Cola (20 ounces)	64	16
Gatorade (20 ounces)	34	8.5
7-Eleven Super Big Gulp	128	32
Arizona Lemon Iced Tea (20 ounces)	35	8.75

- Finally, go back to sample nutrition label of M&Ms and point out that a soda can have MORE sugar than a bag of M&Ms.
- Ask students to notice how much sugar is in Gatorade and the bottle of iced tea. Point out that there is still a lot of sugar in those drinks and they are not much healthier than drinking soda.

### DISCUSSION 3: DAILY RECOMMENDATION OF SUGAR INTAKE

1. Tell students: You should try to eat less than 50 grams of added sugar per day. Put a star next to each of the drinks that has more than 50 grams of sugar. Have you ever thought of soda as liquid candy? Really, that’s all it is! It is hard to think of sodas as candy because we drink them, but they have just as much sugar, if not more.

### AGUAS FRESCAS TASTE TEST

1. Ask students to open their workbooks to the Beverage Taste Test on **page 17** and rate each of the Aguas Frescas. They will start with the one their group prepared and then rotate to the other tables.

### VOTING ON THE AGUAS FRESCAS

1. Pass out five beans to each student.
2. Assistant walks around to each table with two cups and instructs the students to place the bean in the “yes” cup if they liked the first agua fresca and in the “no” cup if they did not like the first agua fresca.
  - a. Repeat for voting on the remaining four aguas frescas.

### CONCLUSION

Based on learning outcomes, ask students to tell a partner what they learned in the lesson today. Then, ask the following questions as a whole group and elaborate/clarify as necessary.

1. What is difference between natural and added sugars?
2. How many grams of added sugar should you eat a day?
3. How does too much sugar affect your body?
4. What are some beverages that have a lot of added sugar?
5. What are some drinks you can have instead of soda?
6. What was your favorite agua fresca?
7. What does the picture on the right make you think of?\*



\*Enlarged image cutout on last page of lesson

### CLASSROOM CONNECTIONS

1. Free write: What is one thing you remembered about this lesson?  
OR
2. Write what you think of when you look at the above picture.

COOKING INSTRUCTIONS FOR EACH TABLE

<b>Table 1</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• 4 cutting boards</li> <li>• 4 knives</li> <li>• 1 pitcher</li> <li>• 1 orange</li> <li>• 1 sprig mint leaves</li> <li>• Large plastic spoon</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut oranges in half, and juice into pitcher (with pre-prepared Jamaica tea).</li> <li>2. Crush mint leaves to release oil by pressing with fork, and add to pitcher.</li> <li>3. Stir mixture with spoon.</li> </ol>



<b>Table 2</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• 4 cutting boards</li> <li>• 4 knives</li> <li>• 1 pitcher</li> <li>• Large plastic spoon</li> <li>• 1 cucumber</li> <li>• 1 peeler</li> <li>• 1 sprig mint leaves</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Peel cucumber. Cut in half.</li> <li>2. Cut cucumber into ½ inch thick slices and add to pitcher.</li> <li>3. Crush mint leaves to release oil by pressing with fork, and add to pitcher.</li> </ol>



**Table 3**

Supplies	Directions
<ul style="list-style-type: none"> <li>• 4 cutting boards</li> <li>• 4 knives</li> <li>• 4 forks</li> <li>• 1 pitcher</li> <li>• 1 citrus</li> <li>• Large plastic spoon</li> <li>• 2 juicers</li> <li>• 3 limes</li> <li>• 1 sprig mint leaves</li> <li>• 2 liters club soda</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut limes in half and juice into pitcher.</li> <li>2. Crush mint leaves to release oil by pressing with fork, and add to pitcher.</li> <li>3. Combine club soda, juice from limes and mint leaves.</li> <li>4. Stir mixture with spoon.</li> </ol>



**Table 4**

Supplies	Directions
<ul style="list-style-type: none"> <li>• 4 cutting boards</li> <li>• 4 knives</li> <li>• 4 forks</li> <li>• 1 pitcher</li> <li>• 1 citrus juicer</li> <li>• Large plastic spoon</li> <li>• 1 sprig basil leaves</li> <li>• 2 oranges</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut oranges in half and juice into pitcher.</li> <li>2. Crush basil leaves to release oil by pressing with fork and add to pitcher.</li> <li>3. Add water to pitcher. Stir mixture with spoon.</li> </ol>




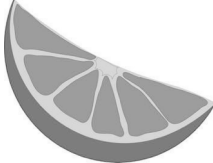




**Table 5**



Supplies	Directions
<ul style="list-style-type: none"> <li>• 4 cutting boards</li> <li>• 4 knives</li> <li>• 1 pitcher</li> <li>• Large plastic spoon</li> <li>• 1 orange</li> <li>• 1 cinnamon stick</li> <li>• 1 piece of ginger, 3 inches long</li> <li>• 1 peeler</li> </ul> <p style="text-align: center;"><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut oranges in half and juice into pitcher (with pre-prepared cinnamon tea).</li> <li>2. Peel ginger and cut into ½ inch pieces.</li> <li>3. Put ginger into pitcher.</li> <li>4. Stir mixture with a spoon.</li> </ol>







**RECIPES**

 <b>Orange-Basil Agua Fresca</b>	
<p><b>Ingredients</b>            1 quart filtered water            2 oranges            10 basil leaves (1 sprig)</p> <p><b>Time:</b> 10 minutes  <b>Serving size:</b> 1 cup (8 fluid ounces)  <b>Servings per recipe:</b> one pitcher</p>	<div style="text-align: center;">  </div> <p><i>Per serving:</i>  <b>Carbohydrates:</b> 0 grams  <b>Fiber:</b> 0 grams  <b>Added Sugar:</b> 0 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Cut oranges into slices.</li> <li>2. Crush basil leaves to release oil by pressing with fork.</li> <li>3. Put oranges and basil into pitcher of water, add ice, and serve.</li> </ol>	

 <h2 style="text-align: center;">Mint, Lime &amp; Club Soda Agua Fresca</h2>	
<p><b>Ingredients</b>                  2 liters club soda                  Juice from 3 limes                  Handful of fresh mint leaves                  Ice</p> <p><b>Time:</b> 10 minutes  <b>Serving size:</b> 1 cup (8 fluid ounces)  <b>Servings per recipe:</b> one pitcher</p>	 <p><i>Per serving:</i>  <b>Carbohydrates:</b> 0 grams  <b>Fiber:</b> 0 grams  <b>Added Sugar:</b> 0 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Crush or mull mint leaves.</li> <li>2. Combine club soda, lime juice, and crushed mint leaves with ice and mix.</li> </ol>	

 <h2 style="text-align: center;">Mint Cucumber Water</h2>	
<p><b>Ingredients</b>                  1 pitcher filtered water                  1 cucumber                  Handful of fresh mint leaves                  Ice</p> <p><b>Time:</b> 10 minutes  <b>Serving size:</b> 1 cup (8 fluid ounces)  <b>Servings per recipe:</b> one pitcher</p>	 <p><i>Per serving:</i>  <b>Carbohydrates:</b> 0 grams  <b>Fiber:</b> 0 grams  <b>Added Sugar:</b> 0 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Cut cucumbers into thin rounds.</li> <li>2. Crush mint leaves to release oil by pressing with fork.</li> <li>3. Put cucumbers and mint into pitcher of water, add ice, and serve.</li> </ol>	

 <h2 style="text-align: center;">Cinnamon Spice Herbal Tea</h2>	
<p><b>Ingredients</b></p> <p>1 cup water 1 teabag (cinnamon flavor) 1 cinnamon stick Ice</p> <p><b>Time:</b> 10 minutes <b>Serving size:</b> 1 cup (8 fluid ounces) <b>Servings per recipe:</b> 1</p>	 <p><i>Per serving:</i> <b>Carbohydrates:</b> 0 grams <b>Fiber:</b> 0 grams <b>Added Sugar:</b> 0 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Pour water into cup.</li> <li>2. Steep tea bag in water for 5-10 minutes.</li> <li>3. Pour mixture over ice, and add cinnamon stick.</li> </ol>	

 <h2 style="text-align: center;">Agua de Jamaica</h2>	
<p><b>Ingredients</b></p> <p>1/3 cup dried jamaica (hibiscus) flowers 1 cinnamon stick (optional) 5 cloves (optional) 5 sprigs fresh mint 8 cups water Fresh orange slices, if desired</p> <p><b>Time:</b> 10 minutes <b>Serving size:</b> ½ cup (4 fluid ounces) <b>Servings per recipe:</b> 16</p>	 <p><i>Per serving:</i> <b>Carbohydrates:</b> 0 grams <b>Fiber:</b> 0 grams <b>Added Sugar:</b> 0 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Rinse flowers in cold water in a colander.</li> <li>2. Bring the water to a boil in a medium pot.</li> <li>3. Add jamaica, cinnamon, and cloves.</li> <li>4. Allow to boil for 2-3 minutes, stirring continuously, and then remove from heat.</li> <li>5. Cover, and allow ingredients to steep for at least 30 min.</li> <li>6. Strain into a pitcher, pressing on solids to extract more liquids.</li> <li>7. Add additional cold water to taste, mint, and orange slices, if desired. The tea should be very mild and not bitter. Add water until the taste becomes smooth. Store in the refrigerator. Serve over ice.</li> </ol> <p><i>Note: Jamaica will stain so don't use a pitcher that retains color</i></p>	

**CONCLUSION IMAGE CUTOUT**



Image Credit: [diabetesforecast.org](http://diabetesforecast.org)

## LESSON 5: FIBER

### Whole Grain Taste Test

**Recipe:** Lemon-Lime Agua Fresca

#### LEARNING OUTCOMES

1. Explain the benefits of eating dietary fiber
2. Describe the different sources of dietary fiber
3. Find fiber on a nutrition label
4. Identify how much dietary fiber is needed each day
5. Describe ways to eat more fiber every day
6. Compare taste of various whole grains

#### TEKS/CURRICULUM CONCEPTS

TEKS Concept	Subject	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
Apply mathematics to problems arising in everyday life, society, and the workplace.	Math	3.1A	4.1A	5.1A
Determine liquid volume (capacity) or weight using appropriate units and tools.	Math	3.7E		
Identify types of nutrients.	Health	3.1C		
Identify information on menus and food labels (B); (A) examine and analyze food labels and menus for nutritional content.	Health		4.1B	5.1A
Identify the importance of taking personal responsibility for developing and maintaining a personal health plan such as fitness, nutrition, stress management, and personal safety.	Health		4.1F	
Describe how health behaviors affect body systems.	Health		4.2A	
Communicate valid conclusions supported by data in writing, by drawing pictures, and through verbal discussion.	Science	3.2F		
Communicate valid, oral, and written results supported by data.	Science		4.2F	
Draw inferences and evaluate accuracy of product claims found in advertisements and labels such as for toys and food.	Science	3.3B	4.3B	5.3B
Analyze and interpret information to construct reasonable explanations from direct (observable) and indirect (inferred) evidence.	Science			5.2D

**PREPARATION**

<p><b>Prep Beforehand</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Prepare Lemon-Lime Agua Fresca</li> <li><input type="checkbox"/> Precook and prepare ½ cup of each (per class) item for taste test: crunch corn bran cereal, Quaker Oats square cereal, quinoa (cooked in chicken broth, add salt to taste) and whole wheat pasta (with some olive oil and salt). 5 slices whole wheat bread, quartered.</li> </ul>	
<p><b>Other Items to Bring</b></p>		
<p><b>General</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Lesson report form</li> <li><input type="checkbox"/> Pencils</li> <li><input type="checkbox"/> Trash bags</li> <li><input type="checkbox"/> Vinegar cleaning solution</li> <li><input type="checkbox"/> 2 tables for instruction</li> <li><input type="checkbox"/> 4 hand towels</li> <li><input type="checkbox"/> Compost and Recycling buckets</li> <li><input type="checkbox"/> Texas Sprouts workbooks</li> <li><input type="checkbox"/> Dry erase markers/eraser</li> <li><input type="checkbox"/> Paper towel roll</li> <li><input type="checkbox"/> Tape</li> <li><input type="checkbox"/> First aid kit</li> <li><input type="checkbox"/> Hornet spray</li> </ul>	
<p><b>Discussion 1</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Piece of rope (for discussion 1)</li> </ul>	
<p><b>Activity 1</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> 2 oranges cut in half</li> <li><input type="checkbox"/> Cutting boards</li> <li><input type="checkbox"/> 1 empty glass</li> <li><input type="checkbox"/> Tupperware with colored water for sponge</li> <li><input type="checkbox"/> Juicer</li> <li><input type="checkbox"/> 1 glass half full of orange juice</li> <li><input type="checkbox"/> Large sponge</li> </ul>	
<p><b>Agua Fresca</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> 3 gallons cold water</li> <li><input type="checkbox"/> Pitcher</li> <li><input type="checkbox"/> Basil</li> <li><input type="checkbox"/> Cups</li> <li><input type="checkbox"/> Watermelon</li> </ul>	
<p><b>Activity 3 – Taste Test</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Recipe ingredients</li> <li><input type="checkbox"/> 5 student tables</li> <li><input type="checkbox"/> Table numbers</li> <li><input type="checkbox"/> Recipe cards</li> <li><input type="checkbox"/> Plates and utensils</li> <li><input type="checkbox"/> 5 small bowls with: whole wheat bread, crunch corn bran cereal, Quaker Oats square cereal, quinoa and whole wheat pasta</li> <li><input type="checkbox"/> Hose/bucket/sink for washing veggies</li> <li><input type="checkbox"/> Hand sanitizer</li> <li><input type="checkbox"/> Conclusion picture</li> <li><input type="checkbox"/> Voting beans &amp; jars</li> </ul>	
<p><b>To Set Up/Prep in the Garden</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Set up tables: recipe cards</li> <li><input type="checkbox"/> Set up orange fiber demo</li> <li><input type="checkbox"/> Write objectives &amp; agua fresca on the board</li> <li><input type="checkbox"/> Set up taste test for grains</li> </ul>	
<p><b>Workbook</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> What Is Fiber?</li> <li><input type="checkbox"/> Whole Orange Vs. Orange Juice</li> <li><input type="checkbox"/> Nutrition label</li> <li><input type="checkbox"/> Whole Grain Taste Test Chart</li> </ul>	

**INTRODUCTION:** Welcome students back and go over objectives for the lesson, refresher of rules for the class (if you feel necessary) and point out the agua fresca for the day.

**DISCUSSION 1: WHAT IS FIBER?**

1. Show students a piece of rope and ask what they think it is made by asking the following questions. Is there one solid piece or many small pieces? What are the small pieces called? Once you get them to answer fiber, tell them that we are going to talk about fiber today, but a different kind-fiber in food. We will talk about why it's important and where you can find it in foods.
2. Ask students to open their notebooks to **page 23**. We are going to do a demonstration to show how much fiber is in food.

**ACTIVITY 1: ORANGE JUICE DEMONSTRATION**

1. On a table where all students can see, ask students to discuss with their partner: How many oranges do you think we need to squeeze to get half of a glass of orange juice? Call on a few students to share their responses.
2. One by one, squeeze oranges in a juicer until it has reached the half glass mark. If there is time, ask student volunteers to come up and juice oranges.
3. Hold up an orange half and ask students what is left inside the peel?
  - a. *Answer: fiber*
4. Tell students: We just juiced two oranges and only got this much juice. If we juiced four oranges, we would get almost a full cup of juice. How many of you could drink this whole glass of juice if it were full? How many of you could actually eat four oranges in one sitting? It would be a lot tougher to eat the four oranges. So, let's think about what we get when we drink a cup of orange juice. Ask students to look at their workbooks (**page 23**). Review the nutrition label of orange juice: 21 grams (5 teaspoons) of sugar (Remind students at this time how many grams of sugar should be eaten per day maximum-50grams), 200% Vitamin C, and 0.5 grams of fiber. Now, let's look at eating the whole orange. Do you think you are going to get more or less sugar? What about fiber? With a whole orange, you get 12 grams of sugar and 3 grams of fiber and 116% of vitamin C.
5. Ask students to fill out the sugar content of an orange versus orange juice in their workbooks.
6. But, why is that important? Why is getting that fiber important? Tell students: Including the fiber of the pulp allows the fiber to act as a sort of sponge (show visual of pouring water into a sponge until some water is slowly dripping out into a container) for the sugar absorbing into your bloodstream. It helps slow down the rate the sugar is absorbed in your body so the affects of the sugar are not as extreme.

7. Ask students: Do you remember how having too much sugar can affect you? Call on a few students to share aloud.
  - a. *Answers:*
    - i. *Difficult to learn and concentrate, bad behavior*
    - ii. *Headaches & stomach aches*
    - iii. *Gives “false” energy, which is very quick (sugar rush) and goes away quickly leaving you feeling tired*
8. Give a definition of fiber. Ask students to fill in the blanks in their workbooks as you read aloud: Fiber is found in the plants we eat. It is the part of the plant that we cannot digest. It is important to have a high fiber diet to maintain good health. Fiber helps you feel full so you don’t have to eat as much and don’t gain too much weight. It lowers blood cholesterol and helps keep your digestive system healthy.

## **DISCUSSION 2: WHERE CAN YOU FIND FIBER?**

1. Ask students: Can you tell me what foods have a lot of fiber? We have already mentioned fruits. Can you think of some other foods that might help by acting as a sponge for when we eat sugar? Call on a few students to share. Fill in with foods they do not mention.
  - a. *Answers: 100% whole grain breads, pasta, cereals, tortillas; fruits and vegetables, especially in the peel\*, legumes and nuts (beans, peas, and almonds for example)*

\*Tell students how much fiber an apple has with a peel (4 grams) and without (2 grams)

## **ACTIVITY 2: LABELS - HOW MUCH FIBER DO YOU NEED?**

1. Ask students to turn to **page 24** in their workbooks and look at the nutrition label. Find and circle where it says, DIETARY FIBER.
2. Tell students: You should be eating at least 25-30 grams of fiber per day. High fiber foods have five or more grams per serving. Ask students: how many servings of these high-fiber foods would you need to eat per day to reach the recommended amount of fiber? (Answer: 5-6)

## **ACTIVITY 3: WHOLE GRAIN TASTE TEST ACTIVITY**

1. Tell students: Now we are going to taste some whole grain foods that contain a lot of fiber. Turn to the next page in your workbooks to review how each one tastes and how much fiber is in it.
2. Explain to students that they will start by tasting the item that is on their table first and recording their opinions in their workbooks. Then, assistants will rotate with different whole grain items. They will taste each one, look at the nutrition label to see how much fiber is in a serving and record it in their workbooks.
3. Wrap up this activity by calling on students to share which foods they had never tried before, their favorites, etc.
4. Tell students: Eating whole grains like whole grain pasta instead of regular pasta is a great way to get more fiber in your diet. Tell them the difference in the amount of fiber whole grain and regular pasta has per serving: 1 cup regular pasta = 2.5 grams of fiber; 1 cup whole-wheat pasta = 6.3 grams of fiber.



## AGUA FRESCA TASTING

Assistants should fill a small cup for each student and distribute.

## VOTING ON THE AGUA FRESCA

1. Pass out one bean to each student.
2. Assistant walks around to each table with two cups and instructs the students to place the bean in the “yes” cup if they liked the agua fresca and in the “no” cup if they did not like the agua fresca.

## CONCLUSION



Based on learning outcomes, ask students to tell a partner what they learned in the lesson today. Then, ask the following questions as a whole group and elaborate/clarify as necessary.

1. What are the benefits of eating fiber?
2. Where can we find fiber?
3. Where is fiber on a nutrition label?
4. How much dietary fiber is needed each day?
5. How can we eat more fiber every day?

## CLASSROOM CONNECTIONS

1. What whole grains do you like to eat?
2. Write down 3 dishes that you eat at home that you can change to eat with whole grains instead of refined.

## RECIPE

 <b>Lemon-Lime Agua Fresca</b>	
<p><b>Ingredients</b></p> <p>1 pitcher of filtered water 2 lemons 2 limes</p> <p><b>Time:</b> 10 minutes <b>Serving size:</b> 1 cup (8 fluid ounces) <b>Servings per recipe:</b> one pitcher</p>	 <p><i>Per serving:</i> <b>Carbohydrates:</b> 0 grams <b>Fiber:</b> 0 grams <b>Added Sugar:</b> 0 grams <b>Protein:</b> 0 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Cut lemons and limes into thin slices, and add to pitcher.</li> <li>2. Fill pitcher with water, and chill in refrigerator.</li> <li>3. To serve, pour water into glasses, leaving the lemons and limes in pitcher. Refill the pitcher and reuse the lemons and limes a few times. They will stay fresh for 2 days if kept cold.</li> </ol>	

## LESSON 6: REVIEW I

**Recipes:** Whole Grain Pasta with Veggies and Cinnamon Spice Herbal Tea

### LEARNING OUTCOMES

1. Define the meaning of “whole food”
2. Describe the difference between whole food and processed food
3. Discuss why whole food is healthier than processed food
4. Identify and incorporate real food into your meals
5. Identify the elements that are in healthy garden soil
6. Describe how soil is different from dirt
7. Explain the importance of depth and spacing in planting different seeds for successful germination and growing
8. Describe the difference between natural and added sugars
9. Explain why it is important to limit added sugar and how it affects the body
10. Identify common foods/beverages high in added sugar
11. Recognize alternatives to sugar-sweetened beverages
12. Explain the benefits of eating dietary fiber
13. Describe the different sources of dietary fiber
14. Identify how much dietary fiber is needed each day
15. Describe ways to eat more fiber every day

### TEKS/CURRICULUM CONCEPTS

TEKS Concept	Subject	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
Describe ways in which peers and families can work together to build a healthy community.	Health	3.8B		
Identify types of nutrients (3.1C); Identify foods that are sources of one or more of the six major nutrients (5.1C).	Health	3.1C		5.1C
Identify information on menus and food labels (4.1B); Apply information from the food guide pyramid to making healthy food choices (5.1B).	Health		4.1B	5.1B
Identify the benefits of six major nutrients contained in foods.	Health		4.1A	
Explain how personal-health habits affect self and others.	Health	3.1A		
Describe how health behaviors affect body systems.	Health		4.2A	
Identify the importance of taking personal responsibility for developing and maintaining a personal health plan such as fitness, nutrition, stress management, and personal safety.	Health		4.1F	
Examine properties of soils, including color and texture, capacity to retain water, and ability to support the growth of plants.	Science		4.7A	
Explore and recognize that a mixture is created when two materials are combined such as gravel and sand and metal and plastic paper clips.	Science	3.5D		
Communicate valid conclusions supported by data in writing, by drawing pictures, and through verbal discussion.	Science	3.2F		
Communicate valid, oral, and written results supported by data.	Science		4.2F	
Draw inferences and evaluate accuracy of product claims found in advertisements and labels such as for toys and food.	Science	3.3B	4.3B	5.3B
Demonstrate safe practices and use of safety equipment.	Science	3.1A	4.1A	5.1A
In all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student.	Science	3.3A	4.3A	5.3A

## PREPARATION

<b>Prep Beforehand</b>	<input type="checkbox"/> Steep Cinnamon Tea <input type="checkbox"/> Pre-cook pasta (1 cup per class) <input type="checkbox"/> Wash all fruits & vegetables <input type="checkbox"/> Clipboards with numbers
<b>Other Items to Bring</b>	
<b>General</b>	<input type="checkbox"/> Lesson report form <input type="checkbox"/> Texas Sprouts workbooks <input type="checkbox"/> Pencils <input type="checkbox"/> Dry erase markers/eraser <input type="checkbox"/> Trash bags <input type="checkbox"/> Paper towel roll <input type="checkbox"/> Vinegar cleaning solution <input type="checkbox"/> Tape <input type="checkbox"/> 2 tables for instruction <input type="checkbox"/> First aid kit <input type="checkbox"/> 4 hand towels <input type="checkbox"/> Hornet spray <input type="checkbox"/> Compost and Recycling buckets
<b>Activity 1</b>	<input type="checkbox"/> 6 sets of laminated ABCD color-coded cards and TRUE/FALSE cards <input type="checkbox"/> Posters with review questions
<b>Agua Fresca</b>	<input type="checkbox"/> 3 liters cold club soda <input type="checkbox"/> Cups <input type="checkbox"/> Pitcher <input type="checkbox"/> Ice <input type="checkbox"/> Steep cinnamon tea
<b>Cooking Activity</b>	<input type="checkbox"/> 5 student tables <input type="checkbox"/> Hand sanitizer <input type="checkbox"/> Cooking directions <input type="checkbox"/> Table numbers <input type="checkbox"/> Recipe cards <input type="checkbox"/> 18 cutting boards <input type="checkbox"/> Strainer <input type="checkbox"/> 24 knives <input type="checkbox"/> Plates and utensils <input type="checkbox"/> 1 large cooking/serving spoon <input type="checkbox"/> 5 medium bowls <input type="checkbox"/> 1 large bowl <input type="checkbox"/> Sautee Pan <input type="checkbox"/> Propane and stove <input type="checkbox"/> Lighter/matches <input type="checkbox"/> Measuring spoons and cups <input type="checkbox"/> Voting beans & jars <input type="checkbox"/> Sharp adult knife <input type="checkbox"/> Hose/bucket/sink for washing veggies  <u>Recipe ingredients:</u> <input type="checkbox"/> 2 tomatoes <input type="checkbox"/> 1 zucchini <input type="checkbox"/> 1 bell pepper <input type="checkbox"/> 1 eggplant <input type="checkbox"/> 1 stem fresh basil/oregano <input type="checkbox"/> Parmesan cheese <input type="checkbox"/> 1 Tbsp minced garlic
<b>To Set Up/Prep in the Garden</b>	<input type="checkbox"/> Set up tables: number tables & set out recipe cards, utensils and cups for tasting for each student <input type="checkbox"/> Write objectives/recipe/agua fresca on the board
<b>Workbook</b>	<input type="checkbox"/> Game Rules

**INTRODUCTION:** Welcome students back and go over objectives for the lesson, refresher of rules for the class (if you feel necessary) and point out the recipe and agua fresca for the day.

## COOKING ACTIVITY

1. Review knife safety from Week 1 with students (page 5 of educator curriculum).
2. Ask students to open to **page 30** of their workbooks and silently read over recipe. Ask students which of these vegetables they have tried before and hold up each one as you go over them. Release them to their cooking prep tables. Ask them to read the directions on the tables and hand sanitize. Explain that they will prep the ingredients to stir-fry and that one of the assistants will cook while they play the game.

## STUDENT PREP

Table #	Item to Prep	Materials Needed	Directions on Table
1	Tomatoes (2)	4 cutting boards 6 knives 1 medium bowl	1. Cut off ends of tomatoes. 2. Cut into small pieces.
2	Bell pepper	4 cutting boards 6 knives 1 medium bowl	1. Cut off stem. Remove seeds. 2. Cut in half, then strips. 3. Final pieces about ¼ inch long.
3	Zucchini	4 cutting boards 6 knives 1 medium bowl	1. Cut off ends of squash and put into compost bucket. 2. Cut squash in half. 3. Cut into small cubes.
4	Eggplant	4 cutting boards 6 knives 1 medium bowl	1. Cut of top of eggplant and put into compost bucket. 2. Cut eggplant in half. 3. Cut into small cubes.
5	Basil or oregano	2 cutting boards 1 medium bowl	1. Tear leaves off of the stems. 2. If leaf is really big, tear in half. 3. Discard stems into compost bucket.

**Cooking Assistant Directions:** While students complete the lesson, sauté garlic in 1 tablespoon olive oil over medium heat for 30 seconds until you can smell it. Add tomatoes and bring to simmer. Add in the rest of the vegetables. Let cook for five minutes, breaking up tomato chunks with a spoon, if necessary. Season with salt and pepper. Toss pasta, vegetables, and sauce together. Top with herbs and cheese.

## ACTIVITY 1: REVIEW GAME

1. Divide the class into five or six groups of four students each. Pass out the laminated ABCD color-coded cards and True/False cards to each group and a review sheet to each student. Move groups around so that they have some space in between each other and can discuss freely. Explain the rules to students and begin playing. Ask an assistant to keep score on the board, hold poster up and set timer for answering questions. Emphasize/clarify answers as needed.

Game Rules:

1. You will see 15 questions about the topics that we have covered the last few weeks in our lessons.
2. For each question, you will work together with your groups to choose the correct answer A, B, C or D to each question. You have 30 seconds to choose your answer.
3. When the buzzer goes off, hold up ONE card with the answer you chose.
4. If you hold up the correct card, your team will earn one point.
5. You cannot change your answer once you hold one card up.
6. The team with the highest number of points wins and gets released to eat first.
7. While we are playing, you may look through your workbooks at the information from lessons 1-5 to review the information.

**REVIEW GAME QUESTIONS/ANSWERS**

1. Which of the following is NOT a benefit of eating fiber?  
 A. Acts like a sponge for sugar      B. Helps you feel full      C. Helps build muscles  
 D. Helps digestion
2. What is the maximum amount of sugar we should eat in a day?  
 A. 200 grams      B. 150 grams      C. 100 grams      D. 50 grams
3. Which of the following has only NATURAL sugar?  
A. Apple      B. Apple pie      C. Sour apple candy      D. Fruit chews
4. Why is drinking soda bad for you?  
 A. It has too much fat      B. Makes your teeth stronger      C. Gives you false energy
5. How much fiber should we eat a day?  
 A. 5-10 grams      B. 10 -14 grams      C. 15-20 grams      D. 25-30 grams
6. Which of the following foods is high in fiber?  
A. 100% whole grain breads      B. All cereals      C. Soda      D. Apple sauce
7. TRUE/FALSE. Processed food is healthier than real food.
8. Which of the following does NOT describe a whole food?  
 A. Comes in a package      B. Better for your health      C. Has more nutrients per serving  
 D. Doesn't need ingredient list
9. Which is better for your health? A. Eating an orange. B. Drinking a glass of orange juice.
10. TRUE/FALSE. All the different components of soil are the same size.
11. TRUE/FALSE. As a general rule, the bigger a seed is, the deeper you should plant it.
12. Which one of the following didn't you try in the Whole Grain Taste Test?  
 A. Quinoa      B. Brown Rice      C. Wheat Thins Crackers      D. Bran Flakes Cereal

13. Which of the following are reasons why you would want to eat healthy?  
A. Improve physical fitness    B. Have more energy    C. Do better in school  
D. All of the above
14. Which option is listed from least to most processed?  
A. Apples, apple sauce, pre-sliced apples, apple juice    B. Applesauce, pre-sliced apples, apples, apple juice  
C. Apples, pre-sliced apples, applesauce, apple juice    D. Applesauce, apples, pre-sliced apples, apple juice
15. What is dietary fiber?  
A. Part of a cloth    B. Part of plants we can't digest    C. Something unhealthy

### **RECIPE AND AGUA FRESCA TASTING**

Table to taste recipe and agua fresca releases students. Assistants should serve a small sample per plate and help distribute to students.

### **VOTING ON THE RECIPE**

1. Pass out a bean to each student.
2. Assistant walks around to each table with two cups and instructs the students to place the bean in the "yes" cup if they liked the recipe and in the "no" cup if they did not like the recipe.

### **CONCLUSION**

Congratulate students on what they have learned so far in the Texas Sprouts lessons and give them a preview of the lessons to come: Fruit, vegetables, lifecycles of plants, eating healthy at school and food groups and portions.

### **CLASSROOM CONNECTIONS**

1. Set a timer for five minutes and have students write down as many words/phrases/numbers that describe what they have learned in the first few lessons with Texas Sprouts. Ask students to share what they have learned with a classmate and then as a whole class, time permitting.

**COOKING DIRECTIONS FOR EACH TABLE**

<b>Table 1</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• 2 tomatoes</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• 1 medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut off ends of tomatoes.</li> <li>2. Cut into small pieces.</li> </ol>



<b>Table 2</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• Bell pepper</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• 1 medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut off stem. Remove seeds.</li> <li>2. Cut in half, then strips.</li> <li>3. Final pieces about ¼ inch long.</li> </ol>



<b>Table 3</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• Zucchini</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• 1 medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut off ends of squash and put into compost bucket.</li> <li>2. Cut squash in half.</li> <li>3. Cut into small cubes.</li> </ol>



<b>Table 4</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• Eggplant</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• 1 medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut of top of eggplant and put into compost bucket.</li> <li>2. Cut eggplant in half.</li> <li>3. Cut into small cubes.</li> </ol>









**Table 5**

<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• Basil or oregano</li> <li>• 2 cutting boards</li> <li>• 1 medium bowl</li> </ul> <p style="text-align: center;"><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Tear leaves off of the stems.</li> <li>2. If leaf is really big, tear in half.</li> <li>3. Discard stems into compost bucket.</li> </ol>



RECIPES

 <h2 style="text-align: center;">Whole Grain Pasta With Veggies</h2>	
<p><b>Ingredients</b></p> <p>1 cup whole wheat pasta, uncooked          2 cups fresh tomatoes, chopped          1 clove garlic          1-2 tsp. olive oil          2 cups vegetables (ex: zucchini, eggplant, spinach, peppers)          ¼ cup Parmesan cheese          1 stem fresh basil or oregano, chopped          Salt and pepper, to taste</p>	 <p><i>Per serving:</i>  <b>Carbohydrates:</b> 26 grams  <b>Fiber:</b> 4 grams  <b>Added Sugar:</b> 0 grams  <b>Protein:</b> 8 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Cook pasta according to package directions.</li> <li>2. To make tomato sauce, sauté garlic in 1 tsp. olive oil over medium heat for about 30 seconds, until you can smell it. Add in tomatoes and bring to a simmer. Add in the rest of the vegetables. Let cook for about 5 minutes, breaking up tomato chunks with a spoon, if necessary. Season with salt and pepper.</li> <li>3. Toss pasta, vegetables, and sauce together.</li> <li>4. Top with herbs and cheese, if desired.</li> </ol>	

 <h2 style="text-align: center;">Cinnamon Spice Herbal Tea</h2>	
<p><b>Ingredients</b></p> <p>1 cup water          1 teabag, cinnamon flavor          1 cinnamon stick          Ice</p> <p><b>Time:</b> 10 minutes  <b>Serving size:</b> 1 cup (8 fluid ounces)  <b>Servings per recipe:</b> 1</p>	 <p><i>Per serving:</i>  <b>Carbohydrates:</b> 0 grams  <b>Fiber:</b> 0 grams  <b>Added Sugar:</b> 0 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Boil water, and pour boiling water into cup.</li> <li>2. Steep tea bag in water for 5-10 minutes.</li> <li>3. Pour mixture over ice, and add cinnamon stick.</li> </ol>	

## LESSON 7: FOOD GROUPS AND PORTIONS

**Recipe:** Mint, Lime, and Club Soda Agua Fresca

### Garden Taste Test

#### LEARNING OUTCOMES

1. Identify all of the food groups
2. Give examples of foods in each group
3. Describe how each food group is good for you
4. Explain what the Healthy Plate is and what healthy portion sizes look like for each food group
5. Describe how to make good choices about how much of each type of food should go on their plates

#### TEKS/CURRICULUM CONCEPTS

TEKS Concept	Subject	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
Apply mathematics to problems arising in everyday life, society, and the workplace.	Math	3.1A	4.1A	5.1A
Represent fractions greater than zero and less or equal to one with denominators of 2, 3, 4, 6, and 8 using concrete objects and pictorial models, including strip diagrams and number lines (3.3A); represent a fraction $a/b$ as a sum of fractions $1/b$ where $a$ and $b$ are whole numbers and $b > 0$ , including when $a > b$ (4.3A).	Math	3.3A	4.3A	
Identify types of nutrients (3.1C); identify foods that are sources of one or more of the six major nutrients (5.1C).	Health	3.1C		5.1C
The student explains ways to enhance and maintain health throughout the life span: (D) describe food combinations in a balanced diet such as food pyramid.	Health	3.1D		
Identify the benefits of six major nutrients contained in foods.	Health		4.1A	
Collect information by detailed observations and accurate measuring.	Science			5.2C

## PREPARATION

<b>Prep Beforehand</b>	<input type="checkbox"/> Mint, Lime, and Club Soda Agua Fresca <input type="checkbox"/> Clipboards with numbers
<b>To Set Up/Prep in the Garden</b>	<input type="checkbox"/> Set up tables: food models with foods from different food groups in bags <input type="checkbox"/> Food group bins in the front of the room or spread out in garden area <input type="checkbox"/> Write objectives /agua fresca on the board
<b>Other Items to Bring</b>	
<b>General</b>	<input type="checkbox"/> Lesson report form <input type="checkbox"/> Pencils <input type="checkbox"/> Trash bags <input type="checkbox"/> Vinegar cleaning solution <input type="checkbox"/> 2 tables for instruction <input type="checkbox"/> 4 hand towels <input type="checkbox"/> Compost and Recycling buckets <input type="checkbox"/> Texas Sprouts workbooks <input type="checkbox"/> Dry erase markers/eraser <input type="checkbox"/> Paper towel roll <input type="checkbox"/> Tape <input type="checkbox"/> First aid kit <input type="checkbox"/> Hornet spray
<b>Activity 1</b>	<input type="checkbox"/> Food models, separated into 5 bags <input type="checkbox"/> Food group bins (5 clear bins with labels) <input type="checkbox"/> 7 student tables
<b>Activity 4</b>	<input type="checkbox"/> Burger and fries paper ingredients <input type="checkbox"/> Tacos paper ingredients
<b>Garden Taste Test</b>	<input type="checkbox"/> 5 student tables <input type="checkbox"/> Knife <input type="checkbox"/> Plates and utensils <input type="checkbox"/> Voting beans & jars <input type="checkbox"/> Hand sanitizer <input type="checkbox"/> Cutting board <input type="checkbox"/> Garden shears <input type="checkbox"/> Hose/bucket/sink for washing veggies
<b>Agua Fresca</b>	<input type="checkbox"/> 3 liters soda water <input type="checkbox"/> handful fresh mint <input type="checkbox"/> Cups <input type="checkbox"/> 3 limes <input type="checkbox"/> Pitcher <input type="checkbox"/> Ice
<b>Workbook</b>	<input type="checkbox"/> Healthy Plate Illustration

**INTRODUCTION:** Welcome students back and go over objectives for the lesson, refresher of rules for the class (if you feel necessary) and point out the agua fresca for the day.

### DISCUSSION: FOOD GROUPS

1. Tell students: Today we are going to talk about food groups and portions. A good group is a collection of foods that share similar nutritional properties. Nutrition guides usually divide foods into food groups and recommend daily servings of each group for a healthy diet. These can help you understand how to eat healthier.

2. Ask students if they can name any of the food groups. As students name them (if they can), write them up on the board.
  - a. *Answers: Protein, Grains, Fruits and Vegetables, and Dairy*

### ACTIVITY 1: FOOD GROUP RACE

1. Divide students into five groups and make sure each group has a bag of food models.
2. Tell students: Today, we are going to talk about each of these food groups. We are going to start off by seeing how familiar you are with them and do a little race. You will find some food models on your table. Your goal as a class is to get the food models in the correct bin at the front of the room or in the garden area [Grains, Protein, Fruits, Vegetables and Dairy]. If you're not sure which one it goes into, talk to your table members and take a guess. Once you have put all of the food items on your table in a bin, go back to your table.
3. Look in each bin and go over what is in them. Verify the items that are correctly placed and elaborate on ones that are in the wrong bin and why. Make sure to discuss that beans can be vegetables AND protein.

### ACTIVITY 2: MOVEMENT GAME

1. Tell students: Eating food from each of these food groups is important to stay healthy. Now that we know what foods go into each group, let's talk specifically about how each one is good for us.
2. Explain and demonstrate each movement and ask four students to come up to the front of the room and do the movements associated with a food group. Repeat after each action is added with the class joining in.
  - Protein: makes you strong; muscle motion
  - Fruits/Veggies: help with digesting food and moving it through your belly; rub tummy
  - Grains: gives you energy; run in place
  - Dairy: gives you strong bones; jump up and down
3. To reinforce the function of each food group, do the movements randomly and have students shout out which food group it is associated with. Time permitting, do the opposite-shout out a word and ask students to do the motion. To make it more active/fun, say the words faster and faster for each round.

### ACTIVITY 2: HEALTHY PLATE

1. Tell students: So, we know that it's important to eat from all of the food groups. But, now we're going to talk about how much of each one you should be eating at every meal.
2. Ask students to fold their plates in half while demonstrating. Draw a plate on the board and fill in answers as you go.
3. Ask: Of the four food groups, which one do you think should take up one half of our plate? Call on one student to share and clarify as necessary.
  - a. *Answer: Fruits and Vegetables*

4. Ask students to fold their plates in half again so that their plate is folded into fourths.
5. Tell students: Each of the other food groups will go into one of the parts of the plate: protein and grains. This is called a Healthy Plate.

### ACTIVITY 3: DESIGN THE HEALTHY PLATE

1. Tell students: Turn to **page 33** in your workbook. By drawing pictures, create a meal with the correct placement of each food group. Give them a few minutes to do this and then ask them to share their designs with a partner.
2. Then, tell students: A food group that is commonly over-eaten is the grain group. Although whole grains are good for you because they provide fiber and carbohydrates, eating more than the recommended amount can be unhealthy and cause you to gain too much weight, especially the white grains. Some grains that we tend to eat too much of are spaghetti, rice, cereal, bread and tortillas.
3. Ask students: What about pizza? What food group is it part of? Based on student responses, clarify that pizza is a combination of a couple of food groups: grains, dairy, protein and sometimes veggies. Since pizza is mostly a grain and protein, you should really only be having one slice. To help get all of your food groups in, you could add a lot of veggies on top.

### ACTIVITY 4: COMBINATION FOODS AND THE HEALTHY PLATE

1. Tell students: Some other combination foods that we eat are burgers and fries and tacos. We are going to put the parts of a burger/fries and taco/chips on the board and see how they fit on the TX Sprouts plate. Mention that a burger is a combination food, but usually eaten with fries, so we are including them in this activity.
2. Call on student volunteers to come up and put each piece in the appropriate section. Do the same for the taco. Then, discuss by asking students what there is too much of and what is missing.
  - a. *Answer: Slightly too much meat, twice as many grains (include potatoes in grains), half as many fruits/veggies*
3. Brainstorm ideas of how to eat those foods (if you have to), but make changes so that it more closely resembles the TX Sprouts Plate.
  - a. *Answer: If at a fast food restaurant, opt for the smaller burger, omit the fries or chips, add more veggies to the burger or taco; if fruit or salad is an option, choose that instead*

### GARDEN TASTE TEST & AGUA FRESCA TASTING

1. Tell students they will have a garden taste today that will be a whole food. Depending on what there is an abundance of, choose something that students can have a taste of from the garden (supplement with grocery items as needed).
  - a. Each table group will pick ONE vegetable and take it to the assistant who will wash and cut up in smaller pieces for students to try.

### VOTING ON THE TASTE TEST & AGUA FRESCA

1. Pass out two beans to each student.

2. Assistant walks around to each table with two cups and instructs the students to place the bean in the “yes” cup if they liked the taste test and in the “no” cup if they did not like the taste test.
  - a. Repeat for voting on the agua fresca.

### CONCLUSION



Based on learning outcomes, ask students to tell a partner what they learned in the lesson today. Then, ask the following questions as a whole group and elaborate/clarify as necessary.

1. Name the five food groups.
2. Give examples of 2 foods in each group.
3. How is each food group good for you?
4. What is the Healthy Plate?
5. How can we make good choices about the amount of food for each part of the plate?

### CLASSROOM CONNECTIONS

1. Healthy Plate. Illustrate a healthy plate with some of your favorite foods.

### RECIPE

 <b>Mint, Lime &amp; Club Soda Agua Fresca</b>	
<p><b>Ingredients</b></p> <p>Club soda          Juice from 3 limes          Handful of mint leaves          Ice</p> <p><b>Time:</b> 10 minutes  <b>Serving size:</b> 1 cup (8 fluid ounces)  <b>Servings per recipe:</b> one pitcher</p>	 <p><i>Per serving:</i>  <b>Carbohydrates:</b> 0 grams  <b>Fiber:</b> 0 grams  <b>Added Sugar:</b> 0 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Crush or mull mint leaves.</li> <li>2. Combine club soda, lime juice, and crushed mint leaves with ice and mix.</li> </ol>	

## LESSON 8: ALL ABOUT VEGETABLES

**Recipes:** Vegetable Quesadilla With Salsa and Mint Cucumber Water

### LEARNING OUTCOMES

1. Describe the benefits of eating vegetables
2. Identify a variety of vegetables and understand the part of the plant that it comes from
3. Name and describe the specific role played by each part of a plant
4. Name vegetable daily recommendation

### TEKS/CURRICULUM CONCEPTS

TEKS Concept	Subject	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
Apply mathematics to problems arising in everyday life, society, and the workplace.	Math	3.1A	4.1A	5.1A
Geometry and measurement. Determine liquid volume (capacity) or weight using appropriate units and tools.	Math	3.7E		
Health behaviors. Identify types of nutrients (3.1C); identify foods that are sources of one or more of the six major nutrients (5.1C).	Health	3.1C		5.1C
Identify the importance of taking personal responsibility for developing and maintaining a personal health plan such as fitness, nutrition, stress management, and personal safety.	Health		4.1F	
Health information. Describe how health behaviors affect body systems.	Health		4.2A	
Scientific investigation and reasoning. Communicate valid conclusions supported by data in writing, by drawing pictures, and through verbal discussion (3.2F); Communicate valid, oral, and written results supported by data (4.2F); Communicate valid conclusions in both written and verbal forms (5.2F).	Science	3.2F	4.2F	5.2F
Scientific investigation and reasoning. The student uses scientific methods during laboratory and outdoor investigations. The student is expected to: (D) analyze and interpret information to construct reasonable explanations from direct (observable) and indirect (inferred) evidence.	Science			5.2D



**PREPARATION**

<p><b>Prep Beforehand</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Mint Cucumber Water</li> <li><input type="checkbox"/> Separate carrots, celery, spinach, broccoli, peas, and tomatoes from the picture cards to have ready during the first part of the lesson</li> <li><input type="checkbox"/> Cooking directions printed out &amp; cut</li> <li><input type="checkbox"/> Clipboards with numbers</li> </ul>		
<p><b>To Set Up/Prep in the Garden</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Set up tables: number tables &amp; set out recipe cards, utensils and cups for tasting for each student</li> <li><input type="checkbox"/> Cut out fruit and vegetable cards</li> <li><input type="checkbox"/> On each table: Cooking directions</li> <li><input type="checkbox"/> Write objectives/recipe/agua fresca on the board</li> </ul>		
<p><b>Other Items to Bring</b></p>			
<p><b>General</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Lesson report form</li> <li><input type="checkbox"/> Pencils</li> <li><input type="checkbox"/> Trash bags</li> <li><input type="checkbox"/> Vinegar cleaning solution</li> <li><input type="checkbox"/> 2 tables for instruction</li> <li><input type="checkbox"/> 4 hand towels</li> <li><input type="checkbox"/> Compost and Recycling buckets</li> <li><input type="checkbox"/> Texas Sprouts workbooks</li> <li><input type="checkbox"/> Dry erase markers/eraser</li> <li><input type="checkbox"/> Paper towel roll</li> <li><input type="checkbox"/> Tape</li> <li><input type="checkbox"/> First aid kit</li> <li><input type="checkbox"/> Hornet spray</li> </ul>		
<p><b>Activity 1</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Pictures of vegetables</li> <li><input type="checkbox"/> Poster of plant diagram</li> </ul>		
<p><b>Activity 2</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> 1-cup measuring cup</li> </ul>		
<p><b>Agua Fresca</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> 3 liters cold club soda</li> <li><input type="checkbox"/> Pitcher</li> <li><input type="checkbox"/> Cups</li> <li><input type="checkbox"/> Ice</li> <li><input type="checkbox"/> Cucumber</li> <li><input type="checkbox"/> Mint</li> </ul>		
<p><b>Cooking Activity</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> 5 student tables</li> <li><input type="checkbox"/> Cooking Directions</li> <li><input type="checkbox"/> Recipe cards</li> <li><input type="checkbox"/> 24 knives</li> <li><input type="checkbox"/> 5 medium bowls</li> <li><input type="checkbox"/> 1 large cooking/serving spoon</li> <li><input type="checkbox"/> Propane and stove</li> <li><input type="checkbox"/> Measuring spoons and cups</li> <li><input type="checkbox"/> Voting beans &amp; jars</li> <li><input type="checkbox"/> Hand sanitizer</li> <li><input type="checkbox"/> Table numbers</li> <li><input type="checkbox"/> 16 cutting boards</li> <li><input type="checkbox"/> Plates and utensils</li> <li><input type="checkbox"/> 1 large bowl</li> <li><input type="checkbox"/> Sautee pan</li> <li><input type="checkbox"/> Lighter/matches</li> <li><input type="checkbox"/> Sharp adult knife</li> <li><input type="checkbox"/> Hose/bucket/sink for washing veggies</li> </ul> <p><u>Recipe ingredients:</u></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 2 summer squash</li> <li><input type="checkbox"/> 1 bunch spinach</li> <li><input type="checkbox"/> 1 bunch green onion</li> <li><input type="checkbox"/> ¼ cup cheese</li> <li><input type="checkbox"/> 1 bunch cilantro</li> <li><input type="checkbox"/> 1 head broccoli</li> <li><input type="checkbox"/> 1 bell pepper</li> <li><input type="checkbox"/> 15 tortillas</li> <li><input type="checkbox"/> Jar of salsa</li> </ul>		
<p><b>Workbook</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Identify Parts of the Plant We Eat</li> <li><input type="checkbox"/> Plant Parts Diagram</li> </ul>		

**INTRODUCTION:** Welcome students back and go over objectives for the lesson, refresher of rules for the class (if you feel necessary) and point out the recipe and agua fresca for the day.

**COOKING ACTIVITY**

1. Review knife safety from Week 1 with students (page 5 of educator curriculum).
2. Ask students to open to page 40 of their workbooks and silently read over recipe. Ask students which of these vegetables they have tried before and hold up each one as you go over them. Release them to their cooking prep tables. Ask them to read the directions on the tables and hand sanitize.

**Cooking Directions:** Students prepare ingredients as described below. Salsa should be store-bought since we do not have time to make it. After students chop ingredients, the assistant will cook quesadillas on propane stove and cut into pieces to serve. Make sure to cook vegetables first to soften for a couple of minutes, drain, set aside and then assemble quesadillas. Cut into six pieces to portion out and serve with a spoon of salsa on the side.

**STUDENT PREP**

Table #	Item to Prep	Materials Needed	Directions on Table
1	Summer squash (2)	4 cutting boards 6 knives	1. Cut ends of summer squash, and put into compost bucket. 2. Cut zucchini in half. 3. Cut into small cubes.
2	Spinach	1 medium bowl 2 cutting boards	1. Tear into bite size pieces.
3	Bell pepper (1)	4 cutting boards 6 knives 1 medium bowl	1. Cut off stem 2. Remove seeds 3. Cut in half, then strips. Final pieces about ¼ inch long.
4	Broccoli	4 cutting boards 6 knives 1 medium bowl	1. Cut off stalk of broccoli. 2. Tear off each floret, and cut into bite-sized pieces.
5	Green onions	4 cutting boards 6 knives 1 medium bowl	1. Cut off root. 2. Cut in ½ inch pieces.

**Cooking Assistant Directions:** Heat olive oil in a pan and sauté veggies in this order: bell pepper, broccoli, squash, green onion and spinach. Sauté veggies until softened, but not mushy – this should take about five minutes total. Then, remove the veggies from the pan and set aside. Add a little more olive oil to the pan. Add one tortilla and cover with ¼ cup of cheese and half a cup of veggie mixture. Place tortilla on top and press down firmly with a spatula. After the cheese begins to melt, about one minute, flip to the other side until tortilla is slightly browned. Repeat with the remainder of tortillas, cheese and veggie mix.

## DISCUSSION: PARTS OF A VEGETABLE

1. Introduce the concept that plants are made up of different parts, just like people.
2. Tell students: To be a good gardener, you have to know how all of the parts of a plant work to help the plant grow to be healthy. This is similar to how a good doctor needs to understand all of the parts of the body. Can someone name one part of the plant?
3. Call on students to name the six main parts of the plant:
  - a. *Answers: roots, stem, leaves, flower, fruit, and seeds.*
  - b. See how many parts they can come up with on their own.
4. Tell students: Open your workbooks to the page with the plant parts diagram and label the parts of the plant (help them as needed).
5. Explain that all fruits and vegetables that we eat come from one of these six plant parts.

## ACTIVITY 1: PLANT PARTS MATCHING GAME

1. Hold up poster of plant diagram or stick it to the white board. Tape pictures of vegetables on the board and ask students to discuss with their group members which part of the plant it is. Ask for a volunteer from each group to come up and tape the vegetable where it belongs on the plant diagram. Ask students if they agree/disagree and clarify as needed and ask them to add them to fill in the gray boxes on the plant diagram chart.
  - a. Carrots: roots
  - b. Celery: stem
  - c. Spinach: leaves
  - d. Broccoli: flower
  - e. Tomato: fruit\*
  - f. Peas: seeds

*\*Scientifically, fruit means the part of the plant that creates the seeds. So, even though we call tomatoes a vegetable, technically they are a fruit. Other examples: cucumbers, green beans, peppers, pumpkins, etc.*

**COOKING CHECK-IN:** Check in with ‘chef’ to see how quesadillas are coming along.

## ACTIVITY 2: EATING A VARIETY OF COLORS

1. Ask students to open their workbooks to **page 38**, ‘Eating a Rainbow of Colors’.
2. Tell students: It is important to eat a variety of brightly colored vegetables. Vegetables lighter in color like potatoes and corn are still good for you, but they have fewer nutrients. Brightly-colored vegetables are better for you because they have more vitamins and minerals that help your body in various ways. For example, carrots have Vitamin A, which is good for your eyes. Brightly colored vegetables often have less calories and more dietary fiber.

- Tell students: Turn to your partner next to you and give them a high-five. High fives can help you remember how many fruits and vegetable servings you should be eating a day because you should be eating at least 5 servings of fruits and veggies every day. A serving is about 1 cup (hold up measuring cup for students to see). Ask them to turn write this information in their workbooks at the bottom of the 'Eating a Rainbow of Colors' page.

### RECIPE & AGUA FRESCA TASTING

Students are released by table to taste recipe and agua fresca. Assistants should serve a small sample on each plate and help distribute to students.

### VOTING ON THE RECIPE & AGUA FRESCA

- Pass out two beans to each student.
- Assistant walks around to each table with two cups and instructs the students to place the bean in the "yes" cup if they liked the recipe and in the "no" cup if they did not like the recipe.
  - Repeat for voting on the agua fresca.

### CONCLUSION

Based on learning outcomes, ask students to tell a partner what they learned in the lesson today. Then ask the following questions as a whole group and elaborate/clarify as necessary.

- What are the benefits of eating vegetables?
- What are the parts of the plant, and why is each part important?
- Name one vegetable from each part of the plant: roots, stem, leaves, flower, fruit and seed.
- How many servings of vegetables should we eat each day?

### CLASSROOM CONNECTIONS

- Draw a rainbow in your notebook and write in the names of at least one vegetable for each color.

### COOKING INSTRUCTIONS FOR EACH TABLE


Table 1	
Supplies	Directions
<ul style="list-style-type: none"> <li>2 summer squash</li> <li>4 cutting boards</li> <li>6 knives</li> <li>Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>Cut ends of squash and put into compost bucket.</li> <li>Cut squash in half.</li> <li>Cut into small cubes, as pictured. </li> </ol>




Table 2	
Supplies	Directions
<ul style="list-style-type: none"> <li>• Spinach</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Tear into bite-sized pieces, as pictured.</li> </ol> 




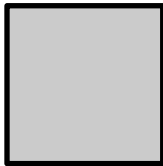

Table 3	
Supplies	Directions
<ul style="list-style-type: none"> <li>• 1 bell peppers</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>2. Cut off stem and cut in half.</li> <li>3. Remove seeds.</li> <li>4. Slice into strips and then into cubes, as pictured.</li> </ol> 





Table 4	
Supplies	Directions
<ul style="list-style-type: none"> <li>• 1 head broccoli</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut off stalk of broccoli.</li> <li>2. Cut off or tear off each floret.</li> <li>3. Cut each piece into bite-sized pieces, as pictured.</li> </ol> 


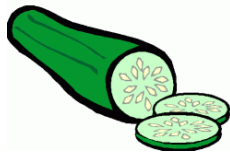


<b>Table 5</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• Green onions</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• Vegetable peeler</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut off root.</li> <li>2. Cut into small pieces, as pictured.</li> </ol> 



RECIPES

 <h2 style="margin: 0;">Vegetable Quesadilla with Salsa</h2>	
<p><b>Ingredients</b></p> <p>2 corn tortillas (6 inches)          ¼ cup cheese (cheddar or mozzarella)          1/2 cup vegetables (such as cauliflower, onion, broccoli, bell peppers, spinach, kale, squash)          ¼ teaspoon taco seasoning</p> <p><b>Time:</b> 10 minutes  <b>Serving size:</b> 1 quesadilla  <b>Servings per recipe:</b> 1</p>	 <p><i>Per serving:</i>  <b>Carbohydrates:</b> 37 grams  <b>Fiber:</b> 6 grams  <b>Added Sugar:</b> 0 grams  <b>Protein:</b> 12 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Heat olive oil in a pan and sauté veggies in this order: bell pepper, broccoli, squash, green onion and spinach. Sauté veggies until softened, but not mushy-this should take about five minutes total.</li> <li>2. Remove the veggies from the pan and set aside.</li> <li>3. Add a little more oil to the pan and one of the tortillas.</li> <li>4. On the tortilla still in the skillet, sprinkle half of the cheese to cover the entire tortilla.</li> <li>5. Add sautéed veggies.</li> <li>6. Top with the rest of the cheese and put the next tortilla on top.</li> <li>7. Cook for 2 minutes, then flip to cook until cheese is melted.</li> <li>8. Remove from skillet and let cool, then slice into triangles, top with salsa and enjoy!</li> </ol>	

 <h2 style="margin: 0;">Mint Cucumber Water</h2>	
<p><b>Ingredients</b></p> <p>1 pitcher filtered water          1 cucumber          Handful of mint leaves          Ice</p> <p><b>Time:</b> 10 minutes  <b>Serving size:</b> 1 cup (8 fluid ounces)  <b>Servings per recipe:</b> one pitcher</p>	 <p><i>Per serving:</i>  <b>Carbohydrates:</b> 0 grams  <b>Fiber:</b> 0 grams  <b>Added Sugar:</b> 0 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Cut cucumbers into thin rounds, and crush mint leaves to release oil by pressing with fork.</li> <li>2. Put cucumbers and mint into pitcher of water, add ice, and serve.</li> </ol>	

## LESSON 9: LIFECYCLE OF A PLANT

**Recipe:** Cinnamon Spice Herbal Tea

**Garden Taste Test**

### LEARNING OUTCOMES

1. Identify the various stages a plant undergoes
2. Describe the basic function of each part of a plant
3. Describe when, why and how to best plant wildflowers

### TEKS/CURRICULUM CONCEPTS

TEKS Concept	Subject	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
Demonstrate safe practices and the use of safety equipment as described in the Texas Safety Standards during classroom and outdoor investigations.	Science	3.1A	4.1A	5.1A
Investigate that most producers need sunlight, water, and carbon dioxide to make their own food, while consumers are dependent on other organisms for food.	Science		4.9A	5.9D
Investigate and compare how animals and plants undergo a series of orderly changes in their diverse life cycles such as tomato plants, frogs and ladybugs.	Science	3.10 C	4.10 C	
Scientific investigation and reasoning. Communicate valid conclusions supported by data in writing, by drawing pictures, and through verbal discussion (3.2F); Communicate valid, oral, and written results supported by data (4.2F); Communicate valid conclusions in both written and verbal forms (5.2F).	Science	3.2F	4.2F	5.2F
Scientific investigation and reasoning. The student uses scientific methods during laboratory and outdoor investigations. The student is expected to: (D) analyze and interpret information to construct reasonable explanations from direct (observable) and indirect (inferred) evidence.	Science			5.2D
Apply mathematics to problems arising in everyday life, society, and the workplace.	Math	3.1A	4.1A	5.1A
Geometry and measurement. Determine liquid volume (capacity) or weight using appropriate units and tools.	Math	3.7E		
Health behaviors. Identify types of nutrients (3.1C); identify foods that are sources of one or more of the six major nutrients (5.1C).	Health	3.1C		5.1C
Identify the importance of taking personal responsibility for developing and maintaining a personal health plan such as fitness, nutrition, stress management, and personal safety.	Health		4.1F	
Health information. Describe how health behaviors affect body systems.	Health		4.2A	



## PREPARATION

<b>Prep Beforehand</b>	<input type="checkbox"/> Cinnamon Spice Herbal Tea <input type="checkbox"/> Clipboards with numbers <input type="checkbox"/> Decide location for seed stomp & rope off <input type="checkbox"/> Scatter seeds in wildflower stomp area
<b>To Set Up/Prep in the Garden:</b>	<input type="checkbox"/> Wildflower stomp area <input type="checkbox"/> Set up stages of plant activity <input type="checkbox"/> Write objectives/recipe/agua fresca on the board
<b>Other Items to Bring</b>	
<b>General</b>	<input type="checkbox"/> Lesson report form <input type="checkbox"/> Texas Sprouts workbooks <input type="checkbox"/> Pencils <input type="checkbox"/> Dry erase markers/eraser <input type="checkbox"/> Trash bags <input type="checkbox"/> Paper towel roll <input type="checkbox"/> Vinegar cleaning solution <input type="checkbox"/> Tape <input type="checkbox"/> 2 tables for instruction <input type="checkbox"/> First aid kit <input type="checkbox"/> 4 hand towels <input type="checkbox"/> Hornet spray <input type="checkbox"/> Compost and Recycling buckets
<b>Activity 1</b>	<input type="checkbox"/> Envelopes with words/pictures of plant parts
<b>Activity 2</b>	<input type="checkbox"/> Picture of seed <input type="checkbox"/> Cards with plant stages
<b>Activity 3</b>	<input type="checkbox"/> Sign for Wildflower Stomp area <input type="checkbox"/> Seed packets
<b>Garden Taste Test</b>	<input type="checkbox"/> 5 student tables <input type="checkbox"/> Hand sanitizer <input type="checkbox"/> Knife <input type="checkbox"/> Cutting board <input type="checkbox"/> Plates and utensils <input type="checkbox"/> Garden shears <input type="checkbox"/> Voting beans & jars
<b>Agua Fresca</b>	<input type="checkbox"/> Steeped Cinnamon Spice Tea <input type="checkbox"/> Ice <input type="checkbox"/> Pitcher <input type="checkbox"/> Cups
<b>Workbook</b>	<input type="checkbox"/> Plant stages matching activity

**INTRODUCTION:** Welcome students back and go over objectives for the lesson, refresher of rules for the class (if you feel necessary) and point out the recipe and agua fresca for the day.

### DISCUSSION 1:

1. Tell students: Did you know that we could not live the way we do on this planet without plants? Can anyone name some very important things that plants do for us?
  - a. *Answers:*
    - i. *Provide food and medicine for us*

- ii. *Provide materials for shelter and clothing for us*
  - iii. *Provide oxygen in our air (explain the difference between O<sub>2</sub> and CO<sub>2</sub>-O<sub>2</sub> is what humans breathe in and CO<sub>2</sub> is what we breathe out, we need O<sub>2</sub> to live and plants need CO<sub>2</sub> to make food to survive)*
  - iv. *Remove carbon dioxide from our air*
2. Tell students: Remember, plants need certain things for their survival, just like we do. Write the acronym PLANT on the board and ask students if they remember what all of the letters stand for. As they say each word, write on the board.

## DISCUSSION 2: FUNCTIONS OF PLANT PARTS

1. Ask students: What are the different parts of our body used for? Can someone give me an example? Do the different parts of our body help us get the things we need?
  - a. *Answer: Yes!*
2. Tell students: Our arms, our legs, our mouths help us get air, food, water and build or find shelter. But names like arms, legs and mouth seem boring. Can we make up new names that are better at describing how our body parts help us?
  - Hands help us pick up food. What could we call them? (Food grabbers, nutrition takers)
  - Legs help us go and get food and water (People movers, people transporters)
  - Arms help us build shelter or open doors to get inside (People power tools)
  - Mouths open to take in air - Have you ever been out of breath and you opened your mouth wider to get more air? (Air suckers)
3. What about plants? They need a place to grow, light, air, nutrients, and water to survive. In the next activity, we're going to divide into groups and each group will be assigned a plant part. Your group will need to:
  - a. Look for some examples in the garden of your part.
  - b. Discuss what your group's plant part does to help the plant survive.
  - c. Come up with a cool new name that explains its function.

## ACTIVITY 1: WHAT PLANT PART AM I?

1. Ask students to open their notebooks to **page 37**. They will be taking notes on their plant part while they discuss and research. Divide the class into 5 even numbered groups and assign the following parts by giving each group a card with the name of one part. Tell students that they will be researching by going out in the garden to look for an example or two of these parts and filling in the guiding questions in their workbooks. After they have filled in their predictions about what the plant part does, the teacher and assistants will walk around to each group to check in with them and see how accurate their predictions were. They will give them another card with the definitions below to see how close they were to their hypothesis. At this point, students will plan and rehearse their short presentations to the group. Each student is responsible for presenting at least one part of the group presentation.
  - **Roots:** take in water and nutrients, help the plant stay upright and anchor it to the ground. (Adults help find a suitable example to pull or have one available already pulled)
  - **Stem:** supports the plant and is the transportation system for water and nutrients to the rest of the plant

- **Leaves:** breathe for the plant by taking in carbon dioxide, catch sunlight for photosynthesis, control amount of moisture in plant by opening and closing holes in leaves, shade roots
  - **Flower:** attracts pollinators, produces seeds
  - **Fruit:** the part of the plant that holds the seed; can be fleshy and juicy or hard
2. Bring class back together and have each group present on their plant part, show what they found, and what they named it to reflect the function. Ask the class to guess their plant part. As each group is presenting, ask students to fill in the chart in the workbook to describe what each plant part does.

### ACTIVITY 2: PLANT LIFE CYCLE

1. Tell students: All plants go through a life cycle that starts with a seed. Tape a picture of a seed on the board. Then call on students to add to the plant with the different plant stage pictures.
2. Ask a few students to share aloud.
  - a. *Answers: seedling, adult plant, fruiting plant (if a fruit), produce seed*
3. Show some samples taken from the garden of plants and different stages and ask students to tell you what stage they are in.

### ACTIVITY 3: WILDFLOWER STOMP

1. Ask students: Can anyone tell me what time of year bluebonnets usually grow?
2. Tell students: A bluebonnet is a wildflower. Wildflowers are good to plant because they are adapted for our region, very drought-tolerant and can make areas that are very plain look beautiful, like roadsides. They are also a great food source for local animals and insects.
3. Tell students: Even though bluebonnets and other wildflowers come up in the spring, the best time to plant them is in the Fall. Fall is best because the rain in the cooler months will begin the lifecycle and start the plants growth. A wildflower will bloom in the Spring and then finish its life cycle in the summer where it produces seeds that are then blown away by the wind, fall to the ground and get covered up by soil. The seeds hopefully get rain in the fall and the winter when they are covered by dirt and begin to grow. Ask the students: How might the seeds get covered with dirt? (Animals might walk on them squashing them into the ground more, kids might walk over them and rain might move dirt over them). Then as the temperatures begin to warm in spring they begin to grow faster and form flowers. Once they have flowered and it is the summer, the wind blows some wildflower seeds to that patch of soil over there. Now, we will pretend to be the animals in the wild that stomp on the ground to let those seeds get covered up by the soil. And then the cycle starts all over again.
  - a. Show students where the wildflower area is and tell them to spread out. Set a timer for 30 seconds and tell them to start stomping in the seeds.
  - b. Tell students: Remember to look out for the seedlings that will sprout here in the Spring!

### GARDEN TASTE TEST & AGUA FRESCA TASTING

1. Tell students they will have a garden taste today that will be a whole food. Depending on what there is an abundance of, choose something that students can have a taste of from the garden (supplement with grocery items as needed).

- a. Each table group will pick ONE vegetable and take it to the assistant who will wash and cut up in smaller pieces for students to try.

### VOTING ON THE TASTE TEST & AGUA FRESCA

1. Pass out two beans to each student.
2. Assistant walks around to each table with two cups and instructs the students to place the bean in the “yes” cup if they liked the taste test and in the “no” cup if they did not like the taste test.
  - a. Repeat for voting on the agua fresca.

### CONCLUSION



Based on learning outcomes, ask students to tell a partner what they learned in the lesson today. Then ask the following questions as a whole group and elaborate/clarify as necessary.

1. What are the different stages a plant undergoes?
2. What is the basic function of: Roots? Flowers? Stem? Leaves? Fruit?
3. When is it best to plant wildflowers?
4. Why is it good for the environment to plant wildflowers?

### CLASSROOM CONNECTIONS

1. Write down something you want to plant, where you will plant it, and the time of year. Draw what it will look like at each phase of the life cycle.

### RECIPE

 <span style="margin-left: 200px;"><b>Cinnamon Spice Herbal Tea</b></span>	
<p><b>Ingredients</b></p> <p>1 cup water 1 teabag, cinnamon flavor 1 cinnamon stick Ice</p> <p><b>Time:</b> 10 minutes <b>Serving size:</b> 1 cup (8 fluid ounces) <b>Servings per recipe:</b> 1</p>	 <p><i>Per serving:</i> <b>Carbohydrates:</b> 0 grams <b>Fiber:</b> 0 grams <b>Added Sugar:</b> 0 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Boil water.</li> <li>2. Pour hot water into cup.</li> <li>3. Steep tea bag in water for 5-10 minutes.</li> <li>4. Pour mixture over ice, and add cinnamon stick.</li> </ol>	

## LESSON 10: FRUIT

**Recipes:** Fruit Rainbows and Mint Cucumber Water

### LEARNING OUTCOMES

1. List the benefits of eating fruit
2. Explain that eating a variety of fruits is important to keep the whole body healthy
3. Identify the difference between real and fake fruit
4. Name daily fruit recommendations
5. Identify ways to eat more fruit every day

### TEKS/CURRICULUM CONCEPTS

TEKS Concept	Subject	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
Apply mathematics to problems arising in everyday life, society, and the workplace.	Math	3.1A	4.1A	5.1A
Determine liquid volume (capacity) or weight using appropriate units and tools.	Math	3.7E		
Identify types of nutrients.	Health	3.1C		
Identify the importance of taking personal responsibility for developing and maintaining a personal health plan such as fitness, nutrition, stress management, and personal safety.	Health		4.1F	
Describe how health behaviors affect body systems.	Health		4.2A	
Communicate valid conclusions supported by data in writing, by drawing pictures, and through verbal discussion.	Science	3.2F		
Communicate valid, oral, and written results supported by data.	Science		4.2F	
Scientific investigation and reasoning. (C) collect information by detailed observations and accurate measuring; (D) analyze and interpret information to construct reasonable explanations from direct (observable) and indirect (inferred) evidence; (F) communicate valid conclusions in both written and verbal forms; and (G) construct appropriate simple graphs, tables, maps, and charts using technology, including computers, to organize, examine, and evaluate information.	Science			5.2C 5.2D 5.2F 5.2G
Identify foods that increase or reduce bodily functions.	P.E.	3.4C		

**PREPARATION**

<b>Prep Beforehand</b>	<input type="checkbox"/> Mint Cucumber Water <input type="checkbox"/> Prepare mystery bags	<input type="checkbox"/> Clipboards with numbers <input type="checkbox"/> Wash all fruits & vegetables
<b>To Set Up/Prep in the Garden</b>	<input type="checkbox"/> Set up tables for fruit rainbow <input type="checkbox"/> Write objectives/recipe/agua fresca on the board	
<b>Other Items to Bring</b>		
<b>General</b>	<input type="checkbox"/> Lesson report form <input type="checkbox"/> Pencils <input type="checkbox"/> Trash bags <input type="checkbox"/> Vinegar cleaning solution <input type="checkbox"/> 2 tables for instruction <input type="checkbox"/> 4 hand towels <input type="checkbox"/> Compost and Recycling buckets	<input type="checkbox"/> Texas Sprouts workbooks <input type="checkbox"/> Dry erase markers/eraser <input type="checkbox"/> Paper towel roll <input type="checkbox"/> Tape <input type="checkbox"/> First aid kit <input type="checkbox"/> Hornet spray
<b>Discussion 1</b>	<input type="checkbox"/> 1-cup measuring cup	
<b>Activity 2</b>	<input type="checkbox"/> Mystery bag <input type="checkbox"/> Mystery bag fruits: <i>Mango, Kiwi, Grapefruit, Peach, Pomegranate</i> <input type="checkbox"/> Whistle or bell	<input type="checkbox"/> Filler materials (shredded paper)
<b>Activity 3</b>	<input type="checkbox"/> Box of juice	
<b>Activity 4</b>	<input type="checkbox"/> Paper bags for tables with juice boxes	
<b>Agua Fresca</b>	<input type="checkbox"/> 3 liters cold club soda <input type="checkbox"/> Pitcher <input type="checkbox"/> Cucumber	<input type="checkbox"/> Cups <input type="checkbox"/> Ice <input type="checkbox"/> Mint
<b>Cooking Activity</b>	<input type="checkbox"/> 5 student tables <input type="checkbox"/> Cooking directions <input type="checkbox"/> Recipe cards <input type="checkbox"/> 18 knives <input type="checkbox"/> Plates and utensils <input type="checkbox"/> 1 large bowl <input type="checkbox"/> Measuring spoons and cups <input type="checkbox"/> Hose/bucket/sink for washing fruit	<input type="checkbox"/> Hand sanitizer <input type="checkbox"/> Table numbers <input type="checkbox"/> 14 cutting boards <input type="checkbox"/> 5 medium bowls <input type="checkbox"/> 1 large cooking/serving spoon <input type="checkbox"/> Voting beans & jars <input type="checkbox"/> Sharp adult knife
	<u>Recipe ingredients:</u> <input type="checkbox"/> 1 bag red grapes <input type="checkbox"/> 1 carton strawberries <input type="checkbox"/> 1 honeydew or 2 kiwis <input type="checkbox"/> 1 cup yogurt	
	<input type="checkbox"/> 1 pint blueberries <input type="checkbox"/> 5 banana <input type="checkbox"/> 2 mandarin oranges	
<b>Workbook</b>	<input type="checkbox"/> Mystery bag record	

	☐ Fruit product nutrition labels
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**INTRODUCTION:** Welcome students back and go over objectives for the lesson, refresher of rules for the class (if you feel necessary) and point out the recipe and agua fresca for the day.

**DISCUSSION 1: EATING A RANBOW**

1. Tell students: It is important to eat a variety of different colored fruits. Fruits in general supply you with nutrients and vitamins to keep you healthy.
2. Tell students: Turn to your classmate next to you and give them a high five. This will help you remember how many servings of fruits and vegetables you should be eating a day.
3. Tell students: You should be eating a minimum of 5 servings of fruits and vegetables a day. A serving is about 1 cup. Hold up measuring cup for students to see. Confession time: Do you eat enough fruit a day? Raise your hand with the number of fruits you probably eat on an average day.
4. Tell students: Different colored fruits are good for you in different ways. For example, oranges, grapefruits and other citrus have Vitamin C which helps your body fight off sickness.

**ACTIVITY 1: FRUIT RAINBOW**

1. Ask students to open their workbooks to **page 48**. Working with a partner, ask them to write down as many fruits as they can think of in one minute. Set timer. Ask students how many of them got more than 5, 10, 15, etc.?
2. Ask students what fruit has that is good for you and write on the board as they answer.
  - a. *Answers: fiber, vitamins, nutrients, natural sugar, water*
5. Ask students if they can give an example of one fruit and the body part/system that benefits from it. The goal is not for them to really learn the exact benefits of each one, but emphasize that eating a variety of fruits is good to keep all of your body parts healthy. Tell students: Different colored fruits are good for you in different ways. For example, oranges, grapefruits and other citrus have Vitamin C which helps your body fight off sickness. They have the following image in their workbooks on **page 49**.

Image Credit:  
Skinnygeneproject.com



## ACTIVITY 2: MYSTERY BAG ACTIVITY

1. Divide students into five groups.
2. Ask students to open workbook to **page 50**.
3. Before class begins, bags with different fruits and some sort of filler material (packing peanuts, shredded paper, mulch, etc.) are set out in different areas of the garden and labeled 1-5.
4. Ask each group to go to one of the bags. Students take turns reaching in and guessing what it is without looking (student can smell and feel) and record their guesses in their workbooks. Because students will be tempted to look in the bags, emphasize to students that this is a competition and to not let their classmates cheat. If they cheat, they are disqualified.
5. Ring a bell or blow a whistle to indicate it's time to switch to the next bag. Ask them to move in one direction.
6. Go over answers with students and have them make corrections in their workbook as needed. Ask students while going over answers if any of these are their favorites or if there are any they have not tried before.

*Answers:      1. Mango      2. Kiwi      3. Grapefruit      4. Peach      5. Pomegranate*

## DISCUSSION 2: FAKE FRUIT VERSUS REAL FRUIT

1. Ask students in which part of the grocery store can you find fruit.
2. Hold up a box of juice and ask students if they find this in the same area as fruit? Is it as healthy as eating a piece of fruit?
3. Depending on their answers, explain that fruit juice and other products that say 'fruit' on them are not necessarily healthy. Most of the time, those products don't even contain any fruit at all and have a lot of added sugar to make them sweet. This is what we call fake fruit. Real fruit is found in the produce aisle and sometimes in processed foods.

## ACTIVITY 3: BE A FOOD DETECTIVE

1. Tell students: Now we are going to take a look at some foods and drinks that say they contain fruit and do an investigation to find out just how much actual fruit is in them.
2. Tell students to open up their workbooks to **page 51** that lists fruit products and their ingredients.
3. Tell students: Ingredients are always listed in order from largest to smallest in quantity. There is a law from the government that food companies have to do this. So, if sugar or high fructose corn syrup (which is a type of sugar) is one of the first few ingredients, that means that sugar is one of the main ingredients and if fruit is one of the last few ingredients, then there is actually very little fruit in the product.



4. Ask students: What do you remember about eating or drinking too much sugar? How does it affect your health and how does it make you feel? Remind students about the recommended 50 grams or less per day sugar intake.
5. Emphasize that the truth is always on the label. The rest of the packaging is about making a product sell, but may not be a true reflection of the product. For example, if a product shows a soccer player on the front of the box, does eating that product make you a better soccer player?

### COOKING ACTIVITY

1. Review knife safety from Week 1 with students ([page 5 of educator curriculum](#)).
2. Ask students to open to [page 53](#) of their workbooks and silently read over recipe. Ask students which of these fruits they have tried before and hold up each one as you go over them. Release them to their cooking prep tables. Ask them to read the directions on the tables and hand sanitize.

### STUDENT PREP

Table #	Item to Prep	Materials Needed	Directions on Table
1	Carton of strawberries	4 cutting boards 6 knives 1 medium bowl	1. Cut tops off of strawberries and put into compost bucket. 2. Cut strawberries in half lengthwise and put into bowl.
2	Bag of green grapes	2 cutting boards 1 medium bowl	1. Separate a small group of grapes from the bunch for each student. 2. Remove each grape from the vine and put into bowl.
3	Bag of red grapes	2 cutting boards 1 medium bowl	1. Separate a small group of grapes from the bunch for each student. 2. Remove each grape from the vine and put into bowl.
4	Bananas (5)	4 cutting boards 6 knives 1 medium bowl	1. Each student removes peel from one banana. Place peel into compost bin. 2. Cut bananas into ½ inch slices and put into bowl.
5	Mandarin oranges	2 cutting boards 6 knives 1 medium bowl	1. Each student removes peel from two mandarin oranges. Put the peels into the compost bin. 2. Tear orange into slices.

### RECIPE & AGUA FRESCA TASTING

Students are released by table to taste recipe and agua fresca. Each student takes a plate and rotates around to each table to get every color of fruit, beginning at their own table. Each student will create his/her own fruit rainbow. Assistants should pour a sample of the agua fresca for each student.

### VOTING ON THE RECIPE & AGUA FRESCA

1. Pass out two beans to each student.
2. Assistant walks around to each table with two cups and instructs the students to place the bean in the “yes” cup if they liked the recipe and in the “no” cup if they did not like the recipe.
  - a. Repeat for voting on the agua fresca.

## CONCLUSION

Based on learning outcomes, ask students to tell a partner what they learned in the lesson today. Then ask the following questions as a whole group and elaborate/clarify as necessary.


1. What are the benefits of eating fruit?
2. How are different fruits good for you?
3. What is the difference between real and fake fruit?
4. How much fruit should we have each day?
5. How can we eat more fruit every day?

## CLASSROOM CONNECTIONS

1. What is the difference between real fruit and fake fruit (i.e. taste, smell, feel, nutrition)? Write some of each that you have at home and that you see at school.

## COOKING INSTRUCTIONS FOR EACH TABLE

<b>Table 1</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• Carton of strawberries</li> <li>• 4 cutting boards</li> <li>• 4 knives</li> <li>• Medium bowl</li> </ul> <p style="text-align: center;"><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut tops off of strawberries and put into compost bucket.</li> <li>2. Cut strawberries in half lengthwise and put into bowl.</li> </ol>



<b>Table 2</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• Bag of green grapes</li> <li>• 2 cutting boards</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Separate a small group of grapes from the bunch for each student.</li> <li>2. Remove each grape from the vine and put into bowl.</li> </ol>



<b>Table 3</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• Bag of red grapes</li> <li>• 2 cutting boards</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Separate a small group of grapes from the bunch for each student.</li> <li>2. Remove each grape from the vine and put into bowl.</li> </ol>






Table 4	
Supplies	Directions
<ul style="list-style-type: none"> <li>• 5 bananas</li> <li>• 4 cutting boards</li> <li>• 4 knives</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Each student removes peel from one banana. Place peel into compost bin.</li> <li>2. Cut bananas into ½ inch slices and put into bowl.</li> </ol> 



Table 5	
Supplies	Directions
<ul style="list-style-type: none"> <li>• 10 mandarin oranges</li> <li>• 2 cutting boards</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Each student removes peel from two mandarin oranges.</li> <li>2. Put the peels into the compost bin.</li> <li>3. Tear into slices.</li> </ol>



<h2 style="text-align: center;">Fruit Rainbows</h2>	
<p><b>Ingredients</b></p> <p>½ cup purple fruit (red grapes)          ½ cup blue fruit (blueberries)          ½ cup green fruit (honeydew or kiwi)          ½ cup orange fruit (oranges or mangoes)          ½ cup yellow fruit (pineapple or banana)          ½ cup red fruit (watermelon or strawberries)          1 cup plain, no sugar added, yogurt</p> <p><b>Time:</b> 10 minutes  <b>Serving size:</b> 1 cup  <b>Servings per recipe:</b> 4</p>	 <p><b>Carbohydrates:</b> 21 grams  <b>Fiber:</b> 3 grams  <b>Added Sugar:</b> 0 grams  <b>Protein:</b> 4 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Wash all fruits.</li> <li>2. Cut the larger fruit into cubes.</li> <li>3. Place the fruit into rows, according to rainbow color order.</li> <li>4. Use the yogurt as clouds.</li> </ol>	

<h2 style="text-align: center;">Mint Cucumber Water</h2>	
<p><b>Ingredients</b></p> <p>1 pitcher filtered water          1 cucumber          Handful of mint leaves          Ice</p> <p><b>Time:</b> 10 minutes  <b>Serving size:</b> 1 cup (8 fluid ounces)  <b>Servings per recipe:</b> one pitcher</p>	 <p><i>Per serving:</i>  <b>Carbohydrates:</b> 0 grams  <b>Fiber:</b> 0 grams  <b>Added Sugar:</b> 0 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Cut cucumbers into thin rounds.</li> <li>2. Crush mint leaves to release oil by pressing with fork.</li> <li>3. Put cucumbers and mint into pitcher of water, steep for at least 30 min, add ice, and serve.</li> </ol>	

## **LESSON 11: EATING HEALTHY AT SCHOOL**

**Recipe:** Watermelon Basil Agua Fresca

### **Garden Taste Test**

#### **LEARNING OUTCOMES**

1. Identify the benefits of eating breakfast
2. Choose a healthy breakfast and lunch from school cafeteria menu
3. Recognize the benefits of eating a healthy lunch
4. Name several options for healthy lunch items brought from home

#### **TEKS/CURRICULUM CONCEPTS**

<b>TEKS Concept</b>	<b>Subject</b>	<b>3<sup>rd</sup></b>	<b>4<sup>th</sup></b>	<b>5<sup>th</sup></b>
Apply mathematics to problems arising in everyday life, society, and the workplace.	Math	3.1A	4.1A	5.1A
Determine liquid volume (capacity) or weight using appropriate units and tools.	Math	3.7E		
Identify the importance of taking personal responsibility for developing and maintaining a personal health plan such as fitness, nutrition, stress management, and personal safety.	Health		4.1F	
Describe how health behaviors affect body systems.	Health		4.2A	
Identify similarities in which healthy environments can be promoted in homes, schools, and communities.	Health		4.6A	
Describe the importance of being a positive role model for health.	Health		4.8B	

## PREPARATION

<b>Prep Beforehand</b>	<input type="checkbox"/> Watermelon Basil Agua Fresca <input type="checkbox"/> Wash all fruits & vegetables <input type="checkbox"/> Clipboards with numbers
<b>To Set Up/Prep in the Garden</b>	<input type="checkbox"/> <u>Set up tables</u> : School breakfast options (at least 3 healthy and 3 unhealthy) with laminated nutrition label for things that don't have a label (mini cereal boxes (lower and higher sugar content), milk cartons (white and chocolate), boxes of pancakes/French toast sticks, fresh fruit, etc.)* <i>Try to get samples from the school's cafeteria if possible</i> <input type="checkbox"/> Write objectives/ agua fresca on the board
<b>Other Items to Bring</b>	
<b>General</b>	<input type="checkbox"/> Lesson report form <input type="checkbox"/> Texas Sprouts workbooks <input type="checkbox"/> Pencils <input type="checkbox"/> Dry erase markers/eraser <input type="checkbox"/> Trash bags <input type="checkbox"/> Paper towel roll <input type="checkbox"/> Vinegar cleaning solution <input type="checkbox"/> Tape <input type="checkbox"/> 2 tables for instruction <input type="checkbox"/> First aid kit <input type="checkbox"/> 4 hand towels <input type="checkbox"/> Hornet spray <input type="checkbox"/> Compost and Recycling buckets
<b>Discussion 1</b>	<input type="checkbox"/> Pictures of breakfast foods in each food group
<b>Activity 1</b>	<input type="checkbox"/> Healthy and unhealthy breakfast items for each table
<b>Activity 2</b>	<input type="checkbox"/> Picture of TX Sprouts Plate (either draw on board or display image)
<b>Garden Taste Test</b>	<input type="checkbox"/> 5 student tables <input type="checkbox"/> Hand sanitizer <input type="checkbox"/> Knife <input type="checkbox"/> Cutting board <input type="checkbox"/> Plates and utensils <input type="checkbox"/> Garden shears <input type="checkbox"/> Hose/bucket/sink for washing veggies <input type="checkbox"/> Voting beans & jars
<b>Agua Fresca</b>	<input type="checkbox"/> Watermelon <input type="checkbox"/> Basil <input type="checkbox"/> Ice <input type="checkbox"/> Pitcher <input type="checkbox"/> Cups
<b>Workbook</b>	<input type="checkbox"/> School menu for the week/month

**INTRODUCTION:** Welcome students back and go over objectives for the lesson, refresher of rules for the class (if you feel necessary) and point out the agua fresca for the day.

### GARDEN GLANCE

1. Tell students to open to **page 54** of their workbooks, and then walk around to observe the garden for 5 minutes (set timer). Walk around with students, getting to know them, asking what they see, etc.
  - a. Have them record observations in their workbook while walking around.

2. Call students back to the group and call on a few students to share their observations aloud.

### **DISCUSSION 1: WHY DO WE EAT BREAKFAST? WHAT IS A HEALTHY BREAKFAST?**

1. Ask students: Why do we eat breakfast? Call on students to share aloud and fill in gaps as needed. Write these up on the board as students say them (ask assistant to help if possible).
  - a. *Answers:*
    - i. *Gives you more energy to be active*
    - ii. *Makes you less grumpy and tired in the morning*
    - iii. *Makes you healthier and helps you miss less days of school*
    - iv. *Helps you maintain your weight*
    - v. *Turns on metabolism first thing in the morning; \*define metabolism for students (how your body converts food into energy)*
    - vi. *Helps you avoid overeating or snacking on unhealthy foods later*
    - vii. *Allows you to concentrate and do better in school*
  
2. Tell students that a healthy breakfast needs to include the following elements (make sure to review what each element does) and ask for examples of each that they have seen at breakfast. Tape these up on the board as students or teacher says them. Also, ask them to write them into their workbooks in the chart on **page 55**.
  - a. Protein foods: which are needed to grow and maintain muscle in the body (*possible examples: sausage, bacon, eggs, milk, yogurt, beans*)
  - b. Low sugar, high-fiber carbohydrates: give the body energy (*possible examples: healthy cereal, bagel, oatmeal, whole grain pancakes or waffles*)
  - c. Fruits and vegetables: high in fiber and have a lot of vitamins and minerals (*possible examples: add fruit to oatmeal, yogurt, or cereal; or add veggies to eggs*)

### **ACTIVITY 1: CREATE YOUR OWN BREAKFAST**

1. Tell students that in this activity they will put together a healthy breakfast based on the criteria on the board. Share that the items on the table are some of the same items offered in their school cafeteria. Remind them to look closely at the nutrition labels to help them make their choices: look for grams of sugar, fiber and protein.
  
2. Students work in their table groups to put together a healthy breakfast.
  
3. When they are finished, each group (time permitting) will present their breakfast to the class.
  - a. Ask them to be sure to explain WHY they chose each item.
  
4. Give groups feedback about their choices and highlight the following (also in their workbooks):
  - a. White milk instead of chocolate milk
  - b. Low-sugar cereal over high-sugar cereal
  - c. Fresh fruit over fruit juice
  - d. Omitting or limiting the syrup/honey/jam



## DISCUSSION 2: WHY DO WE EAT LUNCH? WHAT IS A HEALTHY LUNCH?

1. Ask students: We talked about why it's important to eat breakfast. What about the importance of a healthy lunch? Are there different reasons why it's important to eat lunch? Call on students to share aloud and fill in gaps as needed.

*Answers:*

- *Gives you energy for playing sports and after school*
  - *Keeps your body healthy*
  - *Helps you concentrate and do better in school*
  - *Fills you up and prevents you from picking unhealthy snacks later*
  - *Helps you be more creative and alert*
2. Tell students: The reasons are really the same for a healthy breakfast and lunch; just the time of day is different.

## ACTIVITY 2: HEALTHY PLATE

1. Draw or post a picture of the Healthy Plate on the board and remind students about the different food groups and the importance of eating each food group at each meal (not just putting them on your plate).

## ACTIVITY 3: TODAY'S LUNCH

1. Tell students: Now that we have learned how to choose a healthy breakfast, let's use some of the same ideas and the Healthy Plate to choose some healthy options from the cafeteria. Remember to choose a variety of vegetable colors like we discussed a couple of weeks ago.
2. Ask students to open their workbooks to **page 56** with the sample school menu. Ask them to circle the items that would make a healthy breakfast and lunch. Note that the breakfast menu is the same for both days-they should choose two different meals combinations.
3. After they have chosen, give them a few minutes to share their choices with a partner at their table and compare.
4. Ask one or two students to share with the class what they chose and WHY. Ask other students to "judge" their classmate's choice with a thumbs up or down. If they give a thumbs down, ask them why they did not approve and to give a suggestion of how to improve their choice.

## ACTIVITY 4: LUNCH FROM HOME (if time allows)

1. Tell students: Some students bring their lunch from home. What are some things you bring or see your classmates bring from home that are healthy options?
2. Call on a couple of students to share aloud.

## GARDEN TASTE TEST & AGUA FRESCA TASTING

1. Tell students they will have a garden taste today that will be a whole food. Depending on what there is an abundance of, choose something that students can have a taste of from the garden (supplement with grocery items as needed).

- a. Each table group will pick ONE vegetable and take it to the assistant who will wash and cut up in smaller pieces for students to try.

### VOTING ON THE TASTE TEST & AGUA FRESCA

1. Pass out two beans to each student.
2. Assistant walks around to each table with two cups and instructs the students to place the bean in the “yes” cup if they liked the taste test and in the “no” cup if they did not like the taste test.
  - a. Repeat for voting on the agua fresca.

### CONCLUSION


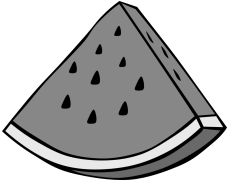
Based on learning outcomes, ask students to tell a partner what they learned in the lesson today. Then ask the following questions as a whole group and elaborate/clarify as necessary.

1. What are the benefits of eating breakfast?
2. What some healthy breakfast options that you can choose at school?
3. What some healthy lunch options that you can choose at school?
4. What are the benefits of eating a healthy lunch?
5. What can you bring from home that would be a healthy lunch?

### CLASSROOM CONNECTIONS

1. Imagine you are in charge of creating healthy meals for your school. Create one breakfast menu and one lunch menu that you think would be healthy and delicious.

### RECIPE

 <span style="margin-left: 100px;"><b>Watermelon Basil Water</b></span>	
<p><b>Ingredients</b></p> <p>1 pitcher filtered water 2 slices of watermelon Handful of basil leaves Ice</p> <p><b>Time:</b> 10 minutes <b>Serving size:</b> 1 cup (8 fluid ounces) <b>Servings per recipe:</b> one pitcher</p>	 <p><i>Per serving:</i> <b>Carbohydrates:</b> 0 grams <b>Fiber:</b> 0 grams <b>Added Sugar:</b> 0 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Cut watermelon slices into cubes and place in pitcher.</li> <li>2. Add basil leaves, water, and ice to pitcher, and serve.</li> </ol>	

## **LESSON 12: REVIEW 2**

**Recipes:** Ultimate Sandwich and Agua de Jamaica

### **LEARNING OUTCOMES**

1. Identify all of the food groups
2. Give examples of foods/beverages in each food group
3. Describe how each food group is good for you
4. Explain what the Healthy Plate is and what healthy portion sizes look like for each food group
5. Describe the benefits of eating vegetables
6. Identify a variety of vegetables and understand the part of the plant that it comes from
7. Describe the specific role played by each part of a plant
8. Name daily vegetable recommendations
9. Describe the basic function of each part of a plant
10. Describe how and when to plant wildflowers
11. Explain how different fruits are good for you
12. Identify the difference between real and fake fruit
13. Name daily fruit recommendations
14. Identify the benefits of eating breakfast
15. Choose a healthy breakfast and lunch from school cafeteria menu

**TEKS/CURRICULUM CONCEPTS**

<b>TEKS Concepts</b>	<b>Subject</b>	<b>3<sup>rd</sup></b>	<b>4<sup>th</sup></b>	<b>5<sup>th</sup></b>
Demonstrate safe practices and the use of safety equipment as described in the Texas Safety Standards during classroom and outdoor investigations.	Science	3.1A	4.1A	5.1A
Investigate that most producers need sunlight, water, and carbon dioxide to make their own food, while consumers are dependent on other organisms for food.	Science		4.9A	5.9D
Investigate and compare how animals and plants undergo a series of orderly changes in their diverse life cycles such as tomato plants, frogs and lady bugs.	Science	3.10C	4.10C	
Collect information by detailed observations and accurate measuring; (D) analyze and interpret information to construct reasonable explanations from direct (observable) and indirect (inferred) evidence; (F) communicate valid conclusions in both written and verbal forms; and (G) construct appropriate simple graphs, tables, maps, and charts using technology, including computers, to organize, examine, and evaluate information.	Science			5.2C 5.2D 5.2F 5.2G
Apply mathematics to problems arising in everyday life, society, and the workplace.	Math	3.1A	4.1A	5.1A
Determine liquid volume (capacity) or weight using appropriate units and tools.	Math	3.7E		
Represent fractions greater than zero and less or equal to one with denominators of 2, 3, 4, 6, and 8 using concrete objects and pictorial models, including strip diagrams and number lines (3.3A); represent a fraction $a/b$ as a sum of fractions $1/b$ where $a$ and $b$ are whole numbers and $b > 0$ , including when $a > b$ (4.3A).	Math	3.3A	4.3A	
Identify types of nutrients (3.1C); identify foods that are sources of one or more of the six major nutrients (5.1C).	Health	3.1C		5.1C
Identify the importance of taking personal responsibility for developing and maintaining a personal health plan such as fitness, nutrition, stress management, and personal safety.	Health		4.1F	
Describe how health behaviors affect body systems.	Health		4.2A	
The student explains ways to enhance and maintain health throughout the life span: (D) describe food combinations in a balanced diet such as food pyramid.	Health	3.1D		
Identify the benefits of six major nutrients contained in foods.	Health		4.1A	
Identify similarities in which healthy environments can be promoted in homes, schools, and communities.	Health		4.6A	
Describe the importance of being a positive role model for health.	Health		4.8B	
Identify foods that increase or reduce bodily functions.	P.E.	3.4C		

## PREPARATION

<b>Prep Beforehand</b>	<input type="checkbox"/> Agua de Jamaica <input type="checkbox"/> Wash all fruits & vegetables	
<b>To Set Up/Prep in the Garden</b>	<input type="checkbox"/> Set up tables: recipe cards <input type="checkbox"/> Write objectives/recipe/agua fresca on the board	
<b>Other Items to Bring</b>		
<b>General</b>	<input type="checkbox"/> Lesson report form <input type="checkbox"/> Pencils <input type="checkbox"/> Trash bags <input type="checkbox"/> Vinegar cleaning solution <input type="checkbox"/> 2 tables for instruction <input type="checkbox"/> 4 hand towels <input type="checkbox"/> Compost and Recycling buckets <input type="checkbox"/> Texas Sprouts workbooks <input type="checkbox"/> Dry erase markers/eraser <input type="checkbox"/> Paper towel roll <input type="checkbox"/> Tape <input type="checkbox"/> First aid kit <input type="checkbox"/> Hornet spray	
<b>Activity 1</b>	<input type="checkbox"/> Timer (or can use phone) <input type="checkbox"/> 6 sets colored, laminated answer cards with A,B,C,D and True/False <input type="checkbox"/> Poster with review questions	
<b>Agua Fresca</b>	<input type="checkbox"/> Steeped Jamaica <input type="checkbox"/> Pitcher <input type="checkbox"/> Cinnamon stick <input type="checkbox"/> Fresh mint <input type="checkbox"/> Cups <input type="checkbox"/> Ice <input type="checkbox"/> Cloves <input type="checkbox"/> Fresh orange slices	
<b>Cooking Activity</b>	<input type="checkbox"/> 5 student tables <input type="checkbox"/> Cooking Directions <input type="checkbox"/> Recipe cards <input type="checkbox"/> Vegetable peeler <input type="checkbox"/> Plates and utensils <input type="checkbox"/> 1 large bowl <input type="checkbox"/> Measuring spoons and cups <input type="checkbox"/> Sharp knife <input type="checkbox"/> Hand sanitizer <input type="checkbox"/> Table numbers <input type="checkbox"/> 18 cutting boards <input type="checkbox"/> 25 knives <input type="checkbox"/> 5 medium bowls <input type="checkbox"/> 1 large cooking/serving spoon <input type="checkbox"/> Voting beans & jars <input type="checkbox"/> Hose/bucket/sink for washing fruit	
	<u>Recipe ingredients:</u> <input type="checkbox"/> 1 loaf high fiber bread <input type="checkbox"/> 1 package sliced Monterrey Jack <input type="checkbox"/> 2 tomatoes <input type="checkbox"/> 1 bunch green onion <input type="checkbox"/> 1 container mustard <input type="checkbox"/> 1 package sliced deli turkey <input type="checkbox"/> 1 romaine lettuce <input type="checkbox"/> 2 cucumbers <input type="checkbox"/> 2 bell peppers	
<b>Workbook</b>	<input type="checkbox"/> Game Rules	

**INTRODUCTION:** Welcome students back and go over objectives for the lesson, refresher of rules for the class (if you feel necessary) and point out the recipe and agua fresca for the day.

### ACTIVITY 1: REVIEW GAME

1. Divide the class into five or six groups of four students each. Pass out the laminated ABCD and True/False color-coded cards to each group. Move groups around so that they have some space in between each other and can discuss freely. Explain the rules to students and begin playing. Ask an assistant to keep score on the board, hold poster up and set timer for answering questions. Emphasize/clarify answers as needed.

#### Game Rules:

1. You will see 15 questions about the topics that we have covered the last few weeks in our lessons.
2. You will work together with your groups to choose the correct answer A, B, C or D or True/False to each question.
3. You have 30 seconds to choose your answer.
4. When the buzzer goes off, hold up ONE card with the answer you chose.
5. If you hold up the correct card, your team will earn one point.
6. You cannot change your answer once you hold one card up.
7. The team with the highest number of points wins and gets released to eat first.
8. While we are playing, you may look through your workbooks at the information from lessons 7-11 to review the facts.

### REVIEW GAME QUESTIONS/ANSWERS (correct answers underlined)

1. Which of the following is NOT one of the four food groups?  
A. Protein    B. Vegetables    C. Sweets    D. Grains
2. How many servings of fruits and vegetables should you eat a day?  
A. 2    B. 3    C. 4    D. 5 or more
3. In what season should wildflower seeds be planted?  
A. Fall    B. Spring    C. Summer    D. Winter
4. How much is one serving of fruits and vegetables?  
A. ½ cup    B. 1-cup    C. 1 ½ cups    D. 2 cups
5. Which part of the plant transports or moves the water and nutrients from the roots to the leaves?  
A. Seed    B. Fruit    C. Flower    D. Stem
6. Which of the following is NOT true about eating vegetables?  
A. Helps you feel full    B. Good source of healthy fat    C. Has vitamins and minerals    D. Contains fiber
7. TRUE/FALSE. Breakfast should include some protein.
8. What part of the carrot plant do you eat?  
A. Stem    B. Root    C. Flower    D. Seed

9. What part of the celery plant do you eat?  
A. Stem      B. Root      C. Flower      D. Seed
10. Which of the following is an example of something from the protein food group?  
A. Rice      B. Beans      C. Onions      D. Pineapples
11. TRUE/FALSE. Half of your Healthy plate should have fruits and vegetables.
12. Which is an example of a 'fake fruit'?  
A. Applesauce      B. Banana      C. Strawberry Nutrigrain Bar      D. Orange
13. All of the following are reasons why eating breakfast is important EXCEPT:  
A. Makes you less grumpy in the morning      B. Can skip lunch  
C. Energy to start the day      D. Concentrate and do better in school
14. Choose the healthiest breakfast option of the following:  
A. Low-sugar cereal, chocolate milk, piece of fruit  
B. Low-sugar cereal, white milk, fruit juice  
C. Low-sugar cereal, white milk, piece of fruit  
D. High-sugar cereal, white milk, piece of fruit
15. TRUE/FALSE. ALL fruits have the same vitamins and minerals.

### COOKING ACTIVITY

1. Review knife safety from Week 1 with students (page 5 of educator curriculum).
2. Ask students to open to page 62 of their workbooks and silently read over the recipe. Ask students which of these vegetables they have tried before and hold up each one as you go over them. Release them to their cooking prep tables. Ask them to read the directions on the tables and hand sanitize.

## STUDENT PREP

Table #	Item to Prep	Materials Needed	Directions on Table
1	Tomatoes (2)	4 cutting boards 6 knives 1 medium bowl	1. Cut off ends of tomatoes. 2. Cut into slices.
2	Bell peppers (2)	4 cutting boards 6 knives 1 medium bowl	1. Cut off stem 2. Remove seeds 3. Cut in half, then strips. Final pieces about ¼ inch long.
3	Green Onions	4 cutting boards 6 knives 1 medium bowl	1. Cut off root. 2. Cut in ½ inch pieces.
4	Cucumbers (2)	4 cutting boards 6 knives 1 vegetable peeler 1 medium bowl	1. Peel cucumber. 2. Cut into four even pieces. 3. Then, cut each piece in half and into small cubes.
5	Head of Romaine lettuce	2 cutting boards 1 medium bowl	1. Tear leaves off of the stem. If leaf is really big, tear in half. 2. Discard stems into compost bucket.

**Cooking Assistant Directions:** While students are doing their chopping, prepare 7-8 sandwiches with bread, hummus, turkey, and cheese. As students finish chopping, collect their veggies and add to sandwiches. Cut sandwiches into quarters, and serve.

### RECIPE AND AGUA FRESCA TASTING

Assistants should serve a small sample on each plate, pour a serving of the agua fresca in each cup, and help distribute to students.

### VOTING ON THE RECIPE & AGUA FRESCA

1. Pass out two beans to each student.
2. Assistant walks around to each table with two cups and instructs the students to place the bean in the “yes” cup if they liked the recipe and in the “no” cup if they did not like the recipe.
  - a. Repeat for voting on the agua fresca.

### CONCLUSION

Congratulate students on what they have learned so far in the Texas Sprouts lessons and give them a preview of the lessons to come in the next few weeks. These topics include: water, composting, eating healthy on the go, family eating, seasons and spring planting.

### CLASSROOM CONNECTIONS

1. Think about someone you know that may not have a very healthy diet. Write a letter to that person trying to convince them to eat healthier. To make your argument strong, use at least 8 facts that you have learned so far in the Texas Sprouts lessons.



COOKING INSTRUCTIONS FOR EACH TABLE



Table 1	
Supplies	Directions
<ul style="list-style-type: none"> <li>• 2 tomatoes</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• 1 medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut off ends of tomatoes.</li> <li>2. Cut into slices.</li> </ol> 




Table 2	
Supplies	Directions
<ul style="list-style-type: none"> <li>• 2 bell peppers</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut off stem and cut in half.</li> <li>2. Remove seeds.</li> <li>3. Slice into strips.</li> </ol>



<b>Table 3</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• Green onions</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• Vegetable peeler</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut off root.</li> <li>2. Cut into small pieces, as pictured.</li> </ol> 



<b>Table 4</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• 2 cucumbers</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Peel cucumber.</li> <li>2. Cut into slices.</li> </ol> 







**Table 5**

<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• Romaine lettuce</li> <li>• 2 cutting boards</li> <li>• Medium bowl</li> </ul> <p style="text-align: center;"><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Tear leaves off of the stem.</li> <li>2. Tear leaf in half.</li> <li>3. Discard stem into compost bucket.</li> </ol>



RECIPES

 <h2 style="margin: 0;">Ultimate Sandwich</h2>	
<p><b>Ingredients</b></p> <p>2 slices high fiber bread                  2 slices turkey breast or other deli meat                  1 slice cheese, such as pepper jack or provolone                  1 leaf romaine lettuce                  ¼ cup sliced tomatoes, peppers, cucumbers, onion, avocado                  Mustard</p> <p><b>Time:</b> 10 minutes  <b>Serving size:</b> 1 sandwich  <b>Servings per recipe:</b> 1</p>	 <p><i>Per Serving:</i>  <b>Carbohydrates:</b> 36 grams  <b>Fiber:</b> 11 grams  <b>Added Sugar:</b> 0 grams  <b>Protein:</b> 27 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>Place the turkey and cheese on the bread. Heat to melt the cheese, if desired.</li> <li>Layer on the avocado, lettuce, other vegetables, and mustard.</li> </ol>	

 <h2 style="margin: 0;">Agua de Jamaica</h2>	
<p><b>Ingredients</b></p> <p>1/3 cup dried Jamaica (hibiscus) flowers                  1 cinnamon stick (optional)                  5 cloves (optional)                  5 sprigs fresh mint                  8 cups water                  Fresh orange slices, if desired</p> <p><b>Time:</b> 10 minutes  <b>Serving size:</b> ½ cup (4 fluid ounces)  <b>Servings per recipe:</b> 16</p>	 <p><i>Per serving:</i>  <b>Carbohydrates:</b> 0 grams  <b>Fiber:</b> 0 grams  <b>Added Sugar:</b> 0 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>Rinse flowers in cold water in a colander.</li> <li>Bring the water to a boil in a medium pot, and add Jamaica, cinnamon, and cloves.</li> <li>Allow to boil for 2-3 minutes, and remove from heat.</li> <li>Cover and allow ingredients to steep for at least 30 min.</li> <li>Strain into a pitcher, pressing on solids to extract more liquids.</li> <li>Add cold water to taste, mint, and orange slices (if desired). Tea should be mild and not bitter. Add water until the taste becomes smooth. Store in the refrigerator. Serve over ice. <i>Note: Jamaica will stain so don't use a pitcher that retains color.</i></li> </ol>	

## LESSON 13: WATER

**Recipes:** Juicy Jicama Salad and Strawberry-Mint Agua Fresca

### LEARNING OUTCOMES

1. Understand where water is located on the earth
2. Explain why water is not an endless resource
3. Understand the importance of water to living things, including people and plants
4. Understand signs and symptoms of dehydration
5. Identify daily water requirements for humans

### TEKS/CURRICULUM CONCEPTS

TEKS Concept	Subject	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
Explain how personal-health habits affect self and others.	Health	3.1A		
D) Describe benefits in setting and implementing short and long-term goals; (E) explain the necessity of perseverance to achieve goals.	Health			5.9D 5.9E
C) Construct maps, graphic organizers, simple tables, charts, and bar graphs using tools and current technology to organize, examine, and evaluate measured data;(D) analyze and interpret patterns in data to construct reasonable explanations based on evidence from investigations.	Science	3.2C 3.2D		
Collect, record, and analyze information using tools, including spring scales.	Science	3.4A		
C) Construct simple tables, charts, bar graphs, and maps using tools and current technology to organize, examine, and evaluate data;(D) analyze data and interpret patterns to construct reasonable explanations from data that can be observed and measured.	Science		4.2C 4.2D	
Collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, mirrors, spring scales, pan balances, triple beam balances, graduated cylinders, beakers, hot plates, meter sticks, compasses, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observation of habitats of organisms such as terrariums and aquariums.	Science		4.4A	
B) Describe and illustrate the continuous movement of water above and on the surface of Earth through the water cycle and explain the role of the sun as a major source of energy in this process.	Science		4.8B	
B) Ask well-defined questions, formulate testable hypotheses, and select and use appropriate equipment and technology; (C) collect information by detailed observations and accurate measuring; (D) analyze and interpret information to construct reasonable explanations from direct (observable) and indirect (inferred) evidence.	Science			5.2B 5.2C 5.2D
Collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observations of habitats or organisms such as terrariums and aquariums.	Science			5.4A
Construct appropriate simple graphs, tables, maps, and charts using technology, including computers, to organize, examine, and evaluate information.	Science			5.2G
Explain how the Sun and the ocean interact in the water cycle.	Science			5.8B

**PREPARATION**

<b>Prep Beforehand</b>	<input type="checkbox"/> Strawberry Mint Agua Fresca <input type="checkbox"/> Wash all fruits & vegetables <input type="checkbox"/> Peel & slice jicama	<input type="checkbox"/> Make sure potted plant is dry <input type="checkbox"/> Fill pitcher with 64 ounces of water
<b>To Set Up/Prep in the Garden</b>	<input type="checkbox"/> Set up tables: recipe cards, labels & sharpies for water bottles <input type="checkbox"/> Cloud activity <input type="checkbox"/> Write objectives/recipe/agua fresca on the board	
<b>Other Items to Bring</b>		
<b>General</b>	<input type="checkbox"/> Lesson report form <input type="checkbox"/> Pencils <input type="checkbox"/> Trash bags <input type="checkbox"/> Vinegar cleaning solution <input type="checkbox"/> 2 tables for instruction <input type="checkbox"/> 4 hand towels <input type="checkbox"/> Compost and Recycling buckets	<input type="checkbox"/> Texas Sprouts workbooks <input type="checkbox"/> Dry erase markers/eraser <input type="checkbox"/> Paper towel roll <input type="checkbox"/> Tape <input type="checkbox"/> First aid kit <input type="checkbox"/> Hornet spray
<b>Activity 1</b>	<input type="checkbox"/> Dry erase markers	
<b>Activity 2</b>	<input type="checkbox"/> Potted plant	<input type="checkbox"/> Watering can
<b>Discussion 2</b>	<input type="checkbox"/> Pitcher for Water Rec	<input type="checkbox"/> Pee Chart Poster
<b>Activity 3</b>	<input type="checkbox"/> Water Bottles <input type="checkbox"/> 10 sharpies	<input type="checkbox"/> Labels
<b>Agua Fresca</b>	<input type="checkbox"/> Strawberries <input type="checkbox"/> Pitcher	<input type="checkbox"/> Mint leaves <input type="checkbox"/> Ice
<b>Cooking Activity</b>	<input type="checkbox"/> 5 student tables <input type="checkbox"/> Cooking directions <input type="checkbox"/> Recipe cards <input type="checkbox"/> Vegetable peeler <input type="checkbox"/> Plates and utensils <input type="checkbox"/> 1 large bowl <input type="checkbox"/> 2 citrus juicers <input type="checkbox"/> Voting beans & jars <input type="checkbox"/> Whisk  <u>Recipe ingredients:</u> <input type="checkbox"/> 2-3 jicamas <input type="checkbox"/> 1 bunch green onion <input type="checkbox"/> 1 handful cilantro <input type="checkbox"/> Olive oil	<input type="checkbox"/> Hand sanitizer <input type="checkbox"/> Table numbers <input type="checkbox"/> 18 cutting boards <input type="checkbox"/> 24 knives <input type="checkbox"/> 6 medium bowls <input type="checkbox"/> 1 large cooking/serving spoon <input type="checkbox"/> Measuring spoons and cups <input type="checkbox"/> Hose/bucket/sink for washing fruit <input type="checkbox"/> Sharp knife  <input type="checkbox"/> 2 grapefruit <input type="checkbox"/> 2 cucumbers <input type="checkbox"/> 2 limes <input type="checkbox"/> 1handful of mint <input type="checkbox"/> Salt
<b>Workbook</b>	<input type="checkbox"/> Where is the Water on Earth?	

**INTRODUCTION:** Welcome students back and go over objectives for the lesson, refresher of rules for the class (if you feel necessary) and point out the recipe and agua fresca for the day.

**COOKING ACTIVITY**

1. Ask students to open to **page 66** of their workbooks and silently read over recipe. Ask students which of these vegetables they have tried before and hold up each one as you go over them. Release them to their cooking prep tables. Ask them to read the directions on the tables and hand sanitize.
2. Show students the difference between a teaspoon and tablespoon. Ask them to write a note in their workbooks with the abbreviations.

**STUDENT PREP**

Table #	Item to Prep	Materials Needed	Directions on Table
1	Grapefruit (2)	4 cutting boards 6 knives 1 medium bowl	1. Remove peel from grapefruit and put into compost bin. 2. Separate grapefruit slices. 3. Cut each slice into 3 pieces and put into bowl.
2	Orange (2)	4 cutting boards 6 knives 1 medium bowl	1. Remove peel from oranges and put into compost bin. 2. Separate orange slices. 3. Cut each slice into 3 pieces and put into bowl.
3	Green Onions	4 cutting boards 6 knives 1 medium bowl	1. Cut off root. 2. Cut in ½ inch pieces. 3. Put into bowl.
4	Cucumber (2)	4 cutting boards 6 knives 1 vegetable peeler 1 medium bowl	1. Peel cucumber. 2. Cut into four even pieces. 3. Then, cut each piece in half and into small cubes. 4. Put into bowl.
5	Cilantro and mint	2 cutting boards 1 medium bowl	1. Tear leaves off of the stems. If leaf is really big, tear in half. 2. Put leaves in bowl. 3. Discard stems into compost bucket.
5	Limes (2)	2 knives 2 juicers 1 small bowl	1. Cut limes in half. 2. Squeeze limes on juicer by pushing down and turning on the lime. 3. Pour lime juice into small bowl.

**Cooking Assistant Directions:** Once students have finished juicing limes and cutting grapefruit, prepare dressing by whisking together olive oil, leftover grapefruit juice, lime juice, and salt in a separate bowl. Once students are finished chopping, collect their vegetables, add to large bowl, and toss with dressing.

### ACTIVITY 1: JMG EARTH WATER GRAPH

1. Tell students: Today we are going to talk about water. Ask students to open their workbooks to **page 64**. Ask students where is water located on the earth? Draw a circle on the board like the one in their workbooks.
  - a. *Answers: in the ocean, in rivers and lakes, in the clouds, in ice like glaciers*
  - b. Mention how it seems like we have plenty of water all around the earth for us to use.
2. Show students visual of percentages of frozen (97%), salt (2%), and fresh water (1%) on Earth ask them to fill in the answers in their workbooks. Make sure they write in the type of water and percentage.
3. Emphasize that the only water that is drinkable is the fresh water- so only 1% of the water on earth.

### ACTIVITY 2: PLANTS NEED WATER!

1. Show students a potted plant with dry-looking soil. Ask them if they can tell if it needs water. Most of them will see that the soil looks dry and say that it needs water.
2. Then, ask a student volunteer to come up and water the plant with a watering can.
3. Ask students: How can you tell if the plant has enough water now? The top of the soil looks wet, but when I put my finger into the soil, it's still dry. Why would a plant need water below the surface too?
  - a. *Answer: to get to the roots*
4. Tell students: Just like we wouldn't try to drink water through our ears, plants want water where they can take it in – as close to the roots as possible.

### DISCUSSION 1: IMPORTANCE OF WATER FOR HUMANS

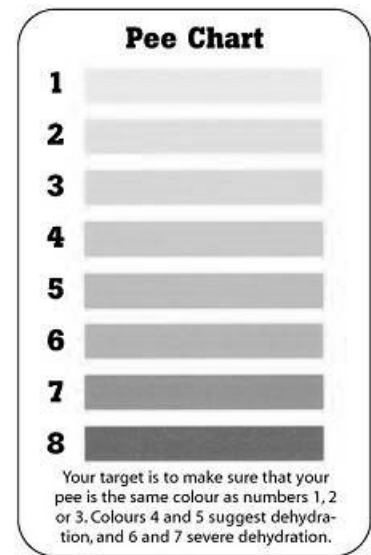
1. Ask students to look at their workbooks to **page 64**. Tell them that they will be filling in the blanks with important information about water for humans.
2. Tell students: Just like plants, we need water to be healthy. Our bodies are  $\frac{2}{3}$  or 67% water. Demonstrate to students that 67% represents about the area from your feet to your chest.
3. What does water do for our bodies?
  - a. *Answers:*
    - i. *Carries nutrients like oxygen to all the cells in our bodies*
    - ii. *Helps us breathe*
    - iii. *Cushions our joints*
    - iv. *Helps convert our food to energy*
    - v. *Protects our organs*
    - vi. *Helps keep our bodies at a constant temperature of 98.6 degrees.*
4. What are some ways that we lose water from our bodies?
  - a. *Answers: sweat, urine, breathing*
5. What do we call it when we don't get enough water?
  - a. *Answer: dehydration*



6. What happens to your body when you don't have enough water?
  - a. *Answers: headaches, no energy, dry mouth and lips, thirst, feel tired, nausea (in severe cases: organs fail and death)*

### DISCUSSION 2: HOW MUCH WATER DO WE NEED?

1. Tell students: We can get water from fruits and vegetables, but it's also important to just drink water or a drink that is primarily water like the aguas frescas we've been having during our lessons. The problem with drinks like soda or even juice is that they don't give us the hydration we really need. This is because they give us a big helping of sugar along with the water.
2. We should all try to drink 64 fluid ounces of water per day (which is about 2 ½ water bottles full). Show pitcher full of recommended amount of water.
3. Fact: You can live up to 6 weeks without food, but you can only live 3 to 4 days without water.
4. Ask students: So we know that feeling thirsty, low on energy or having headaches can be one sign that you are dehydrated. There is also another way to check if you're hydrated enough and you can do this every time you go to the bathroom. Show a poster of the 'Pee Chart' and ask students what they think it means?
  - a. *Answer: When you use the restroom, if your pee is dark yellow, you are dehydrated. If it is light yellow, almost clear, you are well hydrated!*
5. Remind students that they should be drinking water throughout the day, but it is especially important to do before, during and after physical exercise.



### ACTIVITY 3: DISTRIBUTE & LABEL WATER BOTTLES

1. Pass out the TX Sprout water bottle to each student OR have water bottles on tables if pressed for time.
2. Tell students: You are each receiving a refillable water bottle to help you drink water all day. You should bring your water bottle to school every day and try to fill it up at least two times each day. Your water bottle is 25 ounces, so you should drink about 2 ½ bottles full to get to the required amount for each day. If you take care of your bottle, use it regularly and keep it until the end of the school year, you will receive a prize!
3. Have students write their names with sharpie markers on their bottles.

### RECIPE & AGUA FRESCA TASTING

Assistants should serve a small sample on each plate, pour a serving of the agua fresca in each cup, and help distribute to students.

### VOTING ON THE RECIPE & AGUA FRESCA

1. Pass out two beans to each student.
  
2. Assistant walks around to each table with two cups and instructs the students to place the bean in the “yes” cup if they liked the recipe and in the “no” cup if they did not like the recipe.
  - a. Repeat for voting on the agua fresca.

### CONCLUSION

Based on learning outcomes, ask students to tell a partner what they learned in the lesson today. Then ask the following questions as a whole group and elaborate/clarify as necessary.

1. Where is water located on the earth?
2. What is the largest percentage of water found on Earth-frozen, salt and fresh?
3. Why is water important to living things, including people and plants?
4. What happens when someone or something is dehydrated?
5. How much water should we drink each day?

### CLASSROOM CONNECTIONS

1. Focus on getting into the habit of drinking 8 glasses of water a day by filling this chart out over one week. The goal is to get to 8 glasses per day by the end of the week. Color each glass every time you have a glass of water. Remember that one Texas Sprouts water bottle is usually 2 ½ glasses.

### COOKING INSTRUCTIONS FOR EACH TABLE

<b>Table 1</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• 2 grapefruits</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• Medium bowl</li> </ul> <p style="text-align: center;"><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Remove peel from grapefruits and put into compost bin.</li> <li>2. Separate grapefruit slices.</li> </ol> <ol style="list-style-type: none"> <li>1. Cut each slice into 3 pieces and put into bowl.</li> </ol>



Table 2	
Supplies	Directions
<ul style="list-style-type: none"> <li>• 2 oranges</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Remove peel from oranges and put into compost bin.</li> <li>2. Separate orange slices.</li> <li>2. Cut each slice into 3 pieces and put into bowl.</li> </ol>





Table 3	
Supplies	Directions
<ul style="list-style-type: none"> <li>• Green onions</li> <li>• 4 cutting boards</li> <li>• 4 knives</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut off root.</li> <li>2. Cut into small pieces, as pictured.</li> </ol> 



Table 4	
Supplies	Directions
<ul style="list-style-type: none"> <li>• 2 cucumbers</li> <li>• 4 cutting boards</li> <li>• 4 knives</li> <li>• Vegetable peeler</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Peel cucumber.</li> <li>2. Cut into 4 even pieces.</li> <li>3. Then cut each piece in half and into cubes, as pictured.</li> </ol> 




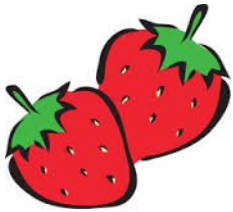
<b>Table 5</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• Cilantro and mint</li> <li>• 2 cutting boards</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Tear leaves off of the stems.</li> <li>2. Discard stems into compost bin.</li> </ol>



<b>Table 5 (continued)</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• 2 limes</li> <li>• 2 knives</li> <li>• 2 juicers</li> <li>• 1 small bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut limes in half.</li> <li>2. Squeeze limes on juicer by pushing down and turning on the lime.</li> <li>3. Pour lime juice into small bowl.</li> </ol>



<h2 style="text-align: center;">Juicy Jicama Salad</h2>	
<p><b>Ingredients</b></p> <p>1 jicama, chopped into matchsticks                  ½ grapefruit, cut in bite-sized pieces                  ½ orange, cut into bite-sized pieces                  ¼ cup green onion, chopped                  ½ large cucumber, chopped                  3 tablespoon olive oil                  Juice from 1-2 limes                  ½ cup cilantro, chopped                  ¼ cup mint, chopped finely                  Salt to taste</p> <p><b>Time:</b> 20 minutes  <b>Serving size:</b> ½ cup  <b>Servings per recipe:</b> 4</p>	 <p><i>Per serving:</i>  <b>Carbohydrates:</b> 21 grams  <b>Fiber:</b> 9 grams  <b>Added Sugar:</b> 0 grams  <b>Protein:</b> 2 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Cut jicama, grapefruit, green onions, and cucumber and place in a large bowl.</li> <li>2. In a separate bowl, add olive oil.</li> <li>3. In the same bowl as the olive oil, whisk in juice from limes and any juice left from grapefruit to make the dressing.</li> <li>4. Add salt, cilantro, and mint to dressing and mix well.</li> <li>5. Toss dressing with salad.</li> </ol>	

<h2 style="text-align: center;">Strawberry-Mint Agua Fresca</h2>	
<p><b>Ingredients</b></p> <p>Filtered water                  5 strawberries, sliced                  Handful of mint leaves                  Ice</p> <p><b>Time:</b> 10 minutes  <b>Serving size:</b> 1 cup (8 fluid ounces)  <b>Servings per recipe:</b> one pitcher</p>	 <p><i>Per serving:</i>  <b>Carbohydrates:</b> 0 grams  <b>Fiber:</b> 0 grams  <b>Added Sugar:</b> 0 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Crush or mull mint leaves.</li> <li>2. Combine water, strawberries, and crushed mint leaves with ice and mix.</li> </ol>	

DISCUSSION 2 IMAGE CUTOUT

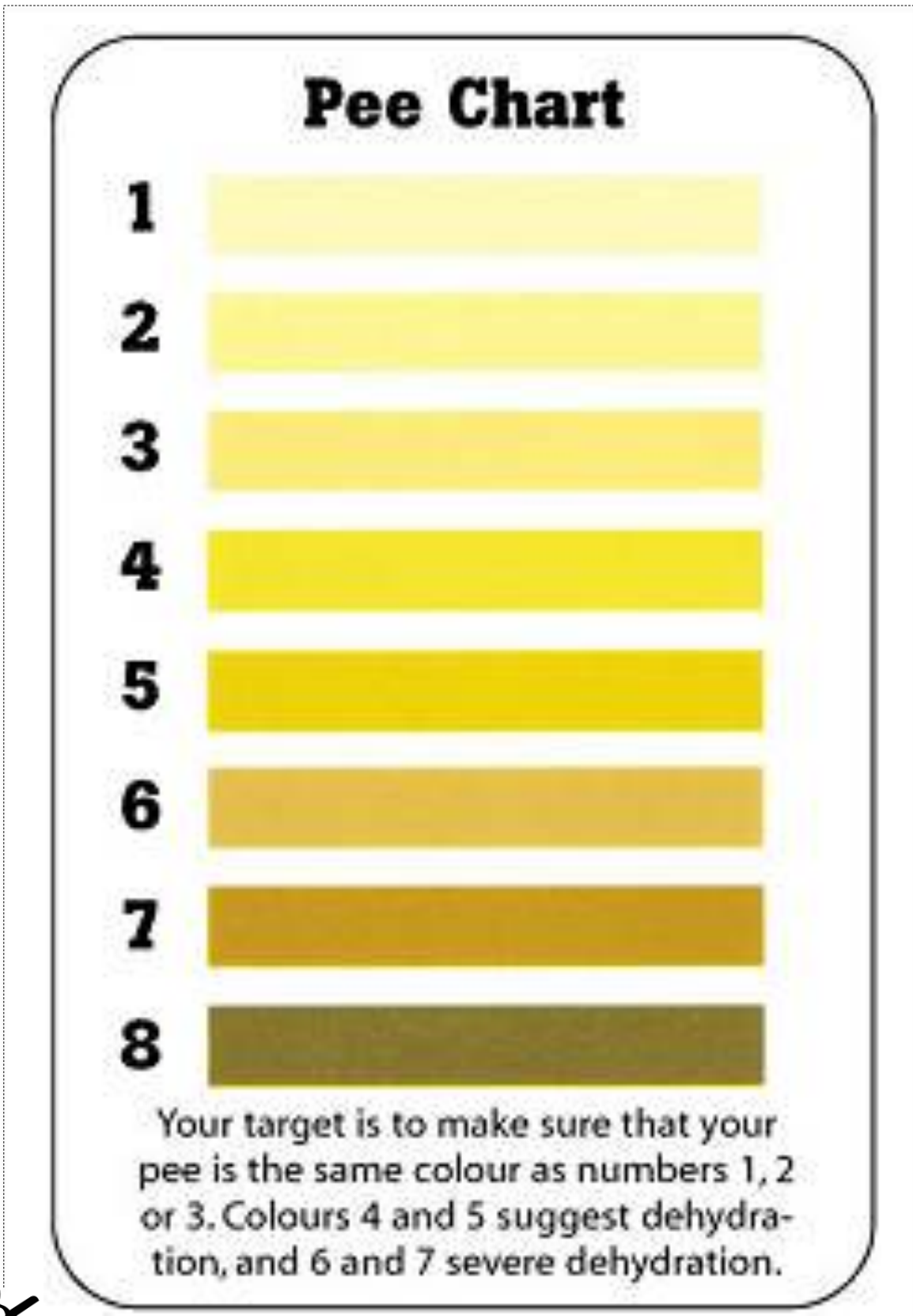


Image Credit: [budgetforhealth.com](http://budgetforhealth.com)

## LESSON 14: COMPOSTING

**Recipe:** Watermelon Basil Agua Fresca  
**Garden Taste Test**

### LEARNING OUTCOMES

1. Define compost and understand the benefits to the environment
2. Explain what materials are compostable and what is not
3. Understand a possible method for composting and the result

### TEKS/CURRICULUM CONCEPTS

TEKS Concept	Subject	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
Make informed choices in the use and conservation of natural resources by recycling or reusing materials such as paper, aluminum cans, and plastics. (3.1B); make informed choices in the use and conservation of natural resources and reusing and recycling of materials such as paper, aluminum, glass, cans, and plastic (4.1B); make informed choices in the conservation, disposal, and recycling of materials (5.1B).	Science	3.1B	4.1B	5.1B
Ask well-defined questions, formulate testable hypotheses, and select and use appropriate equipment and technology.	Science			5.2B
Identify environmental protection programs that promote community health such as recycling, waste disposal, or safe food packaging.	Science			5.8D
Describe how the flow of energy derived from the Sun, used by producers to create their own food, is transferred through a food chain and food web to consumers and decomposers.	Science	5.9B		

## PREPARATION

<b>Prep Beforehand</b>	<input type="checkbox"/> Watermelon Basil Agua Fresca <input type="checkbox"/> Clipboards with numbers
<b>To Set Up/Prep in the Garden:</b>	<input type="checkbox"/> Set up tables: food models in bags <input type="checkbox"/> Compostable items: fruit peel, stick, paper towel, newspaper, leaf <input type="checkbox"/> Harvest vegetables if ready <input type="checkbox"/> Write objectives /agua fresca on the board
<b>Other Items to Bring</b>	
<b>General</b>	<input type="checkbox"/> Lesson report form <input type="checkbox"/> Pencils <input type="checkbox"/> Trash bags <input type="checkbox"/> Vinegar cleaning solution <input type="checkbox"/> 2 tables for instruction <input type="checkbox"/> 4 hand towels <input type="checkbox"/> Compost and Recycling buckets <input type="checkbox"/> Texas Sprouts workbooks <input type="checkbox"/> Dry erase markers/eraser <input type="checkbox"/> Paper towel roll <input type="checkbox"/> Tape <input type="checkbox"/> First aid kit <input type="checkbox"/> Hornet spray <input type="checkbox"/> Cutout for conclusion: "Who Ya' Calling Garbage?"
<b>Discussion 1</b>	<input type="checkbox"/> Examples of compostable materials: leaf, fruit peel, vegetable peel, stick, paper towel, newspaper <input type="checkbox"/> Examples of non-compostable materials: plastic, Styrofoam, metal, bread, meat, foods cooked with oil
<b>Activity 1</b>	<input type="checkbox"/> 5 bags <input type="checkbox"/> Plastic food models (5 compostable items/5 non-compostable items in each)
<b>Activity 2</b>	<input type="checkbox"/> Large clear bin <input type="checkbox"/> Finished compost bin or jar of finished compost <input type="checkbox"/> Green and brown compost items
<b>Garden Taste Test</b>	<input type="checkbox"/> 5 student tables <input type="checkbox"/> Knife <input type="checkbox"/> Plates and utensils <input type="checkbox"/> Voting beans & jars <input type="checkbox"/> Hand sanitizer <input type="checkbox"/> Cutting board <input type="checkbox"/> Hose/bucket/sink for washing veggies <input type="checkbox"/> Garden shears
<b>Agua Fresca</b>	<input type="checkbox"/> Watermelon <input type="checkbox"/> Ice <input type="checkbox"/> Cups <input type="checkbox"/> Basil <input type="checkbox"/> Pitcher
<b>Workbook</b>	<input type="checkbox"/> Green/Brown Lasagna <input type="checkbox"/> What is compostable fill in the blank

**INTRODUCTION:** Welcome students back and go over objectives for the lesson, refresher of rules for the class (if you feel necessary) and point out the recipe and agua fresca for the day.



## GARDEN GLANCE

1. Tell students to open to **page 67** of their workbooks and take notes as they walk around and observe the garden for 5 minutes (set timer). Walk around with students, getting to know them, asking what they see, etc.
2. Call students back to the group and call on a few students to share aloud.

## DISCUSSION: DEFINE COMPOSTING AND RECYCLING

1. Tell students: Today we are going to talk about composting. Compost is a form of recycling in which we can take some food scraps and mix them with old plant material, such as leaves or grass clippings, to create a soil-like substance that is full of nutrients for our gardens.
2. Ask students: *What happens to an apple core after you eat it and put it in the trash?*
  - a. Answer: It starts to rot or decompose. Bugs come and eat it.
3. Explain to students to read along in their workbooks as you read aloud. After any living thing dies, it starts to decompose or break down. If we throw it in the trash, where does it go from there? It goes to the trash dump with so much other stuff. By keeping our food scraps separate from the rest of our trash and adding them into a compost bin, we are keeping extra trash out of landfills and creating something useful to help our gardens grow. Plus, it is like getting free nourishment for our garden.
4. Point out the compost bin near the garden.
5. Ask students to open their workbooks to **page 69**. Here they will write down the rules for how to know if something is compostable. Ask them to fill in the blank: If it comes from a **plant** and has nothing **extra** added to it, it is compostable.
6. Show examples of compostable items and ask students to write them down in their workbooks. As you show them, ask if they come from a plant or not and if anything extra was added. Examples: leaf, fruit peel, vegetable peel, stick, paper towel, newspaper. Also show students some items that are not compostable like plastic, Styrofoam, metal, meats, breads, foods cooked with oil.

## ACTIVITY 1: IN VERSUS OUT

1. Based on the discussion, students will identify if certain foods can go into the compost bin or not.
2. Place students into five groups.
3. Each student group will receive a bag with several food models. Their task is to figure out which ones go into the compost pile and which ones do not. They will discuss with their group, make a decision and put the items that DON'T go into a compost pile back into their bags.
4. Ask a couple of groups to present and clarify as needed. Make sure other students are listening (put their bins down). After the first group or two has presented, tell the students to go through their choices and see if they want to make any changes.
5. Go over answers by asking students to share and clarify as needed.

## **ACTIVITY 2: GREEN AND BROWN LASAGNA**

1. Now that you know what CAN and CANNOT go into a compost pile, let's talk about HOW to compost.
2. There are many different methods for composting but the basics are the same: mix greens (like grass clippings, vegetable scraps) and browns (like dead leaves, old newspaper and paper) together. One method to do this is called the lasagna method. Think about lasagna. How do you make it? Draw an example on the board of layers as students call out different components (lasagna noodles, pasta sauce, cheese, etc.)
3. To build your compost pile, imagine a giant piece of lasagna with green and brown layers.
4. At the front of the room, demonstrate how to make layers by putting items in the large, clear bin and ask students to write in the green and brown items on their 'lasagna' in their workbooks.
5. Tell students: After you have a couple layers of greens and browns, they will start to break down and your pile becomes a compost factory. Some of the factory workers that help break stuff down are bugs, worms, slugs and molds (decomposers). These decomposers eat the layers of greens and browns. Then, what do you think happens? By eating the compost pile ingredients and then pooping, the decomposers are helping to break these ingredients down. All of the work adds heat to the pile and this is a sign that the factory workers are doing their job! Besides your green and brown ingredients, moisture is essential to your compost pile, so water your pile from time to time. Also turn your pile regularly so that your pile gets good airflow.
6. Show students a jar of "finished compost." Time permitting, pass the jar around and let them touch and smell it. Mention that the nutrients that were in the plants that decomposed to make this compost are in the finished compost. These nutrients will also be passed along to the plants that grow where this compost is mixed into the soil.

## **GARDEN TASTE TEST & AGUA FRESCA TASTING**

1. Tell students they will have a garden taste today that will be a whole food. Depending on what there is an abundance of, choose something that students can have a taste of from the garden (supplement with grocery items as needed).
  - a. Each table group will pick ONE vegetable and take it to the assistant who will wash and cut up in smaller pieces for students to try.

## **VOTING ON THE TASTE TEST & AGUA FRESCA**

1. Pass out two beans to each student.
2. Assistant walks around to each table with two cups and instructs the students to place the bean in the "yes" cup if they liked the taste test and in the "no" cup if they did not like the taste test.
  - a. Repeat for voting on the agua fresca.

## CONCLUSION

Based on learning outcomes, ask students to tell a partner what they learned in the lesson today. Then, ask the following questions as a whole group and elaborate/clarify as necessary.

1. What is compost?
2. What are the benefits of compost?
3. What can be composted? What cannot be composted?
4. How does the following picture relate to what we have learned today? \*


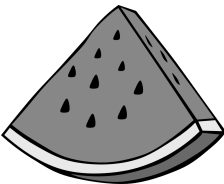


\*Enlarged image cutout on last page of lesson

## CLASSROOM CONNECTIONS

1. Why would you want to compost your food?
2. What did you throw in the trash today that can be composted?

## RECIPE

 <h3 style="display: inline-block; margin-left: 20px;">Watermelon Basil Water</h3>	
<p><b><u>Ingredients</u></b>          1 pitcher filtered water          2 slices of watermelon          Handful of basil leaves          Ice</p> <p><b>Time:</b> 10 minutes  <b>Serving size:</b> 1 cup (8 fluid ounces)  <b>Servings per recipe:</b> one pitcher</p>	
<p><b><u>Directions</u></b></p> <ol style="list-style-type: none"> <li>1. Cut watermelon slices into cubes and place in pitcher.</li> <li>2. Add basil leaves, water, and ice to pitcher, and serve.</li> </ol>	<p><i>Per serving:</i>  <b>Carbohydrates:</b> 0 grams  <b>Fiber:</b> 0 grams  <b>Added Sugar:</b> 0 grams</p>

CONCLUSION IMAGE CUTOUT



## LESSON 15: EATING HEALTHY ON THE GO

**Recipes:** Cucumber, Radish, & Hummus Bites and Cucumber-Lemon Agua Fresca

### LEARNING OUTCOMES

1. Understand why fast-food options are usually not a healthy choice for eating and what choices can be made to make them healthier
2. Name a few healthy choices for snacks that can be eaten when you are out
3. Describe how to make healthier choices when eating out

### TEKS/CURRICULUM CONCEPTS

TEKS Concept	Subject	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: apply mathematics to problems arising in everyday life, society, and the workplace.	Math	3.1A	4.1A	5.1A
Geometry and measurement. The student applies mathematical process standards to select appropriate units, strategies, and tools to solve problems involving customary and metric measurement. The student is expected to: determine liquid volume (capacity) or weight using appropriate units and tools.	Math	3.7E		
Health information. The student recognizes ways to enhance and maintain health throughout the life span. The student is expected to: identify the importance of taking personal responsibility for developing and maintaining a personal health plan such as fitness, nutrition, stress management, and personal safety.	Health		4.1F	
Personal/interpersonal skills. The student understands how relationships can positively and negatively influence individual and community health. The student is expected to: B: describe the importance of being a positive role model for health.	Health		4.8B	

**PREPARATION**

<b>Prep Beforehand</b>	<input type="checkbox"/> Cucumber Lemon Agua Fresca <input type="checkbox"/> Pre-cut radishes into slices	<input type="checkbox"/> Wash all fruits & vegetables <input type="checkbox"/> Clipboards with numbers														
<b>To Set Up/Prep in the Garden:</b>	<input type="checkbox"/> Set up tables: recipe cards <input type="checkbox"/> Write objectives/recipe/agua fresca on the board															
<b>Other Items to Bring</b>																
<b>General</b>	<input type="checkbox"/> Lesson report form <input type="checkbox"/> Pencils <input type="checkbox"/> Trash bags <input type="checkbox"/> Vinegar cleaning solution <input type="checkbox"/> 2 tables for instruction <input type="checkbox"/> 4 hand towels <input type="checkbox"/> Compost and Recycling buckets	<input type="checkbox"/> Texas Sprouts workbooks <input type="checkbox"/> Dry erase markers/eraser <input type="checkbox"/> Paper towel roll <input type="checkbox"/> Tape <input type="checkbox"/> First aid kit <input type="checkbox"/> Hornet spray														
<b>Activity 1</b>	<input type="checkbox"/> Bar graph poster <input type="checkbox"/> Cutouts of bars for the graph of fast food items															
<b>Activity 3</b>	<input type="checkbox"/> Convenience store aisle signs <input type="checkbox"/> Bin full of healthy and unhealthy snacks: <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> Soda</td> <td><input type="checkbox"/> Nuts (without extra flavoring)</td> </tr> <tr> <td><input type="checkbox"/> Pretzels</td> <td><input type="checkbox"/> Gatorade</td> </tr> <tr> <td><input type="checkbox"/> Vitamin Water</td> <td><input type="checkbox"/> Beef Jerky</td> </tr> <tr> <td><input type="checkbox"/> G2 Gatorade</td> <td><input type="checkbox"/> Fig Newtons</td> </tr> <tr> <td><input type="checkbox"/> String Cheese</td> <td><input type="checkbox"/> Plain Yogurt</td> </tr> <tr> <td><input type="checkbox"/> Water</td> <td><input type="checkbox"/> Hot Cheetos</td> </tr> <tr> <td><input type="checkbox"/> Twinkie</td> <td><input type="checkbox"/> Banana</td> </tr> </table>		<input type="checkbox"/> Soda	<input type="checkbox"/> Nuts (without extra flavoring)	<input type="checkbox"/> Pretzels	<input type="checkbox"/> Gatorade	<input type="checkbox"/> Vitamin Water	<input type="checkbox"/> Beef Jerky	<input type="checkbox"/> G2 Gatorade	<input type="checkbox"/> Fig Newtons	<input type="checkbox"/> String Cheese	<input type="checkbox"/> Plain Yogurt	<input type="checkbox"/> Water	<input type="checkbox"/> Hot Cheetos	<input type="checkbox"/> Twinkie	<input type="checkbox"/> Banana
<input type="checkbox"/> Soda	<input type="checkbox"/> Nuts (without extra flavoring)															
<input type="checkbox"/> Pretzels	<input type="checkbox"/> Gatorade															
<input type="checkbox"/> Vitamin Water	<input type="checkbox"/> Beef Jerky															
<input type="checkbox"/> G2 Gatorade	<input type="checkbox"/> Fig Newtons															
<input type="checkbox"/> String Cheese	<input type="checkbox"/> Plain Yogurt															
<input type="checkbox"/> Water	<input type="checkbox"/> Hot Cheetos															
<input type="checkbox"/> Twinkie	<input type="checkbox"/> Banana															
<b>Agua Fresca</b>	<input type="checkbox"/> Cucumber <input type="checkbox"/> Pitcher <input type="checkbox"/> 3 gallons water	<input type="checkbox"/> Lemon <input type="checkbox"/> Ice														
<b>Cooking Activity</b>	<input type="checkbox"/> 5 student tables <input type="checkbox"/> Cooking directions <input type="checkbox"/> Recipe cards <input type="checkbox"/> 30 knives <input type="checkbox"/> Measuring spoons and cups <input type="checkbox"/> Sharp adult knife  <u>Recipe ingredients:</u> <input type="checkbox"/> 15 Radishes <input type="checkbox"/> 2 cups Hummus	<input type="checkbox"/> Hand sanitizer <input type="checkbox"/> Table numbers <input type="checkbox"/> 20 cutting boards <input type="checkbox"/> Plates and utensils <input type="checkbox"/> Voting beans & jars <input type="checkbox"/> Hose/bucket/sink for washing fruit  <input type="checkbox"/> 3 Cucumbers														
<b>Workbook</b>	<input type="checkbox"/> TX Sprouts Fast Food Menu															

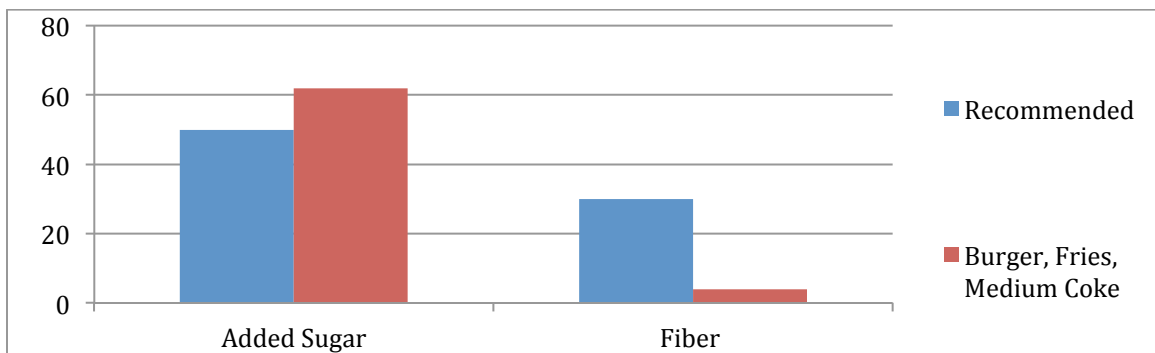
**INTRODUCTION:** Welcome students back and go over objectives for the lesson, refresher of rules for the class (if you feel necessary) and point out the recipe and agua fresca for the day.

**DISCUSSION 1**

1. Tell students: Today, we are going to talk about ‘eating healthy on the go’. ‘On the go’ means when you are out of the house, maybe running errands, going shopping or to play sports. Let’s say it’s the weekend and you and your family had to run out of the house to get to soccer practice, but you didn’t get lunch. Where would you usually stop to get something to eat quickly?
  - a. *Answers-fast food restaurants, convenience stores*
2. Ask students if they think that’s a healthy option (they will probably say NO). Now, let’s take a look at some of the foods we usually eat at fast food restaurants and see exactly WHY they are not good choices.

**ACTIVITY 1: BAR GRAPH**

1. Have bar graph on poster with recommended daily amount of sugar and fiber on the board.
2. Add pre-cut bars that show fiber and sugar content of typical meal (i.e., hamburger, fries and coke) at a fast food restaurant on the bar graph.
  - a. Emphasize too much sugar, too little fiber (i.e. this meal has only 6g of fiber and 62g of added sugar) AND it doesn’t include ketchup\*. Ask students how many packets of ketchup they usually use and add those. Emphasize that this 55 grams is for a Medium Coke and a Large Coke has 76 grams.



Food Item	Added Sugar	Fiber
Cheeseburger	7g	2 grams
Medium Coca Cola	55g	0 grams
Small Fries	0 grams	2 grams
*Ketchup packet	4 grams	0 grams

**ACTIVITY 2: CIRCLE THE HEALTHIEST OPTION**

1. Tell students to turn to **page 74** and circle the healthier items from a sample Fast Food Menu
  - a. Share with the class.

- b. Emphasize that the main point is that there really isn't a 'healthier' option for main dishes, but you can make better choices with sides and drinks. Even just skipping a soda and drinking water instead can make a big difference.

### ACTIVITY 3: HEALTHY SNACKS

1. Set up a 'convenience store' for kids to explore with different 'aisles' of beverages, savory snacks and sweet snacks. Have some healthy and unhealthy options in each and give students the opportunity to shop in small groups and choose the healthiest item from each category. Ask them to look at the labels for sugar and fiber content. See examples in table below.

Health Meter	Beverage	Savory Snack	Sweet Snack
Healthy	Water	Nuts (without extra flavoring) String Cheese	Banana Plain Yogurt
Okay	G2 Gatorade	Beef Jerky Pretzels	Granola bar (without a lot of sugar) Fig Newtons
Unhealthy	Vitamin Water Gatorade Soda	Hot Cheetos	Twinkie

2. Ask students to bring items up to the front and have a couple of volunteers come up and show/tell the class which item they picked and why.

### COOKING ACTIVITY

1. Ask students to open to **page 76** of their workbooks and silently read over recipe. Ask students which of these vegetables they have tried before and hold up each one as you go over them. Release them to their cooking prep tables. Ask them to read the directions on the tables and hand sanitize.
2. Students may eat snacks once they have made enough for the table.



## STUDENT PREP

Table #	Item to Prep	Materials Needed	Directions on Table
1	1 cucumber 3 radishes ¼ cup hummus	4 cutting boards 6 knives Teaspoon	1. Cut cucumber into ¼ inch slices. 2. Cut each radish in half. 3. Cut radishes into ¼ inch slices. 4. Put a spoon of hummus on top of cucumber. 5. Put radish slice on top of hummus.
2	1 cucumber 3 radishes ¼ cup hummus	4 cutting boards 6 knives Teaspoon	1. Cut cucumber into ¼ inch slices. 2. Cut each radish in half. 3. Cut radishes into ¼ inch slices. 4. Put a spoon of hummus on top of cucumber. 5. Put radish slice on top of hummus.
3	1 cucumber 3 radishes ¼ cup hummus	4 cutting boards 6 knives Teaspoon	1. Cut cucumber into ¼ inch slices. 2. Cut each radish in half. 3. Cut radishes into ¼ inch slices. 4. Put a spoon of hummus on top of cucumber. 5. Put radish slice on top of hummus.
4	1 cucumber 3 radishes ¼ cup hummus	4 cutting boards 6 knives Teaspoon	1. Cut cucumber into ¼ inch slices. 2. Cut each radish in half. 3. Cut radishes into ¼ inch slices. 4. Put a spoon of hummus on top of cucumber. 5. Put radish slice on top of hummus.
5	1 cucumber 3 radishes ¼ cup hummus	4 cutting boards 6 knives Teaspoon	1. Cut cucumber into ¼ inch slices. 2. Cut each radish in half. 3. Cut radishes into ¼ inch slices. 4. Put a spoon of hummus on top of cucumber. 5. Put radish slice on top of hummus.

### RECIPE & AGUA FRESCA TASTING

Assistants should pour a serving of the agua fresca in each cup, and help distribute to students.

### VOTING ON THE RECIPE & AGUA FRESCA

1. Pass out two beans to each student.
2. Assistant walks around to each table with two cups and instructs the students to place the bean in the “yes” cup if they liked the recipe and in the “no” cup if they did not like the recipe.
  - a. Repeat for voting on the agua fresca.

### CONCLUSION

Based on learning outcomes, ask students to tell a partner what they learned in the lesson today. Then, ask the following questions as a whole group and elaborate/clarify as necessary.

1. What are 3 healthy snacks you can eat when you are out?
2. What are some healthier choices to eat at a fast food restaurant?
3. What do you think of when you see the pictures below?

### CLASSROOM CONNECTIONS

1. Look at the food in your house and write down 6 snacks that you could take with you. Which ones are healthier than the others? Why are they healthy? Describe what you think are better choices and why.  
OR
2. Write a paragraph on how this photo relates to what you learned about in this lesson?



Image Credit: thenext28days.com

### COOKING INSTRUCTIONS FOR EACH TABLE

<b>Table 1</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• 1 cucumber</li> <li>• 3 radishes</li> <li>• <math>\frac{3}{4}</math> cup hummus</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• Teaspoon</li> </ul> <p style="text-align: center;"><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut cucumber into <math>\frac{1}{4}</math> inch slices.</li> <li>2. Put 1 teaspoon of hummus on top of cucumber.</li> <li>3. Put radish slice on top of hummus.</li> </ol>



<b>Table 2</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• 1 cucumber</li> <li>• 3 radishes</li> <li>• <math>\frac{3}{4}</math> cup hummus</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• Teaspoon</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut cucumber into <math>\frac{1}{4}</math> inch slices.</li> <li>2. Put 1 teaspoon of hummus on top of cucumber.</li> <li>3. Put radish slice on top of hummus.</li> </ol>



<b>Table 3</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• 1 cucumber</li> <li>• 3 radishes</li> <li>• <math>\frac{3}{4}</math> cup hummus</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• Teaspoon</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut cucumber into <math>\frac{1}{4}</math> inch slices.</li> <li>2. Put 1 teaspoon of hummus on top of cucumber.</li> <li>3. Put radish slice on top of hummus.</li> </ol>







<b>Table 4</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• 1 cucumber</li> <li>• 3 radishes</li> <li>• <math>\frac{3}{4}</math> cup hummus</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• Teaspoon</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut cucumber into <math>\frac{1}{4}</math> inch slices.</li> <li>2. Put 1 teaspoon of hummus on top of cucumber.</li> <li>3. Put radish slice on top of hummus.</li> </ol>



<b>Table 5</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• 1 cucumber</li> <li>• 3 radishes</li> <li>• <math>\frac{3}{4}</math> cup hummus</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• Teaspoon</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut cucumber into <math>\frac{1}{4}</math> inch slices.</li> <li>2. Put 1 teaspoon of hummus on top of cucumber.</li> <li>3. Put radish slice on top of hummus.</li> </ol>



 <h2 style="text-align: center;">Cucumber, Radish, and Hummus Bites</h2>	
<p><b>Ingredients</b>                  3 radishes                  1 cucumber                  Hummus</p> <p><b>Time:</b> 5 minutes  <b>Serving size:</b> 4 bites  <b>Servings per recipe:</b> 2</p>	 <p><i>Per serving:</i>  <b>Carbohydrates:</b> 10 grams  <b>Fiber:</b> 3 grams  <b>Added Sugar:</b> 0 grams  <b>Protein:</b> 3 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Slice radishes and cucumbers into bite-sized round pieces.</li> <li>2. Spread hummus on cucumber slice, top with radish, and enjoy!</li> </ol>	

 <h2 style="text-align: center;">Cucumber-Lemon Agua Fresca</h2>	
<p><b>Ingredients</b>                  Filtered water                  1 cucumber                  2 lemons</p> <p><b>Time:</b> 10 minutes  <b>Serving size:</b> 1 cup (8 fluid ounces)  <b>Servings per recipe:</b> one pitcher</p>	 <p><i>Per serving:</i>  <b>Carbohydrates:</b> 0 grams  <b>Fiber:</b> 0 grams  <b>Added Sugar:</b> 0 grams  <b>Protein:</b> 0 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Cut cucumber in half, slice it lengthwise into 4 sections, and place in pitcher.</li> <li>2. Cut lemons into thin slices, and add to pitcher.</li> <li>3. Fill pitcher with water, and chill in refrigerator.</li> <li>4. To serve, pour water into glasses, leaving the lemon and cucumber in pitcher. Refill the pitcher and reuse the lemon and cucumber a few times. They will stay fresh for 2 days if kept cold.</li> </ol>	

## LESSON 16: FAMILY EATING

**Recipes:** Winter Salad and Mint Cucumber Water

### LEARNING OUTCOMES

1. Describe the importance of family eating
2. Identify different family dining habits
3. Name several ideas for dinner discussion at home

### TEKS/CURRICULUM CONCEPTS

TEKS Concept	Subject	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
Mathematical process standards. Apply mathematics to problems arising in everyday life, society, and the workplace.	Math	3.1A	4.1A	5.1A
Geometry and measurement. Determine liquid volume (capacity) or weight using appropriate units and tools.	Math	3.7E		
Personal/interpersonal skills. Describe ways in which peers and families can work together to build a healthy community	Health	3.8A		
Identify similarities in which healthy environments can be promoted in homes, schools, and communities	Health		4.6A	
Personal/interpersonal skills. Describe the importance of being a positive role model for health	Health		4.8B	

## PREPARATION

<b>Prep Beforehand</b>	<input type="checkbox"/> Cucumber Mint Agua Fresca <input type="checkbox"/> Wash all fruits & vegetables <input type="checkbox"/> Clipboards with numbers
<b>To Set Up/Prep in the Garden</b>	<input type="checkbox"/> Set up tables: recipe cards and cooking directions <input type="checkbox"/> Cut out conversation starter cards <input type="checkbox"/> Write objectives/recipe/agua fresca on the board
<b>Other Items to Bring</b>	
<b>General</b>	<input type="checkbox"/> Lesson report form <input type="checkbox"/> Texas Sprouts workbooks <input type="checkbox"/> Pencils <input type="checkbox"/> Dry erase markers/eraser <input type="checkbox"/> Trash bags <input type="checkbox"/> Paper towel roll <input type="checkbox"/> Vinegar cleaning solution <input type="checkbox"/> Tape <input type="checkbox"/> 2 tables for instruction <input type="checkbox"/> First aid kit <input type="checkbox"/> 4 hand towels <input type="checkbox"/> Hornet spray <input type="checkbox"/> Compost and Recycling buckets
<b>Agua Fresca</b>	<input type="checkbox"/> Cucumber <input type="checkbox"/> Mint <input type="checkbox"/> Pitcher <input type="checkbox"/> Ice <input type="checkbox"/> 3 gallons water
<b>Cooking Activity</b>	<input type="checkbox"/> 5 student tables <input type="checkbox"/> Hand sanitizer <input type="checkbox"/> Cooking directions <input type="checkbox"/> Table numbers <input type="checkbox"/> Recipe cards <input type="checkbox"/> 20 cutting boards <input type="checkbox"/> 6 medium bowls <input type="checkbox"/> 1 large bowl <input type="checkbox"/> 30 knives <input type="checkbox"/> Plates and utensils <input type="checkbox"/> Measuring spoons and cups <input type="checkbox"/> Voting beans & jars <input type="checkbox"/> Sharp adult knife <input type="checkbox"/> Hose/bucket/sink for washing fruit  <u>Recipe ingredients:</u> <input type="checkbox"/> 1 bunch red radishes <input type="checkbox"/> 2 oranges <input type="checkbox"/> 2 pears <input type="checkbox"/> 1 bunch seasonal greens <input type="checkbox"/> 1 handful cilantro <input type="checkbox"/> Nuts or seeds <input type="checkbox"/> 1 block Cotija cheese  <u>Dressing:</u> <input type="checkbox"/> Olive oil <input type="checkbox"/> Apple cider vinegar <input type="checkbox"/> Salt <input type="checkbox"/> Powdered sugar <input type="checkbox"/> Dry mustard <input type="checkbox"/> Paprika <input type="checkbox"/> Pepper
<b>Workbook</b>	<input type="checkbox"/> Dinner Conversation Starters

**INTRODUCTION:** Welcome students back and go over objectives for the lesson, refresher of rules for the class (if you feel necessary) and point out the recipe and agua fresca for the day.

**DISCUSSION 1: WHAT IS A FAMILY DINNER?**

1. Tell students: Today, we are going to talk about eating with our families. Think about where and when you eat dinner with your family. Some of you may already eat dinner as a family. I am going to read about a few different situations and I want you to tell me if you think this is a family dinner or not.
2. Read situations aloud and ask students to respond with YES or NO. Clarify as needed.
  - a. Having McDonald's in the car on the way to the mall. **NO**
  - b. Eating at a restaurant with some or all of your family and talking about your day. **YES**
  - c. Eating dinner with just your brothers and/or sisters in front of the TV. **NO**
  - d. Eating dinner with just your brothers and/or sisters at the dinner table. **YES**
  - e. Having leftovers in your room alone while you finish homework. **NO**
  - f. Eating a small dinner when everyone comes home and quickly talks about his or her day. **YES**
3. Tell students: You just heard some examples of what IS and is NOT a family dinner. Can someone tell me what IS a family dinner? Call on a few students to share and clarify as needed. As students share, assistant writes these on the board.
  - a. A family dinner takes place when:
    - Some or all members of the family eat together
    - Eating that takes place at a dining table or in a common area with everyone facing each other
    - Conversations happen during this time
    - Family dinners usually last at least 30 minutes, but they can be longer or shorter
4. Tell students: Today, after we cook our meal, you will be pretending that your classmates are your family members. You will sit down to have a family meal together.

**COOKING ACTIVITY**

Ask students to open **page 81** of their workbooks and silently read over recipe. Ask students which of these vegetables they have tried before and hold up each one as you go over them. Release them to their cooking prep tables. Ask them to read the directions on the tables and hand sanitize.



## STUDENT PREP

Table #	Item to Prep	Materials Needed	Directions on Table
1	Radishes	4 cutting boards 6 knives 1 medium bowl	1. Cut tops off of radishes and put into compost bucket. 2. Cut radishes in half. 3. Slice thinly and put in bowl.
2	Cotija cheese	4 cutting boards 6 knives 1 medium bowl	1. Cut block of cheese into 4 or 5 parts-one part per student. 2. Carefully crumble cheese into bowl.
2	Cilantro	1 medium bowl	1. Tear leaves off stems and place in bowl. 2. Put stems into compost bin.
3	2 pears	4 cutting boards 6 knives 1 medium bowl	1. Cut pears in half. 2. Each student cuts a half-pear into small pieces, as shown.
4	2 oranges	4 cutting boards 6 knives 1 medium bowl	1. Remove peel from oranges and put into compost bin. 2. Separate orange slices. 3. Cut each slice into 3 pieces and put into bowl.
5	Bunched spinach	4 cutting boards 6 knives 1 medium bowl	1. Cut off stem part of bunch and put into compost bin. 2. Cut spinach into 1 inch pieces and put into bowl.

**Cooking Assistant Directions:** While students are chopping, prepare dressing. When students are finished chopping, collect all of their ingredients, combine in large bowl with dressing, and toss.

### WHILE EATING: CONVERSATION STARTERS

1. Tell students that they will be playing the conversation game. One person will pick up a card from the stack in the middle and ask the question to the person to their right. When they have finished answering, the person answering picks up a card and continues the game.
2. Tell students that they should eat slowly enough so that everyone has a chance to ask their question and have everyone respond.

3. Conversation starters:
  - a. What is your favorite childhood memory?
  - b. What is your favorite meal?
  - c. If you could invite any famous person for dinner, who would it be and why?
  - d. If you could travel to any country in the world, where would you go and why?
  - e. What is something that you have always wanted to do but have not done yet?
  - f. Can you remember one of the times you have laughed the hardest? Tell the story of what made you laugh.
  - g. What is your earliest memory? Can you remember when you were 3 years old? 4 years old? What comes to mind?
  - h. What is your favorite vegetable and way to prepare it?
  - i. If you were stranded on a desert island and could only have 2 single foods, what would you choose?
  - j. Can you think of a food that you have never tried but would like to try?
  - k. If you were to write a book, what would it be about?
  - l. What is your favorite smell?
  - m. If you were a fruit, which one would you be and why?
  - n. If you were a superhero, what power would you have?

#### **DISCUSSION 2: BENEFITS OF FAMILY EATING**

1. Ask students the following questions: What did you notice? Did you eat slower? What did you learn about your classmates that you didn't know before?
2. Summarize the benefits of family eating with students:
  1. Eat more slowly, helping you to stop eating when you are full.
  2. Helps avoid indigestion.
  3. Get along better with your family by getting to know them better.
  4. Enjoy your food since you are not distracted by other activities at the same time.

#### **VOTING ON THE RECIPE**

1. Pass out a bean to each student.
2. Assistant walks around to each table with two cups and instructs the students to place the bean in the "yes" cup if they liked the recipe and in the "no" cup if they did not like the recipe.

#### **CONCLUSION**

Based on learning outcomes, ask students to tell a partner what they learned in the lesson today. Then, ask the following questions as a whole group and elaborate/clarify as necessary.

1. What is the importance of family eating?
2. What are some different family dining habits?
3. Name 3 ideas for dinner discussion at home.

**CLASSROOM CONNECTIONS**

1. Study the picture below and write a paragraph describing what you see and how this way of eating is not healthy. Then draw a picture below that shows what he could be doing instead based on what you learned about Family Eating.

Image Credit:  
<http://blogs.longwood.edu/>



**COOKING INSTRUCTIONS FOR EACH TABLE**

<b>Table 1</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• Radishes</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• Medium bowl</li> </ul> <p style="text-align: center;"><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut tops off of radishes and put into compost bucket.</li> <li>2. Cut radishes in half.</li> <li>3. Slice thinly and put in bowl.</li> </ol>




Table 2	
Supplies	Directions
<ul style="list-style-type: none"> <li>• Cotija cheese</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut block of cheese into 4/5 parts-one part per student.</li> <li>2. Carefully crumble cheese into bowl.</li> </ol>



Table 2 (continued)	
Supplies	Directions
<ul style="list-style-type: none"> <li>• Handful cilantro</li> <li>• Medium bowl</li> <li>• 4 cutting boards</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Tear leaves off stems and place in bowl.</li> <li>2. Put stems into compost bin.</li> </ol>



Table 3	
Supplies	Directions
<ul style="list-style-type: none"> <li>• 2 pears</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut pears in half.</li> <li>2. Each student cuts a half- pear into small pieces, as shown.</li> </ol> 



<b>Table 4</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• 2 oranges</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Remove peel from oranges and put into compost bin.</li> <li>2. Separate orange slices.</li> <li>3. Cut each slice into 3 pieces and put into bowl.</li> </ol>



<b>Table 5</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• Bunched spinach</li> <li>• Medium bowl</li> <li>• 4 cutting boards</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut off stem part of bunch and put into compost bin.</li> <li>2. Tear spinach into 1 inch pieces and put into bowl.</li> </ol>



What is your favorite childhood memory?

What is your favorite meal?

If you could invite any famous person for dinner, who would it be and why?

If you could travel to any country in the world, where would you go and why?

What is something that you have always wanted to do but have not done yet?

Can you remember one of the times you have laughed the hardest? Tell the story of what made you laugh.

If you were a fruit, which one would you be and why?



If you could invite any famous person for dinner, who would it be and why?

What is your favorite vegetable?

If you were stranded on a desert island and could only have 2 single foods, what would you choose?

Can you think of a food that you have never tried but would like to try?



If you were to write a book, what would it be about?



What is your earliest memory? Can you remember when you were 3 or 4 years old? What comes to mind?

If you were a superhero, what power would you want to have?



RECIPES

 <h2 style="margin: 0;">Winter Salad</h2>	
<p><b>Ingredients</b></p> <p>2 bunches seasonal greens: such as kale, Swiss chard, spinach or lettuce          1/2 bunch radishes          1 orange or pear sliced          1/4 cup cilantro          1/3 cup nuts or seeds, such as pepitas          1/3 cup crumbled cotija cheese (optional)</p> <p><i>Dressing:</i></p> <p>½ cup olive oil          ¼ cup apple cider vinegar          1 teaspoon salt          ½ teaspoon powdered sugar          ¼ teaspoon dry mustard          ½ teaspoon paprika          ½ teaspoon pepper</p>	<p><b>Time:</b> 5 minutes  <b>Serving size:</b> ½ cup  <b>Servings per recipe:</b> 5</p> <div style="text-align: center; margin: 10px 0;">  </div> <p><i>Per Serving:</i></p> <p><b>Carbohydrates:</b> 21 grams  <b>Fiber:</b> 5 grams  <b>Added Sugar:</b> 2 grams  <b>Protein:</b> 11 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Chop all greens into bit-size pieces or ribbons and place in a large mixing bowl.</li> <li>2. Thinly slice radishes and fruit, and add them to the bowl.</li> <li>3. Add cilantro leaves and nuts to the bowl. Toast nuts if desired.</li> <li>4. Make the salad dressing. Mix salt, powdered sugar, dry mustard, paprika and pepper together. Add vinegar and stir well. Slowly add olive oil and mix well.</li> <li>5. Toss everything together, and top with cheese (if desired).</li> </ol>	

 <h2 style="margin: 0;">Mint Cucumber Water</h2>	
<p><b>Ingredients</b></p> <p>1 pitcher filtered water          1 cucumber          Handful of mint leaves          Ice</p> <p><b>Time:</b> 10 minutes  <b>Serving size:</b> 1 cup (8 fluid ounces)  <b>Servings per recipe:</b> one pitcher</p>	<div style="text-align: center; margin: 10px 0;">  </div> <p><i>Per serving:</i></p> <p><b>Carbohydrates:</b> 0 grams  <b>Fiber:</b> 0 grams  <b>Added Sugar:</b> 0 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Cut cucumbers into thin rounds.</li> <li>2. Crush mint leaves to release oil by pressing with fork.</li> <li>3. Put cucumbers and mint into pitcher of water, let steep for at least 30 minutes, add ice, and serve.</li> </ol>	



## LESSON 17: SEASONS/SPRING PLANTING

**Recipe:** Strawberry-Mint Agua Fresca

**Garden Taste Test**

### LEARNING OUTCOMES

1. Explore how the weather affects what foods we grow
2. Identify which vegetables grow in the different seasons
3. Explain why buying foods 'in season' is better for your health and the environment
4. Describe the difference between local foods and imported foods

### TEKS/CURRICULUM CONCEPTS

TEKS Concept	Subject	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
Observe, measure, record, and compare day-to-day weather changes in different locations at the same time that include air temperature, wind direction, and precipitation.	Science	3.8A		
Measure and record changes in weather and make predictions using weather maps, weather symbols, and a map key.	Science		4.8A	
Analyze and interpret information to construct reasonable explanations from direct (observable) and indirect (inferred) evidence.	Science			5.2D
Differentiate between weather and climate.	Science			5.8A

## PREPARATION

<b>Prep Beforehand</b>	<input type="checkbox"/> Strawberry Mint Agua Fresca <input type="checkbox"/> Clipboards with numbers
<b>To Set Up/Prep in the Garden</b>	<input type="checkbox"/> Set up tables: holiday/season/vegetable cards, fruit/vegetable with sticker <input type="checkbox"/> Clipboards with pictures of warm and cool season vegetables around garden <input type="checkbox"/> Write objectives/agua fresca on the board <input type="checkbox"/> Draw quadrant for seasons on board
<b>Other Items to Bring</b>	
<b>General</b>	<input type="checkbox"/> Lesson report form <input type="checkbox"/> Pencils <input type="checkbox"/> Trash bags <input type="checkbox"/> Vinegar cleaning solution <input type="checkbox"/> 2 tables for instruction <input type="checkbox"/> 4 hand towels <input type="checkbox"/> Compost and Recycling buckets <input type="checkbox"/> Texas Sprouts workbooks <input type="checkbox"/> Dry erase markers/eraser <input type="checkbox"/> Paper towel roll <input type="checkbox"/> Tape <input type="checkbox"/> First aid kit <input type="checkbox"/> Hornet spray
<b>Activity 1</b>	<input type="checkbox"/> Vegetable pictures for clipboards
<b>Discussion 1</b>	<input type="checkbox"/> Fruit or vegetable with sticker with location
<b>Activity 2</b>	<input type="checkbox"/> Seeds <input type="checkbox"/> Transplants <input type="checkbox"/> Compost <input type="checkbox"/> Yard Sticks <input type="checkbox"/> Shovels <input type="checkbox"/> Watering Cans
<b>Agua Fresca</b>	<input type="checkbox"/> Strawberries <input type="checkbox"/> Pitcher <input type="checkbox"/> 3 liters club soda <input type="checkbox"/> Mint <input type="checkbox"/> Ice
<b>Garden Taste Test</b>	<input type="checkbox"/> 5 student tables <input type="checkbox"/> Knife <input type="checkbox"/> Plates and utensils <input type="checkbox"/> Veggies <input type="checkbox"/> Hand sanitizer <input type="checkbox"/> Cutting board <input type="checkbox"/> Hose/bucket/sink for washing <input type="checkbox"/> Garden shears
<b>Workbook</b>	<input type="checkbox"/> Weather & Climate <input type="checkbox"/> Seasonal Foods

**INTRODUCTION:** Welcome students back and go over objectives for the lesson, refresher of rules for the class (if you feel necessary) and point out the recipe and agua fresca for the day.

### GARDEN GLANCE

1. Tell students to turn to **page 82** of their workbook and take notes while they walk around and observe the garden for 5 minutes (set timer). Walk around with students, getting to know them, asking what they see, etc.

- a. Have them record observations in their workbook while walking around.
2. Call students back to the group and call on a few students to share aloud.

### ACTIVITY 1: SEASONS

1. Ask what the seasons are and write in quadrants on the board. Ask students what they know about them. Then, ask them to describe the weather in these seasons and write in those descriptions.

<b>COOL SEASON</b> <b>CROPS</b> (grow below ground, smaller)	<b>Fall</b> (Cool, sun, leaves falling)	<b>Winter</b> (cold, less sun-shorter days, rain, cooler soil)
<b>WARM SEASON</b> <b>CROPS</b> (grow above ground, bigger)	<b>Spring</b> (lots of rain, warm, humid)	<b>Summer</b> (lots of sun-longer days, very hot, little rain, hotter soil)

2. Tell students: Certain plants like it to be hot and sunny to grow, others like it cold and need less sun to grow. Let's talk about what the differences are in each of the four seasons and figure out which plants like to grow in each one.
3. Ask students:
  - Do you think vegetables that grow in cold weather would be more likely to be small or bigger?  
*Answer: smaller (because they want to be closer to the ground to stay warm)*
  - Do you think in cold weather you might have more edible parts growing above ground or below ground?  
*Answer: below ground to protect them from the cold*
  - What about the warm season? Would more sun and longer days make plants bigger or smaller?  
*Answer: bigger*
  - Would they be more likely to have their edible parts above ground in the warm weather or below ground?  
*Answer: above ground*
4. Divide students into 5 groups.
5. Point out clipboards of vegetable pictures that have been placed around the outdoor classroom area. Ask groups to walk around to the pictures of different vegetables clipboards and decide whether or not they think it grows in the Fall/Winter or Spring/Summer. \*Make sure pictures have the ENTIRE plant with a measure scale, not just the edible part of the vegetable.
6. After groups have gone to each clipboard, ask them to bring up the picture of the last plant they discussed and choose one student per group to tape it on the board next to the cool or warm season heading. An assistant will bring the rest of the clipboards up and pick a few different students to tape them up where they think they should go.
7. After they have finished, ask the class if they agree with the answers and discuss/clarify as needed.

## DISCUSSION 1: WHERE DOES MY FOOD COME FROM?

1. Ask students: If fruits and vegetables need specific temperatures to be able to grow, how is it that we can buy tomatoes, for example, in the winter even though they need a lot of heat and sun to grow?
2. See if a student is able to answer correctly.
  - a. *Answer: Those tomatoes are grown in a different part of the country/world and then imported to Texas/ the United States.*
3. Tell students: If we only buy foods that are “in season,” they are more likely to be grown nearby, they don’t have to travel as far to get to us, they taste better and are usually cheaper.
4. Hold up a fruit or vegetable and show students that you can often look on the sticker to see where it was grown. Many stores also have signs for the local vegetables too, look for these when you are at the grocery store next time.

## ACTIVITY 2: SPRING PLANTING

1. Tell students what plant they will be planting today (each class will plant a different plant\*).
2. Look at seed packet or picture or transplant on their table of ‘their’ plant.
3. Let’s see what it says about the seeds your class will be planting.
4. Remind students that they can just use their fingers as a measure. Ask students to hold up their index fingers and explain what one-inch, ½ an inch, ¼ inch, etc. looks like in relation to their finger (approx. 1/2” to first knuckle, 1” to second knuckle).
5. Take students to the garden and show them where they will be planting. Add compost and have groups of students work the soil first by simple digging and flipping technique to soften and level it. Use yard sticks to help students know where to plant their seeds.
6. Tell students: Normally, we would be watering our plants, but since several classes are planting, we will be watering at the end of the day.

\*Procedures for each crop:

Plant	Seed Depth	Seed Spacing	Notes
Cucumber	½ inch	6 inches apart	Plant seeds next to trellis to vine up.
Eggplant	½ inch	12 inches apart	
Green Beans (Bush)	¾ inch	6 inches apart	
Peppers	Transplant	18 inches apart	In groups, students will divide tasks of preparing soil, digging hole, putting in plant and filling in soil.
Squash	½ inch	6 inches apart	
Tomato	Transplant	18 inches apart	In groups, students will divide tasks of preparing soil, digging hole, putting in plant and filling in soil. Show students the hairs on the stem of the tomato plant and explain that if you plant it a few inches deeper, with only a few leaves showing, it will help develop a strong root system.

### GARDEN TASTE TEST & AGUA FRESCA TASTING

1. Tell students they will have a garden taste today that will be a whole food. Depending on what there is an abundance of, choose something that students can have a taste of from the garden (supplement with grocery items as needed).
  - a. Each table group will pick ONE vegetable and take it to the assistant who will wash and cut up in smaller pieces for students to try.

### VOTING ON THE TASTE TEST & AGUA FRESCA

1. Pass out two beans to each student.
2. Assistant walks around to each table with two cups and instructs the students to place the bean in the “yes” cup if they liked the taste test and in the “no” cup if they did not like the taste test.
  - a. Repeat for voting on the agua fresca.

### CONCLUSION

Based on learning outcomes, ask students to tell a partner what they learned in the lesson today. Then, ask the following questions as a whole group and elaborate/clarify as necessary.

1. How does the weather affect what foods we grow?
2. Which vegetables grow in the cool season? Which vegetables grow in the warm season?
3. Why is buying and eating foods that are growing in this season better for your health and the environment?
4. What is the difference between local foods and imported foods?



### CLASSROOM CONNECTIONS

1. In which season do you think the sun is strongest? Why?
2. Discuss why this squash plant looks like this?



Image Credit: extension.umn.edu

### RECIPE

 <b>Strawberry-Mint Agua Fresca</b>	
<p><b>Ingredients</b>            Filtered water            5 strawberries, sliced            Handful of mint leaves            Ice</p> <p><b>Time:</b> 10 minutes  <b>Serving size:</b> 1 cup (8 fluid ounces)  <b>Servings per recipe:</b> one pitcher</p>	 <p><i>Per serving:</i>  <b>Carbohydrates:</b> 0 grams  <b>Fiber:</b> 0 grams  <b>Added Sugar:</b> 0 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Crush or mull mint leaves.</li> <li>2. Combine water, strawberries, and crushed mint leaves with ice and mix.</li> </ol>	

## LESSON 18: FINAL REVIEW

**Recipes:** Veggie Stir-Fry and Watermelon Basil Agua Fresca

### LEARNING OUTCOMES

1. Describe concepts learned during the year about gardening and nutrition
2. Brainstorm ideas about what students could incorporate into their own lives
3. Identify a few gardening/nutrition-related jobs
4. Explain connections between the garden and nutrition lessons and how they affect the environment around them

### TEKS/CURRICULUM CONCEPTS

TEKS Concept	Subject	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
Explain how personal-health habits affect self and others	Health	3.1A		
Identify similarities in which healthy environments can be promoted in homes, schools, and communities	Health		4.6A	
Describe the importance of being a positive role model for health	Health		4.8B	
Identify the importance of taking personal responsibility for developing and maintaining a personal health plan such as fitness, nutrition, stress management, and personal safety	Health		4.1F	

## PREPARATION

<b>Prep Beforehand</b>	<input type="checkbox"/> Watermelon Basil Agua Fresca <input type="checkbox"/> Wash all fruits & vegetables <input type="checkbox"/> Clipboards with numbers	<input type="checkbox"/> Pre-cook brown rice <input type="checkbox"/> Pre-cook tofu
<b>To Set Up/Prep in the Garden:</b>	<input type="checkbox"/> Set up tables: recipe cards <input type="checkbox"/> Draw “garden” circle on board & “food” circle on board <input type="checkbox"/> Write objectives/recipe/agua fresca on the board	
<b>Other Items to Bring</b>		
<b>General</b>	<input type="checkbox"/> Lesson report form <input type="checkbox"/> Pencils <input type="checkbox"/> Trash bags <input type="checkbox"/> Vinegar cleaning solution <input type="checkbox"/> 2 tables for instruction <input type="checkbox"/> 4 hand towels <input type="checkbox"/> Compost and Recycling buckets	<input type="checkbox"/> Texas Sprouts workbooks <input type="checkbox"/> Dry erase markers/eraser <input type="checkbox"/> Paper towel roll <input type="checkbox"/> Tape <input type="checkbox"/> First aid kit <input type="checkbox"/> Hornet spray
<b>Agua Fresca</b>	<input type="checkbox"/> Watermelon <input type="checkbox"/> Pitcher <input type="checkbox"/> 3 liters club soda	<input type="checkbox"/> Mint <input type="checkbox"/> Ice
<b>Cooking Activity</b>	<input type="checkbox"/> 5 student tables <input type="checkbox"/> Cooking directions <input type="checkbox"/> Recipe cards <input type="checkbox"/> 12 knives <input type="checkbox"/> Measuring spoons and cups <input type="checkbox"/> Propane stove <input type="checkbox"/> Sharp adult knife <input type="checkbox"/> Hose/bucket/sink for washing fruit	<input type="checkbox"/> Hand sanitizer <input type="checkbox"/> Table numbers <input type="checkbox"/> 15 cutting boards <input type="checkbox"/> Plates and utensils <input type="checkbox"/> Voting beans & jars <input type="checkbox"/> Wok <input type="checkbox"/> 5 medium bowls
	<u>Recipe ingredients:</u> <input type="checkbox"/> 2 cups cooked brown rice <input type="checkbox"/> Olive oil <input type="checkbox"/> 2 bell peppers <input type="checkbox"/> 1 bunch green onions <input type="checkbox"/> 1 head broccoli <input type="checkbox"/> Garlic <input type="checkbox"/> 1 block firm tofu <input type="checkbox"/> Teriyaki sauce <input type="checkbox"/> 1 head cabbage <input type="checkbox"/> Bean sprouts <input type="checkbox"/> 1 cup snow Peas <input type="checkbox"/> Black pepper <input type="checkbox"/> Salt	
<b>Workbook</b>	<input type="checkbox"/> Reflection page	

**INTRODUCTION:** Welcome students back and go over objectives for the lesson, refresher of rules for the class (if you feel necessary) and point out the recipe and agua fresca for the day.

## COOKING ACTIVITY

1. Review knife safety from Week 1 with students (page 5 of educator curriculum).
2. Ask students to open to **page 90** of their workbooks and silently read over recipe. Ask students which of these vegetables they have tried before and hold up each one as you go over them. Release them to their cooking prep tables. Ask them to read the directions on the tables and hand sanitize.

## STUDENT PREP

Table #	Item to Prep	Materials Needed	Directions on Table
1	Red bell pepper (2)	4 cutting boards 6 knives Medium bowl	1. Cut off stem 2. Remove seeds 3. Cut in half, then strips. Final pieces about ¼ inch long.
2	Green onions	4 cutting boards 6 knives Medium bowl	1. Cut off root. 2. Cut in ½ inch pieces.
3	Head of broccoli	4 cutting boards 6 knives Medium bowl	1. Cut off stalk of broccoli. 2. Tear off each floret, and cut into bite-sized pieces.
4	½ head of cabbage	4 cutting boards 6 knives Medium bowl	1. Lay the flat side of the cabbage down, and slice into very thin strips. *Assistant should help get them started.
5	½ head cabbage	4 cutting boards 6 knives Medium bowl	1. Lay the flat side of the cabbage down, and slice into very thin strips. *Assistant should help get them started.

**Cooking Assistant Directions:** Heat large skillet over high heat on propane stove. Add oil and garlic, and cook for 1-2 minutes. Once students are finished chopping, collect vegetables and cook according to recipe card. Serve over brown rice.

## DISCUSSION AND ACTIVITY: WEB OF KNOWLEDGE

1. Draw two circles on the board, one labeled with GARDEN and the other FOOD.
2. Tell students: We are going to spend today celebrating all of the great things we have been learning this year about the garden, plants, the environment, cooking, nutrition and food. I'd like for you all to reflect on all we did this year and share something you learned. Some ideas for what you might share:
  - a. An activity or recipe you really liked
  - b. Something that you might apply to your own life in gardening or cooking
  - c. A new topic that you learned about
  - d. A new food that you tried
  - e. A nutrition fact you learned
3. As the students begin to share things, the teacher should write it on the board and draw connecting lines to either GARDEN or FOOD circles (or both).



4. After all students have shared, the teacher should find some additional connections, perhaps between two items that students shared so that the chart becomes more web-like.
5. Teacher can then ask some additional questions to add more to the “web”
  - a. What are some recipes that we had that you’d like to eat at home?
  - b. Can you think of some jobs that are related to the topics and areas we have been learning about?  
*Farmer, chef, nutritionist, dietician, scientist, landscaper, landscape designer, teacher, caterer*
  - c. Are there any new things you now think about when you are making food choices?
  - d. Have you found any opportunities to tell others outside of your class (like your family and friends) about things you have learned or recipes you have tried?
6. Tell students: You can see all of the connections between the many different activities that we have been doing, how can you apply these things in your life, and areas where you now have the opportunity to educate other people in your life. To do this, you are going to come up with some goals and action steps for how to achieve them. We will look at some examples first to give you some ideas.
7. Open your notebooks to **page 88**. Read over some of the choices with students and then ask them to think for a moment before filling it out for themselves.
8. If there is time, have students share their goals with a classmate/whole class.

### **RECIPE & AGUA FRESCA TASTING**

Assistants should serve a small sample on each plate, pour a serving of the agua fresca in each cup, and help distribute to students.

### **VOTING ON THE RECIPE & AGUA FRESCA**

1. Pass out two beans to each student.
2. Assistant walks around to each table with two cups and instructs the students to place the bean in the “yes” cup if they liked the recipe and in the “no” cup if they did not like the recipe.
  - a. Repeat for voting on the agua fresca.

### **CLASSROOM CONNECTIONS**

1. Write a letter to an imaginary child your age in another city telling them about something you learned or experiences over this year.
- OR
2. Write a paragraph explaining how you will be changing something about the way you eat based on what you have learned in the Texas Sprouts lessons.

COOKING INSTRUCTIONS FOR EACH TABLE



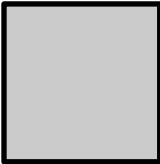
Table 1	
Supplies	Directions
<ul style="list-style-type: none"> <li>• 2 bell peppers</li> <li>• 4 cutting boards</li> <li>• 4 knives</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut off stem and cut in half.</li> <li>2. Remove seeds.</li> <li>3. Slice into strips and then into cubes, as pictured.</li> </ol> 



Table 2	
Supplies	Directions
<ul style="list-style-type: none"> <li>• Green onions</li> <li>• 4 cutting boards</li> <li>• 4 knives</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut off root.</li> <li>2. Cut into small pieces, as pictured.</li> </ol> 



<b>Table 3</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• 1 head broccoli</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Cut off stalk of broccoli.</li> <li>2. Cut off or tear off each floret.</li> <li>3. Cut each piece into bite-sized pieces, as pictured.</li> </ol> 





<b>Table 4</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• ½ head cabbage</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Lay the flat side of the cabbage down, and slice into very thin strips.</li> </ol>


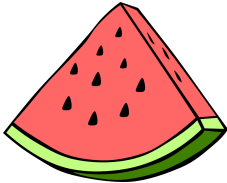


<b>Table 5</b>	
<b>Supplies</b>	<b>Directions</b>
<ul style="list-style-type: none"> <li>• ½ head cabbage</li> <li>• 4 cutting boards</li> <li>• 6 knives</li> <li>• Medium bowl</li> </ul> <p><i>Don't forget to use hand sanitizer!</i></p>	<ol style="list-style-type: none"> <li>1. Lay the flat side of the cabbage down, and slice into very thin strips.</li> </ol>



RECIPE

 <h2 style="margin: 0;">Veggie Stir-Fry</h2>	
<p><b>Ingredients</b></p> <ul style="list-style-type: none"> <li>1.5 cups brown rice</li> <li>2 tablespoons olive oil</li> <li>1 red bell pepper, cored, seeded and sliced</li> <li>1 head of broccoli, cut in florets</li> <li>1 clove garlic, minced</li> <li>Green onion</li> <li>8 ounces firm tofu, cut into large chunks</li> <li>½ cup teriyaki sauce (less than 2g sugar per serving)</li> <li>½ head of cabbage, sliced</li> <li>½ cup bean sprouts</li> <li>½ cup snow peas</li> <li>¼ teaspoon black pepper</li> <li>¼ teaspoon salt</li> </ul>	<p><b>Time:</b> 10 min  <b>Serving size:</b> 2 cups  <b>Servings per recipe:</b> 6</p>  <p><i>Per serving:</i>  <b>Carbohydrates:</b> 15 grams  <b>Fiber:</b> 4 grams  <b>Added Sugar:</b> 0 grams  <b>Protein:</b> 7 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Cook brown rice according to directions on package. Then, heat a wok or large skillet on high heat.</li> <li>2. Add oil, onions and garlic and cook for one or two minutes.</li> <li>3. Add bell pepper, broccoli and tofu and cook for two minutes.</li> <li>4. Add cabbage and snow peas and cook for one minute. Add bean sprouts and teriyaki sauce and cook for two minutes. Serve over brown rice.</li> </ol>	

 <h2 style="margin: 0;">Watermelon Basil Water</h2>	
<p><b>Ingredients</b></p> <ul style="list-style-type: none"> <li>1 pitcher filtered water</li> <li>2 slices of watermelon</li> <li>Handful of basil leaves</li> <li>Ice</li> </ul> <p><b>Time:</b> 10 minutes  <b>Serving size:</b> 1 cup (8 fluid ounces)  <b>Servings per recipe:</b> one pitcher</p>	 <p><i>Per serving:</i>  <b>Carbohydrates:</b> 0 grams  <b>Fiber:</b> 0 grams  <b>Added Sugar:</b> 0 grams</p>
<p><b>Directions</b></p> <ol style="list-style-type: none"> <li>1. Cut watermelon slices into cubes and place in pitcher.</li> <li>2. Add basil leaves, water, and ice to pitcher, and serve.</li> </ol>	

This curriculum was created by:

# TX sprouts

