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## The Meal Gap: A Food Activist Curriculum

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The Meal Gap: A Food Activist Curriculum

by

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Museum Education: Childhood

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Bank Street College of Education

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## Abstract




*The Meal Gap: A Food Activist Curriculum* is a series of fifty-four lessons for fourth grade students that introduces them to the topic of food insecurity. The Food and Agriculture Organization (FAO) of the United Nations initiated the World Food Summit in 1996 to discuss and call attention to the “widespread undernutrition and growing concern about the capacity of agriculture to meet future food needs” (Food and Agriculture Organization, n.d.). The June 2006 Policy Brief of the FAO reaffirmed the 1996 definition of food security, which states that “Food security exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (p. 1). The FAO further elaborated that food security depends on four main components: utilization, availability, access, and stability (p. 1). These components form the main units of this curriculum because they encompass more than the issue of financial access to food, but consider the complex and interconnected reasons why food insecurity exists in “food rich” societies such as the United States.

## Acknowledgements

This project would have been impossible without Aimee Arandia Ostensen, Mollie Welsh Kruger, Carol Accetta, and Caitlin Whittington. Thank you Aimee Arandia Ostensen for your tireless support in helping me think critically about food insecurity. Your guidance, questions, and conversations assisted me in creating a curriculum that is thoughtful, rigorous, and equitable. Thank you Mollie Welsh Kruger, instructor at Bank Street Graduate School, and Carol Accetta, a Bank Street alum, for being sources of encouragement throughout this process. Your feedback, input, and positive words of support helped me to persevere and complete this project when the curriculum seemed too daunting and overwhelming to finish. Thank you, Caitlin Whittington, Graphic and Exhibition Designer at the New York Public Library for the Performing Arts, for creating the unit graphics for each section. Your vision and aesthetic in interpreting the core content in each unit exceeded what I expected.

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# Educator's Letter

Dear Educator,

Welcome to the *Meal Gap: A Food Activist Curriculum*, designed for fourth grade students. The *Meal Gap* is an interdisciplinary curriculum which will provide educators and students with lessons on the financial, social, and economic causes of food insecurity. The *Meal Gap* is divided into seven units, which build upon the concept of food insecurity. The seven units are:

- Unit 1, titled Food and Culture, focuses on what is food and what role does it play in cultures around the world
- Unit 2, Food Insecurity: What is it?, introduces students to the elements of utilization, availability, access, and stability, all of which the Food and Agriculture Organization of the United Nations says contribute to food security
- Unit 3, which looks at Physical Availability of Food, centers on where food comes from
- Unit 4, Food as Medicine: Food Utilization, calls attention to the science of food and how the body uses it
- Unit 5, titled Economic Access to Food, zeroes in on how finances affect people's access to food
- Unit 6, Stability & Social Safety Nets, points out that the stability of food availability, food utilization, and economic access are essential in being

food secure, and that there are social safety nets available if one does experiences food insecurity

- Unit 7, Students as Food Activists, is where students learn how to share their knowledge about food insecurity by creating a children's picture book

This curriculum will utilize children's literature, field trips (with pre- and post-trip activities), and a host of other resources such as handouts, video, and audio recordings to provide students with different perspectives on the food insecurity issue. The lessons in each unit will include a guiding question, objectives, and key concepts, as well as a warm up, work time, wrap up, and unit standards. The titles of videos and audio recordings, articles, infographics, notes to educators, and handouts appear in bold type. In addition, articles, infographics, and handouts are available at the end of each unit.

The goal of this curriculum is for students to become more aware of their food needs as well as the food needs of others and how access to food may not be as readily available as they might believe. Students will have a range of experience with food security, based on their socio-economic backgrounds, from knowing food insecurity on a daily basis to being completely unaware of it. Thus this curriculum can serve as either a mirror into their own lives or a window into the lives of others.

Sincerely,

Kameshia L. Shepherd



# Why Study Food Insecurity?

Though the issue of food insecurity is a global one, for the purposes of this curriculum, I will focus on the U.S. because my target audience is fourth grade students who are still learning about their own local and regional communities.

This curriculum on food insecurity is especially timely and relevant due to the global and local challenges households face in providing enough food for themselves and their families. According to the United States Department of Agriculture's (USDA) Economic Research Report 2017 statistics on food insecurity, 87.7% of U.S. households were food secure and reported so on the Current Population Food Security Survey. However, 12.3% of U.S. households experienced some form of food insecurity in 2016, which is roughly 43 million people (Coleman-Jensen, 2017). Writing for *The Washington Post*, journalist Lyndsey Layton (2015) stated the following:

51 percent of students in pre-kindergarten through 12th grade in the 2012-2013 school year were eligible for the federal program that provides free and reduced-price lunches. The lunch program is a rough proxy for poverty, but the explosion in the number of needy children in the nation's public classrooms is a recent phenomenon that has been gaining attention among educators, public officials and researchers.

This article highlights that while 12.3% of U.S. households are experiencing food insecurity, the percentage is much higher for children.

There is a growing awareness in the U.S. that food insecurity affects people in every community and is not limited to starving people in far-flung countries. Whether in an urban, suburban, or rural area, the issue of food insecurity affects many different groups in our society. According to the Feeding America website, food insecurity significantly impacts senior citizens, children, rural communities, African-American communities, and Latino communities (Feeding America, 2018). It is becoming more likely that, at some point, every American child will either experience food insecurity or know someone who does.

Like Lucy Sprague Mitchell, I hope this curriculum will “enlarge students’ circles of understanding of the world around them; and... enlarge students’ circles of caring--the kind of caring that [leads] to commitment [and stirs activism]” (Vascellaro, 2011, p. 100). I also hope that the more we bring awareness to an issue, the more informed those who are food secure will be and the less stigmatized those who experience food insecurity will feel.

# Development of the Curriculum

*The Meal Gap* had a circuitous route in its development. Several Bank Street classes, various professors, and the *Teaching Economics: Using Children's Literature* curriculum by Harlan Day et al. (1997) that I purchased in 2002 all culminated in this curriculum.

During the fall semester of 2015, I took a class titled *EDUC 518 School/Museum Curriculum Development* with Roberta Altman. The objective of this course was to provide students with the opportunity to create inquiry-based curriculum that was conceptually oriented and developmentally appropriate. A major component of the curriculum was the creation of a teacher-led museum field trip. This trip was the highlight of the curriculum and required both a pre-trip and a post-trip component as well as an object study. The curriculum I created for EDUC 518 was titled *The Wonderful World of Resources: A Farm-to-Table Curriculum for English Language Learners*, based in part on the *Teaching Economics* curriculum, which engages learners in economic concepts by using children's picture books. My curriculum aimed to provide students with a genuine farm-to-table experience by using popular children's picture literature as a platform for learning about sustainable agricultural practices. Also inspired by *Teaching Economics*, *The Meal Gap* will feature children's books that highlight needs and wants, food insecurity, and community organizations which provide aid for those who are hungry.

Another factor in the development of *The Meal Gap* were the courses *EDUC 564 Language, Literature, and Emergent Literacy* taught by Michele Ryan and *EDUC 513 Social Studies Curriculum Development for Inclusive and Special Education Settings (Grades 1-6)* instructed by Jessica Wontropki. *EDUC 564* centered on examining the role literature plays in the life of students and how we as educators can utilize children's books to highlight a text's features and genres, express experiences, and extend children's understanding of social studies content. For this course, I selected a book titled *Maddi's Fridge* (2014), by Lois Brandt, to focus on and was impressed with how the author discussed the topic of food insecurity. This book in particular caused me to consider how books for grades K-5 can be conduits to highlighting social justice topics in a concrete and accessible way for elementary school students. *Maddi's Fridge* is the primary text for this curriculum and will be the framework for the picture books that students will create. The *EDUC 513* course aimed at having participants analyze social studies content for biases and develop integrated curriculum with a social justice component, which made me rethink the goal of social studies. For this course, I collaborated on a curriculum that highlighted the Civil Rights Movement as well as the Black Panther Party for Self-Defense, titled *Power to the People*.

When the time came to decide on a final integrative masters project, I was drawn to the freedom of creating an IMP that could showcase my strengths in creating experiences through curriculum. Using the knowledge I gained in creating *The Wonderful World of Resources* and the *Power to the People* curriculums, I wanted to design lessons that encompassed economics, resources, and social justice. Not sure of

where to start and who to speak to, I thought of reaching out to a school that focused on resources and social justice. The school that came to mind was the Manhattan Country School (MCS) because it is an institution devoted to nurturing “students as future leaders whose shared experiences in learning and activism inspire them to champion excellence and justice, compassion and peace, and the rights of all people to racial, economic, environmental and educational equity” (Manhattan Country School, n.d.).

After visiting MCS and explaining my project to administration, the head of the lower school suggested I speak with Aimee Arandia Ostensen, a former Manhattan Country School teacher. She has been a perfect fit as my content advisor. Ostensen’s goal for me in this curriculum is to “create model materials in an area where there are still so few resources, and where it is critical to have curricula that encourage teachers and students to explore food systems through the lenses of personal responsibility, social justice, and sustainability.”

Afterwards, I sent an email to Mollie Welsh Kruger, a professor at Bank Street, asking if she would be interested in collaborating with me on this project. Bank Street requires at least one of your advisors to be a Bank Street instructor, and I thought Mollie would be a great fit. I had observed her teaching *EDUC 865 Children’s Literature for Grades 3-6* and appreciated how knowledgeable she was about literature and how she challenged students’ thinking about biases they might have regarding content in literature. Kruger agreed to be my Bank Street advisor and has guided me on thinking about why I want to create this curriculum and how to think about the development of the child. Her goal for me in this curriculum is for me to “create a planning tool that

would enable other educators to build learning experiences and explorations for their students around these food issues that impact our health and well-being [physically, socially, and emotionally].”

*The Meal Gap: A Food Activist Curriculum* is created with Dewey’s “educative experience” philosophy where teacher instruction, content, and experience lead to students having a greater application of knowledge and stronger commitment to action. This curriculum is in line with Dewey’s “educative experience” approach and my own educational philosophy which centers on exposure, experience, and application.

# Child Development

Dorothy Cohen in her book *The Learning Child* (1972) writes extensively on 8- to 11-year-olds for whom this curriculum was designed. She highlights three main shifts that take place in the development of the middle years. The first is the moral and ethical growth of 8- to 11-year-olds which enables them to execute their responsibilities. The second is a step towards independence as well as the assimilation of gender roles. The third is how this age group learns and how they become more objective about and aware of the world around them. Cohen also highlights what type of curriculum is suitable for them. For this curriculum I will be focusing on selfhood development, moral/ethical development, and the learning style and quality of the intermediate age.

“Irresponsibility without guilt” is the phrase Cohen (1972) uses to describe 8- to 11-year-olds. Cohen uses the word enthusiastic to illustrate this age group. Children in the intermediate years are enthusiastic for self-directed activities, enthusiastic about creating games and using a variety of materials in their play, and enthusiastic about veering off from their planning when “imagination called for spur-of-the-moment exploration and experimentation” (p. 205). They make time for daydreaming and musing yet are aware of the difference between make-believe and reality (p. 205-206).

Cohen (1972) highlights the middle years as a shift from childhood toward a growing need for freedom from adult influence, authority, and preferences. Children in this stage learn to take on more adult protected tasks (e.g., crossing the street by themselves) and are more able to acknowledge their misbehaviors and face the logical

consequences of their words and actions at school and amongst their peer group. This newfound confidence begins “the process of undermining adult domination of their behavior” (p. 218). Though 8s to 11s have a need for independence, they also have a need to feel safe and taken care of. The individuals who provide a sense of safety are adults in their home, school, and community, the very same individuals from whom they desire liberation (p. 219).

Group alignment is also a hallmark of the intermediate years. 8s to 11s have a profound desire to band together to establish themselves as independent beings from their parents. They want to fit in and conform in language, dress, deportment, taste, and activities within their peer group. Their current world is centered around rules that govern their everyday lives. They believe these rules, accept these rules, and participate in these rules. As a result, nonconformity to the rules will be confronted and managed. 8s to 11s have also have a no nonsense view of relating and thinking about others (Cohen, 1972, p. 220).

This age group’s moral and ethical beliefs are starting to emerge. Cohen states how “growth in moral behavior in general follows a zigzagging path from self-interest to social responsibility” (Cohen, 1972, p. 225). Children up to the age of 11 assume that right and wrong choices and actions can only be answered by immediate physical consequences. However, during the intermediate years, a subtle developmental shift from the subjective to the objective begins to take place. Topics that impact this age group make it easier for them to comprehend the expectations of family, groups, and national norms in which they begin to make sense of these objective issues in their own



way (p. 225). Topics such as law and order, individual rights, religious, cultural, and ethnic differences also enter the sphere of understanding and concern of this age group. Their world now includes peers but also “the customs and attitudes of the nation,” patriotism, as well as in-group and out-group prejudices (p. 226).

Chip Wood’s *Yardsticks: Children in the Classroom Ages 4-14* (2015) echoes Cohen’s views of the social-emotional development of this age group. 8s and 9s, notes Wood, often complain about fairness and are in the initial stages of seeing the bigger world, including the social piece (p. 110-111). 10s continue to develop in maturing around fairness and social justice. They are maturing in their sense of right and wrong and are highly sensitive and are able to begin resolving questions of fairness and other social issues (p. 124).

While children in the intermediate age are maturing and beginning to understand their place in the world and developing a moral consciousness, society, states Cohen, is having an adverse impact on them. These carefree, play-centered years are no longer spent in play and exploration, but are filled with “planned obsolescence and constant replacement of goods” (Wood, 2015, p. 209). They are conditioned by billboards, commercials, television shows, and product placement to become consumers. They are informed by advertisers that they will have an infinite supply of new toys and gadgets for endless fun. However, the inevitable happens when the new gadget breaks or falls apart. This buy-and-break policy conditions children to not become too attached to their toys and be quick about playing with them. Planned obsolescence is depriving children of the middle years argues Cohen. In this consumer-driven society, kids are no longer able to

easily manage and direct their own play and learning. The typical behavior of creative use of materials and spontaneous play that allows 8s to 11s to gain confidence in the belief that they are intelligent human beings is disappearing among today's children of middle years (p. 209).

I echo Cohen's views on how marketing is impacting the minds and habits of children. Our society is shifting to a place where our wants are outweighing our needs. Adults and children are becoming preoccupied with shopping from the "right" store and acquiring the "right" product, whether that be a phone, a car, or even a soft drink. These consumerism lessons from society on what to buy, how much to buy, and where to buy from then propels individuals to believe that they are better than those who do not amass these goods. What can be done to counteract this pervasive and destructive belief system of buy and discard? Educators who hold a strong social justice belief system of their own can create an atmosphere that compels their students to be activists, changemakers in considering the needs of others.

Cohen (1972) articulates how 8s to 11s are ready and capable of analyzing many of the social and ethical questions humanity has grappled with, but also issues that are unique in the current culture and time in which they live (p. 240). These intermediate years are a period in time in which children are pivoting away from firm absolutes towards understanding situations, circumstances, or concepts from multiple perspectives (p. 241). Their flexibility in thinking propels growth in meaning, and alternatives that deepen and supercede the either/or mindset of their toddler and

preschool years. This differentiation in comprehension lends itself to more mature, adult-like conversations and academic pursuits (p. 242).

Children in the intermediate age, observes Cohen (1972), desire access to more information and skills. They gain greater comprehension when curriculum and lessons are “real for their age and stage, when the skill has some observable value, and when the style of learning is the childhood style of action” (p. 244).

*The Meal Gap: A Food Activist Curriculum* will capitalize on the emerging ethical belief system of 8s to 11s as well as their need for curriculum that galvanizes them to think beyond their needs and wants, and to think about ways to hear, help, and call attention to the food needs and wants of others.

# Unit 1 | Food and Culture



Whittington, C. (2018.). [Graphic Image]. Created for this curriculum.

In this seven-lesson unit, students will articulate what food is and what role it plays in their lives and different cultures around the world. Students will first consider the qualities of healthy versus unhealthy food. Students will contemplate how people's needs and wants change around food according to their circumstances, such as their socioeconomic background, their community, and their profession. The lessons will culminate with a field trip to New York's Tenement Museum where students will sample food and discuss how people's food stories have changed over time. Students will then consider their relationship with food by creating food biographies.

Lesson	Guiding Question & Key Concepts	Activities
<b>Unit 1   Food and Culture</b>		
1	<p>Guiding Question: Why do people need healthy food to survive?</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Discuss the benefits of healthy food</li> <li>● Create a definition for food</li> </ul> <p>Key Concepts: Processed Food and Nutrients</p>	<p>Warm Up (10 Minutes): Show the <b>USDA’s <i>My Plate, My Wins: Meet Rocio</i></b> video on <b>YouTube</b> (roughly 3 minutes). <i>Guiding question: What do you think Rocio meant when she said, “What we eat is who we become?”</i></p> <p>Work Time (30 Minutes): Students will read two Newsela articles titled <b><i>Scientists Find Americans Eat Too Much Extra Sugar in Ultra-processed Foods</i></b> and the <b><i>Matter and Energy: What Food to Eat for a Healthy Body</i></b>.</p> <p>Give students the <b>Unprocessed and Ultra-processed</b> handout. They will circle the foods included in both articles and decide if the food belongs in the ultra or unprocessed column. Students will then include the nutrients or the artificial ingredients found in these foods.</p> <p>Class discussion on articles. <i>Guiding questions: What were some of the ultra-processed foods mentioned in both articles? What were some of the unprocessed foods mentioned in both articles? What are some of the benefits of eating unprocessed food? What are some of the drawbacks of eating ultra-processed food? Why do you think people eat ultra-processed food? What are some changes people would have to make to eat healthier?</i></p>

	<p>Have a natural product such as a mango and an ultra-processed product that has mango flavoring available for students to see, smell, taste, and touch. <i>Guiding question: What do you think is the difference between these two products?</i> Create a class T-Chart.</p> <p><b>Note to Educators:</b> State that artificial ingredients and the lack of nutrients are some of the major differences between unprocessed products and products that contain “natural” flavoring. Artificial ingredients include artificial flavor, food coloring, sweeteners, and preservatives. Artificial flavor and coloring are man-made chemicals used in food to mimic the flavor, taste, and color of natural food such as apples, without the product containing any or little real apples. Artificial sweeteners are included by manufacturers in products to reduce the amount of sugar they need to add. Manufacturers market these sweeteners as a “healthier” alternative to sugar. Preservatives are used to prevent products from spoiling, but are also man-made chemicals that provide little or no health benefits (Pollan, 2008).</p> <p>Students will construct a definition of food in their journals, then the class will comprise a class definition of food. Students will rewrite new definition in their journals.</p> <p>Wrap Up (10 Minutes): Journal Entry - Think about what you ate for lunch today? List what you ate. If you were a nutritionist</p>
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		(a person who is an expert in nutrition and healthy eating), would you consider the food you had to be healthy? Why or why not?
2	<p>Guiding Question: What are some needs and wants people have around food?</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Distinguish between needs and wants</li> <li>• Examine how different people have different needs and wants around food</li> </ul> <p>Key Concepts: Needs and Wants</p>	<p>Warm Up (10 Minutes): Ask students to give a definition for the word need. Ask students to give a definition for the word want. Students will write the definitions in their journals.</p> <p>Class discussion on needs and wants. <i>Guiding questions: What is the difference between a need and want? If you do not have your needs met, what are some possible consequences? If you do not have your wants met, what are some possible consequences?</i> List responses on the board and summarize responses.</p> <p>Work Time (30 Minutes): Create groups and give groups a children's book that highlights a want or a need of the main character(s).</p> <p>Possible books include: <b><i>One Potato, Two Potato</i></b> by Cynthia DeFelice, <b><i>Click, Clack, Moo: Cows That Type</i></b> by Doreen Cronin, <b><i>The Giving Tree</i></b> by Shel Silverstein, <b><i>Tops and Bottoms</i></b> by Janet Stevens, and <b><i>The Little Red Hen</i></b> by Paul Galdone.</p> <p><b>Note to Educators:</b> Explain to students that <i>One Potato, Two Potato</i> focuses on how elderly people need food as well as company. <i>Click, Clack, Moo: Cows That Type</i> highlights how farmers need to sell</p>

		<p>food. <i>The Giving Tree</i> centers on how people use natural resources such as trees and apples to meet their economic needs and wants. <i>Tops and Bottoms</i> centers on types of foods that farmers grow for themselves and consumers. <i>The Little Red Hen</i> focuses how people like chefs and those who prepare food need human resources, or people, natural resources like wheat, and capital resources like an oven to prepare food.</p> <p>Students will use the <b>Story Map</b> handout to list the needs and wants of the main characters and if and how these needs and wants change over time. Groups will create a poster of the characters needs and wants. Groups will give a brief description of the book and share their posters with the class. Give students the option to act out their books.</p> <p>Wrap Up (10 Minutes): Journal Entry - What are some of your food needs and wants at school? What are your food needs and wants at home?</p>
3	<p>Guiding Question: What are some traditions or customs people have around food?</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Describe a food tradition or custom</li> <li>● Describe a favorite meal and why it is important</li> </ul> <p>Key Concepts: Food Customs/Traditions</p>	<p>Warm Up (10 Minutes): Students will use the <b>Find Someone Who</b> handout and ask a classmate a question about different types of foods people eat around the world.</p> <p>Answers for Find Someone Who activity: 1. Avocado, 2. Jamaica, 3. Corn, 4. Baguette, 5. Sushi, 6. Apple, 7. Pepperoni, 8. Siesta 9. White Castle, 10. Rice, 11. Peanuts, 12. Native Americans. If possible, provide images of food and people.</p>



		<p>Work Time (30 Minutes): Read the “Food is Culture,” “Borrowed Meals,” “Food Folklore,” and “Celebrate!” sections of Kristin Petrie’s <b><i>Celebrating Diverse Traditions</i></b>.</p> <p>Write one of the following questions on a poster paper: <i>What is your favorite food tradition or custom you have in your family? What food is served? When is this food served? Why is this tradition or custom important to your family?</i> Have students participate in a gallery walk by rotating around and responding to each question. Class discussion on similarities and differences observed in the comments.</p> <p>Wrap Up (10 Minutes): Journal Entry - Imagine if you could not have access to your favorite meal or food, how would you feel?</p>
4	<p>Pre-Trip: Tenement Museum</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>Discover how food tells a story about themselves and/or another individual</li> </ul>	<p><i>Guiding question: Can food tell a story about someone? If so, how?</i></p> <p>Inform students that the following two lessons will focus on the stories, memories, and experiences people have had with food.</p> <p>Teacher will select and play one of <b>PBS’s <i>Family Ingredients</i></b> episodes (roughly 25 minutes). Students will respond to the pre-trip section titled <b>Family Ingredients Episode</b> in the Tenement Museum packet. Have a class discussion on the episode. <i>Guiding questions: What dish was important to this person? Which country did this dish originate from? What</i></p>

		<p><i>family memories does this person have with this food?</i></p> <p>Discuss the itinerary and what to expect on the field trip.</p>
5	<p>Field Trip: Tenement Museum</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>Discover how food tells a story about themselves and/or another individual</li> </ul>	<p>Taste of Tenement Tour - Students will embark on a food journey. They will investigate the neighborhood restaurants and markets, sample foods, and learn about the role immigrants play within American food culture. They will have the opportunity to sample four food items which include cheese, pickles, imported fruit, and dan tat.</p> <p>Have a class discussion on what students experienced on the trip.</p> <p>Alternative: If the tour is unavailable, go to the <a href="http://cookingwithkids.org">cookingwithkids.org</a> website and download a free tasting lesson.</p>
6	<p>Post-Trip, Part 1: Tenement Museum</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>Discover how food tells a story about themselves and/or another individual</li> </ul>	<p>Students will write a biographical portrait of themselves in the post-trip section titled <b>My Food Biography</b> around food and food habits.</p> <p>Read each question with students and answer inquiries they might have around this topic. Explain that this food biography will not respond to everything food related in their lives, but will give them time to explore or highlight different types of food they have experienced.</p> <p>Once students have completed and illustrated the handout, have them partner up and share their biography with a</p>

		<p>classmate. Have students switch at least twice.</p> <p>Class discussion on connection with classmates. <i>Guiding question: What have you learned about this person and their history with food? What were some foods or experiences with food that were similar? What were some foods or experiences with food that were different?</i></p>
7	<p>Post-Trip, Part 2: Tenement Museum</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>Discover how food tells a story about themselves and/or another individual</li> </ul>	<p>Students will write a biographical portrait of another individual through the lens of food in the post-trip section titled <b>Food Biography</b>. They can ask a family member, friend in another class, or even a member of their school community.</p> <p>Class discussion on connection with interviewee. <i>Guiding questions: What have you learned about this person and their history with food? What were some foods or experiences with food that were similar? What were some foods or experiences with food that were different?</i></p>
<p>Unit Standards</p> <p>Common Core Standard ELA (LITERACY.SL.4.1)</p> <p>Common Core Standards ELA (LITERACY.RI.4.2)</p> <p>Common Core Standards ELA (LITERACY.SL.4.4)</p> <p>National Standards for Family and Consumer Sciences Education (Consumer and Family Resources 2.1.2)</p> <p>National Standards for Family and Consumer Sciences Education (Family 6.2.2)</p> <p>National Standards for Family and Consumer Sciences Education (Food Science, Dietetics and Nutrition 9.4.1)</p>		

# Scientists Find Americans Eat too Much Extra Sugar in Ultra-Processed Foods

By Los Angeles Times, adapted by Newsela staff  
03/17/2016



Naomi Woods (left) eats lunch with her classmates at Northeast Elementary Magnet School in Danville, Illinois, Sept. 20, 2011. The curriculum at the public school is focused on health and wellness. Americans are eating a lot of ultra-processed foods which are packed with sugar, a study says.

Scientists have released a new study of America's eating habits. The study shows that one kind of food is making people unhealthy.

The problem is ultra-processed foods, the scientists say.

## Added Flavors, Colors, Sweeteners

Ultra-processed foods contain added flavors, colors and sweeteners to make them look and taste better. The additives give the food a familiar color. They hide unpleasant tastes. They make something tasteless seem tastier.

Many breakfast cereals and sodas are ultra-processed foods. So too are many kinds of bread, cookies, cakes and potato chips.

Ultra-processed foods are a big part of what Americans eat every day, the new study says. They make up almost six-tenths of all the calories Americans take in.

### **Wrong Kind Of Calories**

The human body needs calories. They give people strength and keep them going. However, getting too many calories or the wrong kind of calories can be a problem. People can become overweight and unhealthy.

Ultra-processed foods are very high in added sugar. Large amounts of sugar are not good for us.

Doctors say no more than one-tenth of the calories people take in should be added sugars. However, most people are not listening. More than seven in 10 Americans take in more added sugar than that.

### **Added Sugar = Added Weight**

All that added sugar makes people more likely to be overweight. In turn, being overweight can lead to serious health problems. Too much sugar can also damage our teeth.

The scientists behind the new study wanted to find out how much ultra-processed food Americans are eating. They looked at information on American eating habits. The information was gathered by the government some years ago.

In 2009 and 2010, more than 9,000 people were questioned about their eating habits. They were asked to list every single thing they had eaten in the past 24 hours. More than 280,000 kinds of food were named.

## **Cakes, Cookies, Chips**

The people questioned took in 2,070 calories a day, on average. Somewhat more than a quarter of those calories came from unprocessed foods. Eggs, vegetables and fish are all examples of unprocessed foods.

Around one-tenth came from processed foods. Processed foods have some additives. They do not have as many as ultra-processed foods do, though. Cheese, canned vegetables and bacon are a few examples of processed foods.

However, most of the calories people took in came from ultra-processed foods. Nearly 3 in every 5 calories were from such foods. Breads, cakes, cookies, pies and chips were the most popular ultra-processed foods.

## **Too Much Extra Sugar**

Overall, around one-seventh of all calories came from added sugars. Most of that sugar came from the ultra-processed foods.

Unprocessed foods have no added sugars at all. Processed foods have a small amount.

Ultra-processed foods have a large amount of sugar. On average, more than a fifth of their calories come from added sugars. They have more than 10 times as much added sugar as processed food.

## **Eat Healthier, America!**

Not surprisingly, those who ate more ultra-processed food took in more sugar. Those who ate it the most took in a great deal of sugar. They took in more than two and a half times as much as those who ate it the least.

The message of their study is clear, the scientists said.

If Americans want to cut down on sugar, they will have to change their eating habits. They will have to cut way back on ultra-processed foods.

# Matter and Energy: What Foods to Eat for a Healthy Body

By Encyclopaedia Britannica, adapted by Newsela staff

05/03/2017



Fruit and vegetables at a farmers market in Dallas, Texas. These foods are a good source of nutrients such as vitamins and minerals. Photo by: Travis Isaacs.

Plants make their own food with help from the sun. Animals, including humans, do not. Instead, they eat food to get what their bodies need to live and grow. Humans might eat plants or other animals. Nutrition is the science of how the body uses the food we eat.

Food gives the body the energy it needs. It can repair damaged cells and even help you sleep. The amount of energy a food can give you is measured in calories. These are like invisible bits of energy. When a person eats more food than the body needs, the extra calories turn into fat. When a person eats fewer calories than the body needs, the person loses weight.

Every person needs a different number of calories. It depends on how much energy their bodies use. For example, an athlete probably needs more calories than a person who sits at a desk all day.



You can find calorie information on packaged food items. Don't get too crazy over the information, though—just remember to eat fresh vegetables and fruit every day! Photo from: Getty Images/Joe Raedle.

## Six Kinds Of Nutrients

Food also provides the nutrients that the body needs. They help the body do its job. These nutrients are proteins, carbohydrates, fats, minerals, vitamins and water.

Proteins are needed for body tissue to grow. They also help the body repair itself. Protein is very plentiful in the human body. People can get the protein they need from animals or plants. Animal **sources** include meat, fish and eggs. Plant sources include beans, nuts and grains.



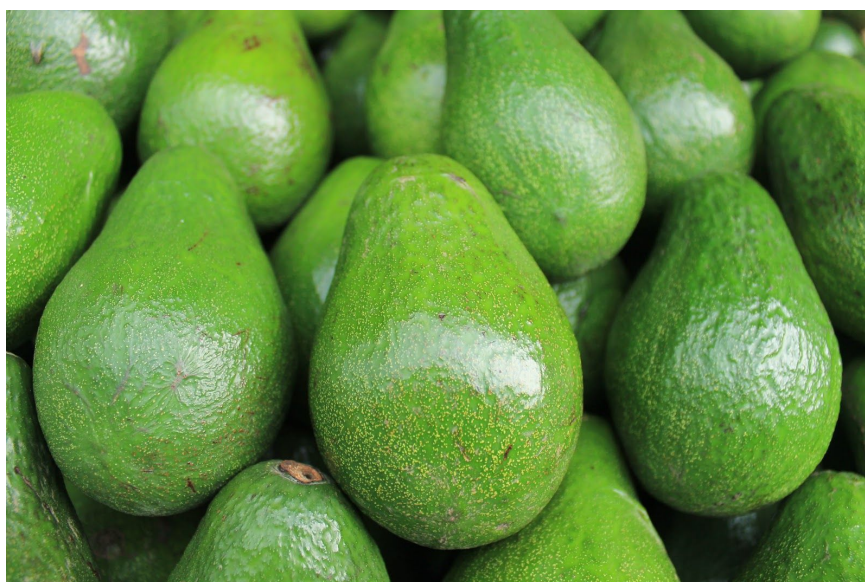
Carbohydrates give the body most of the energy it needs. Starches and sugars are carbohydrates. Starches are found in grains like rice and wheat. Sugars are found naturally in fruits, milk and honey. There are also refined sugars. They are made from plants like corn. These sugars are often used to sweeten foods. They are high in calories.

Fiber is another kind of carbohydrate. It does not provide energy, but it is important to the body in other ways. Fiber helps food break down as it passes through your body. This is called digestion. Fiber also helps people to feel full.

Fats are sources of energy. The body can store fat to use later. The fats in foods may be solid or liquid. Liquid fats are called oils.

Fats help the body **maintain** its temperature. They protect the bodies' organs, too. Cooking oils, nuts, fish and avocados can be healthy sources of fat.

Some fats can be harmful. They can lead to heart disease. These fats are found in meats, dairy products and many packaged snacks. It is best not to eat too much of these foods.



Avocados are a delicious and healthy fat to eat. They are also filled many nutrients—vitamins, minerals, and fiber. Photo from: Unsplash/Nur Afni Setiyaningrum.

## Minerals And Vitamins

Another type of nutrient is minerals. They serve several purposes. Calcium, an important mineral, helps build bones and teeth. It is found in dairy products, green leafy vegetables and tofu. Other important minerals include iron, sodium and zinc.

The body needs vitamins, too. Vitamin C keeps gums healthy. Vitamin D works with other minerals to make strong bones and teeth.

## Water Makes Up Half Of Your Body Weight!

Lastly, water is very important to the body. It helps the body get rid of wastes and maintain its temperature. Water makes up more than half of a grown-up's body weight!



Staying hydrated is important. Remember to drink plenty of water throughout the day! Not drinking enough water can affect not only your health, but also your mood! Reusable water bottles are a great way to bring water with you when you're out. Photo from: Unsplash/Autri Taheri.

Different foods contain different nutrients. Some foods are healthier than others. Scientists have created charts and pictures to show you what foods are best to eat.

If you want to eat well, scientists **recommend** following these rules: Eat lots of vegetables and fruits. Eat smaller **portions** of grains, protein and dairy products. You should only eat small amounts of fats and oils. Avoid sweets, salty snacks and sugary soft drinks. These foods are high in calories. Yet they offer few nutrients.

*This article was originally published by Encyclopaedia Britannica, Inc. Newsela adapted the original article and is responsible for all revisions and for any errors that may result from the adaptation.*

Name \_\_\_\_\_

<b>Unprocessed</b>	<b>Ultra-processed</b>
Nutrients In These Foods	Artificial Ingredients in These Foods

Name \_\_\_\_\_

## Story Map

Where is this story taking place?	
Who are the main characters in the story?	
What needs and wants do the characters have around food? Were there other needs or wants in the story?	
What actions did the characters take to meet their needs or wants?	
What was the outcome of the story?	

Name \_\_\_\_\_

## Find Someone Who

Find someone who can answer the following questions	Name of Person	Response
1.) What is the main ingredient in guacamole?		
2.) Ackee and Saltfish is the national dish in which country: USA, Jamaica or Mexico?		
3.) What is another name for maize?		
4.) What bread do people in France like to eat?		
5.) What is the name of the dish commonly eaten in Japan which often has raw fish?		
6.) Which fruit is not commonly found in Caribbean cuisine: Apple, Tomato, or Coconut?		
7.) Which pizza topping is the most popular in the United States?		
8.) What is the name of the afternoon rest or nap often taken in Spain and other Spanish-speaking countries?		
9.) What was the first fast food restaurant in the USA?		
10.) Which food does half of the world eat: Rice, Lentils, or Corn?		
11.) Which type of nut is often used in many African dishes: Peanut, Walnuts, or Hazelnuts?		
12.) Popcorn originated from which group of people?		

Source: Format adapted from Teach-This.com website.

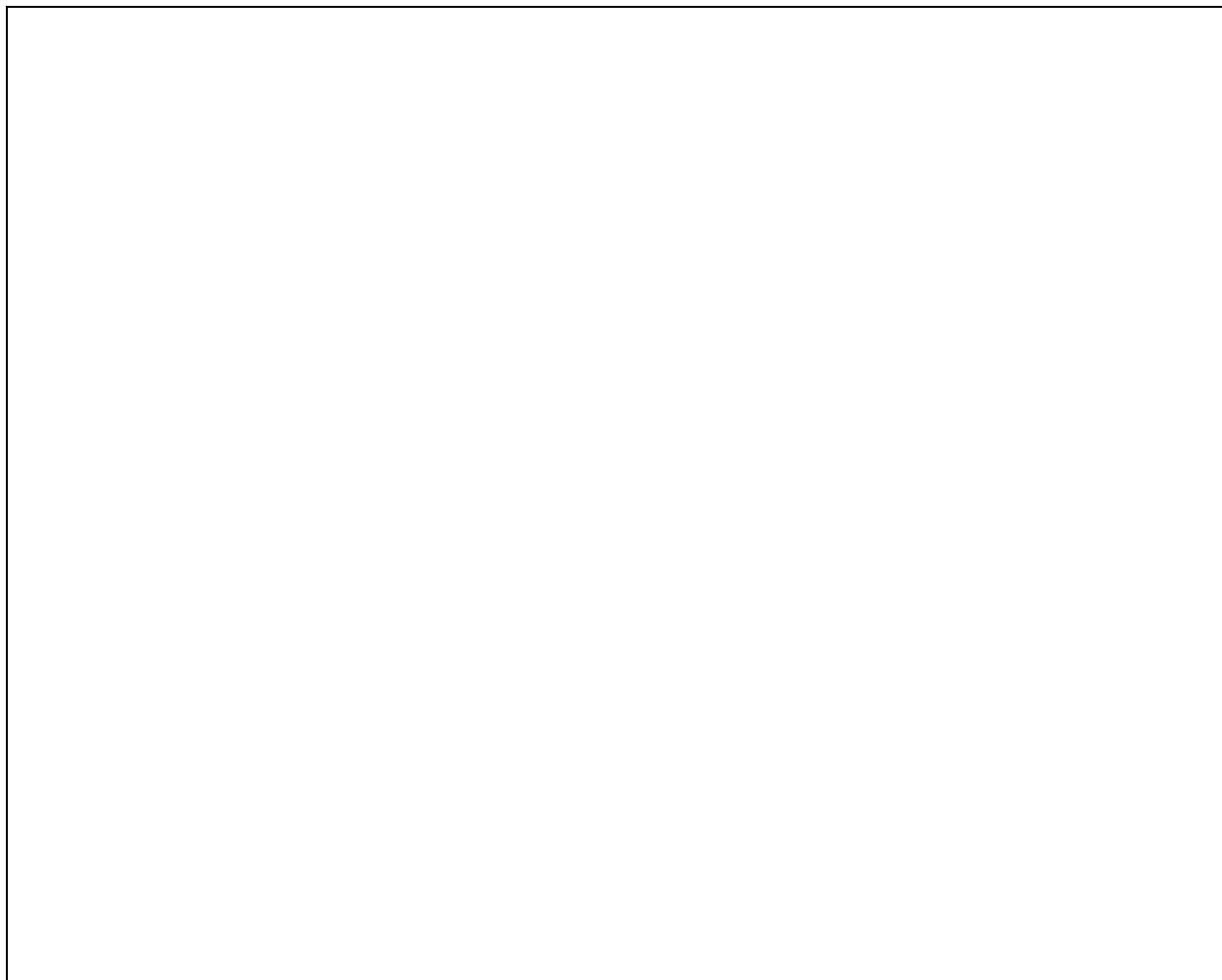


(Untitled photograph of food at the Tenement Museum)

## Tenement Museum - Food Tells a Story

**Name** \_\_\_\_\_

**Pre-Trip - *Family Ingredients* Episode**



Why is this dish important to the interviewee?

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Name \_\_\_\_\_

**Post-Trip - My Food Biography**

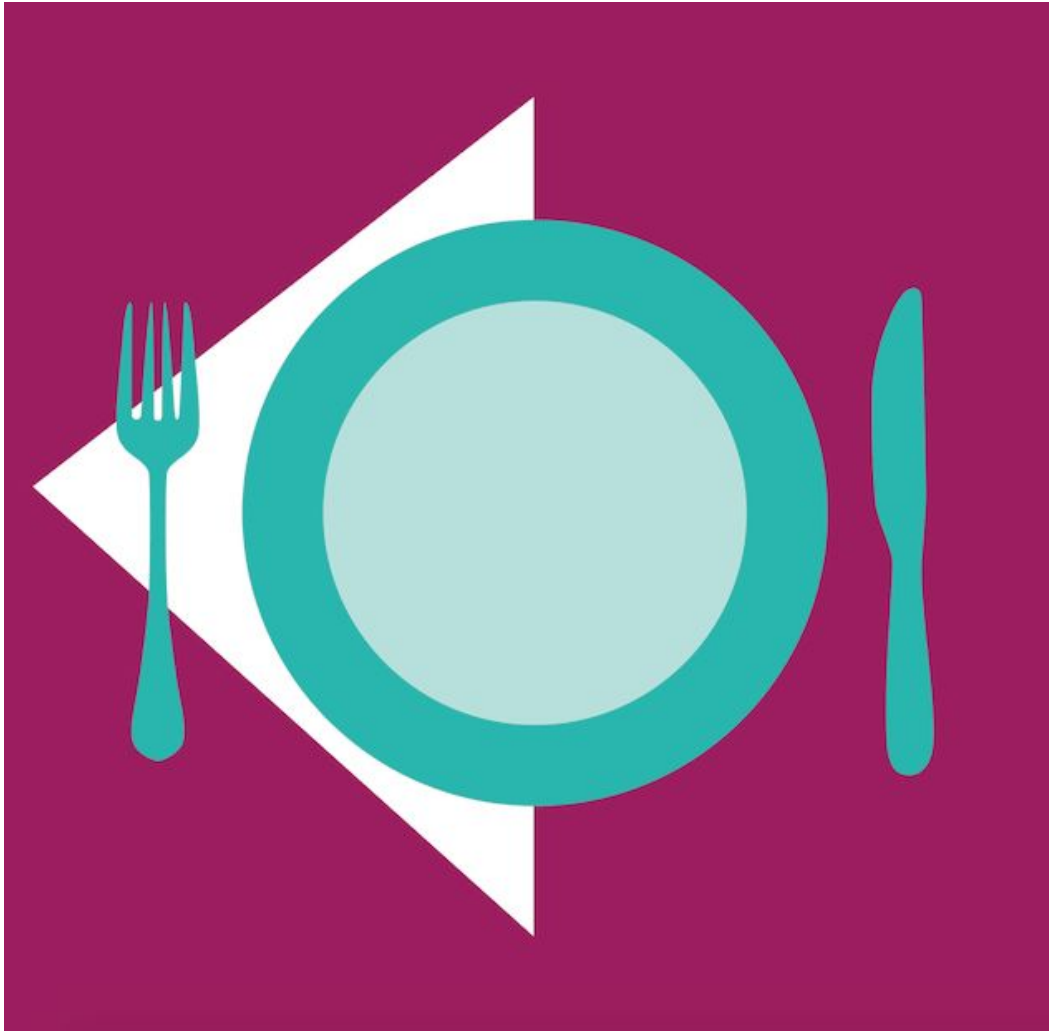
<p>What was your favorite meal when you were younger?</p>	<p>What is your favorite meal now?</p>	<p>Are there any foods that you wouldn't eat when you were younger that you eat now?</p>
<p>What is your earliest food memory?</p>	<p>Draw a picture of yourself</p>	<p>Do you like food from other countries? If so, which do you like the most?</p>
<p>What kind of beverages do you usually drink?</p>	<p>Who is or was the best cook in your family? Why? What did they prepare?</p>	<p>What is the most unusual thing you've ever eaten. How did it taste?</p>

Name \_\_\_\_\_

**Post-Trip - Food Biography**

<p>What was your favorite meal when you were younger?</p>	<p>What is your favorite meal now?</p>	<p>Do you prefer to eat out or cook at home? Why?</p>
<p>What is your earliest food memory?</p>	<p>Draw a picture of your Interviewee</p>	<p>What is your daily food routine?</p>
<p>Is there a food or dish you have always wanted to try, but never had the opportunity to?</p>	<p>What is the most unusual thing you've ever eaten? How did it taste?</p>	<p>Is there any food that you really dislike?</p>

## Unit 2 | Food Insecurity: What is it?




Whittington, C. (2018). [Graphic Image]. Created for this curriculum.


This unit entails five lessons which will introduce students to the concept of food insecurity through two children's books. *Maddi's Fridge* will provide a visual representation of what food insecurity looks like in an urban area in the United States and *The Good Garden* will highlight what food insecurity looks like in a rural area in Honduras. Students will listen to audios of individual experiences of food insecurity in a school and a home setting. This unit will culminate with students analyzing the four components of food security as defined by the Food and Agriculture Organization (FAO) of the United Nations, which include availability, utilization, access and stability.

Lesson	Guiding Question & Key Concepts	Activities
<b>Unit 2   Food Insecurity: What is it?</b>		
1	<p>Guiding Question: Why do some people not have access to healthy food? Part 1</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Define food insecurity</li> <li>● Write a story from another perspective</li> </ul> <p>Key Concepts: Hunger and Food Insecurity</p>	<p>Warm Up (15 Minutes): Class discussion on missing meals. <i>Guiding questions: What is the difference between skipping a meal because you did not have time to eat and skipping a meal because you do not have the money to buy food?</i> Teacher will define food insecurity.</p> <p><b>Note to Educators:</b> Explain that hunger is the physical feeling of discomfort, stomach pains, or weakness caused by an empty stomach. Food insecurity exists when people, at all times, do not have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (Food and Agriculture Organization of the United Nations, 2008).</p> <p>Read-aloud of <i>Maddi's Fridge</i> by Lois Brandt. Class discussion on the food insecurity experienced in the book and how the illustrations compare both fridges. <i>Guiding questions: What food insecurity was featured in the book? Think about how the illustrator drew the two fridges, how did the illustrations help you understand the problem in the story?</i></p> <p>Work Time (30 Minutes): <i>Guiding questions: Who was telling the story? Was it a narrator or Sophia? How might the</i></p>

		<p><i>story be different if Maddi were telling the story?</i></p> <p>Have slips of paper with either Sophia or Maddi on it. Have students select a random slip. Based on the slip chosen, students will rewrite the story from the perspective of either Sophia or Maddi. <i>Guiding questions: How would you feel if you were Sophia or Maddi? What would you do if you were Sophia or Maddi?</i></p> <p>Wrap Up (5 Minutes): Journal Entry - Think about a time when you or someone you know didn't have what you/they needed? Describe the situation and how it made you/they feel.</p>
2	<p>Guiding Question: Why do some people not have access to healthy food? Part 2</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>Analyze how food insecurity impacts the the main character(s) in a children's picture book</li> </ul> <p>Key Concepts: Food Insecurity</p>	<p>Warm Up (15 Minutes): Read-aloud of <b><i>The Good Garden: How One Family went from Hunger to Having Enough</i></b> by Katie Smith Milway. Class discussion on the agricultural and financial practices of the Honduran people as well as how the illustrations show the progression from unhealthy land to fertile land and food insecurity to food security.</p> <p><b>Note to Educators:</b> Explain that a land grab took place in Honduras which left the native Honduran people with land that was the most difficult to farm and lacked nutrients to produce healthy crops. A land grab is when an area is taken by force for economic or military reasons. Explain that throughout history Indigenous people such as Native Americans and local communities such as Maria's village have had their land</p>

	<p>taken away from them by government action, wealthy or rich people, companies, or wars. The Honduran natives were given the poor land and the Spaniards took the best land for themselves (Right and Resources Initiative, 2015).</p> <p>Work Time (30 Minutes): As a class, complete a <b>Story Map</b> of <i>The Good Garden</i>. <i>Guiding questions: Where is this story taking place? Who are the main characters in the story? What needs or wants did the characters have in the story? Did their needs or wants change at any point in the story? What actions did the character(s) take to meet their needs or wants? What food insecurity do you think the main character(s) experienced or saw in the book?</i></p> <p>Create groups and give each group a children’s book that highlights a social issue such as homelessness, food insecurity, or harmful farming practices. Students will use the <b>Story Map</b> handout to list the needs and wants of the main characters and if and how these needs and wants change over time.</p> <p>Students will create a collage using the information from the handout. Students can use illustrations, images from the internet, magazines, etc.</p> <p>Possible books include: <i><b>The Lady in the Box</b></i> by Ann McGovern, <i><b>The Can Man</b></i> by Laura E. Williams, and <i><b>Planting the Trees of Kenya</b></i> by Claire A. Nivola.</p>
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		<p>Wrap Up (5 Minutes): Journal Entry - Which character in the <i>Good Garden</i> interests you the most and why?</p>
3	<p>Guiding Question: Why do some people not have access to healthy food? Part 3</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>Analyze how food insecurity impacts the the main character(s) in a children's picture book</li> </ul> <p>Key Concepts: Food Insecurity</p>	<p>Warm Up (5 Minutes): Listen to the audio titled <b>Dakota Gibson, Gary Barber, and Kenny Thompson</b> on the <b>StoryCorps</b> website (roughly 2 minutes). <i>Guiding questions: What prevented students from accessing food in the story? Who gave them food and why?</i></p>  <p>(Untitled photograph of Dakota, Gary, and Kenny)</p> <p>Work Time (30 Minutes): Students will continue to work on analyzing the food insecurity depicted in a children's books.</p> <p>Teacher will conference with each group and discuss who will present and what information they will share with the class.</p> <p>Wrap Up (5 Minutes): Listen to the audio titled <b>Adolph Carranza</b> on the <b>StoryCorps</b> website (roughly 1 minute).</p>

		<p><i>Guiding question: What prevented Adolph from eating the cranberry jam?</i></p>  <p>(Untitled photograph of Adolph)</p>
4	<p>Guiding Question: Why do some people not have access to healthy food? Part 4</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Present an oral report on a children's book</li> <li>● Describe the needs and wants of characters in a children's book</li> </ul> <p>Key Concepts: Food Insecurity</p>	<p>Warm Up (5 Minutes): Discuss habits of presenters and audience members. <i>Guiding questions: If you are presenting a topic, how should you speak? How should your body be?</i> Remind presenters that they should:</p> <ul style="list-style-type: none"> <li>● Speak in a volume loud enough to be heard</li> <li>● Make eye contact with the audience</li> <li>● Keep papers away from their face</li> <li>● Keep visual materials steady so audience members can clearly see them</li> <li>● Keep body movements to a minimum</li> <li>● Share information in an organized way</li> </ul> <p><i>Guiding question: If you are an audience member, how should your body be?</i> Remind audience members that they should:</p>



		<ul style="list-style-type: none"> <li>● Give the speaker their undivided attention</li> <li>● Don't talk to neighbors during a presentation</li> <li>● Make eye contact with the presenter(s)</li> </ul> <p>Work Time (30 Minutes): Students will participate in oral presentations of their children's book.</p> <p>Wrap Up (10 Minutes): Journal Entry - Which story interests you the most and why?</p>
5	<p>Guiding Question: What are the 4 dimensions of food insecurity?</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>● Label the 4 components of food insecurity</li> </ul> <p>Key Concepts: Utilization, Availability, Access, and Stability</p>	<p>Warm Up (15 Minutes): Class discussion on the four components of food insecurity which are utilization, availability, access, and stability. Have students write the components in their journals.</p> <p>Share that food availability addresses the "supply side" of food security and the journey of food from the farm to their homes (Food and Agriculture Organization of the United Nations, 2008).</p> <p>Explain that utilization is commonly understood as the way the body makes the most of various nutrients in the food. Sufficient energy and nutrient intake by individuals is the result of good care and eating practices, food preparation, diversity of the diet, and intra-household distribution of food (Food and Agriculture Organization of the United Nations, 2008).</p> <p>Inform students that economic access or having enough money to buy the types of</p>

	<p>food a person would like to eat is also a part of food insecurity (Food and Agriculture Organization of the United Nations, 2008).</p> <p>Explain that even if a person eats enough food today, he/she will still be considered to be food insecure if they have do not access to food on a daily basis. For example, a family has enough to eat for three days but not enough for seven days. To be food secure, a household must be stable in utilization, availability, and economic access (Food and Agriculture Organization of the United Nations, 2008).</p> <p>Wrap Up (30 Minutes): As a class, label the ideas each group expressed in their presentations as either utilization, availability, access, or stability.</p> <p>Inform students about <i>The Meal Gap</i> curriculum and how they will be placed in groups to collaborate on creating a book highlighting food insecurity. Read some facts about food insecurity from the <b>Hunger In NYC Fact Sheet</b> handout.</p> <p>Create a class <b>KWHLAQ</b> chart (What do I think I <b>know</b>? What do I <b>want</b> to learn? <b>How</b> do I find out? What have I <b>learned</b>? What <b>action</b> will I take? What new <b>questions</b> do I have?) on food insecurity with the class.</p> <p>Give each student a <b>KWHLAQ</b> handout to keep in their journals. Give students time to add to their handouts.</p>
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		<p><b>Note to Educators:</b> This chart will be a resource throughout the curriculum as a way for students to share their ideas and think about what type of food insecurity topics interests them. Students will journal throughout the curriculum in order to express what they are thinking and feeling around this topic in a safe, low stakes writing way.</p> <p>Wrap Up (10 Minutes): Journal Entry - Students will share one question they have about food insecurity from their KWHLAQ chart.</p>
<p style="text-align: center;">Unit Standards</p> <p>Common Core Standards ELA (LITERACY.RI.3.7)  Common Core Standards ELA (LITERACY.SL.4.1)  Common Core Standards ELA (LITERACY.SL.4.1.B)  Common Core Standards ELA (LITERACY.SL.4.4)  Common Core Standards ELA (LITERACY.SL.5.4)  National Standards for Family and Consumer Sciences Education (Consumer and Family Resources 2.1.3)  National Core Art Standards (VA:Cr1.2.4)</p>		

Name \_\_\_\_\_

## Story Map

Where is this story taking place?	
Who are the main characters in the story?	
What needs or wants did the characters have in the story? Did their needs or wants change at any point in the story?	
What actions did the character(s) take to meet their needs or wants?	
What food insecurity do you think the main character(s) experienced in the book?	

Name \_\_\_\_\_

<p><b>K</b> <i>What do I know about food insecurity?</i></p>	
<p><b>W</b> <i>What do I want to know about food insecurity?</i></p>	
<p><b>H</b> <i>How do I find out about food insecurity?</i></p>	
<p><b>L</b> <i>What have I learned about food insecurity?</i></p>	
<p><b>A</b> <i>What action will I take to learn more about food insecurity?</i></p>	
<p><b>Q</b> <i>What new questions do I have about food insecurity?</i></p>	

Source: Adapted from John Barell's *Why are School Busses Always Yellow?*

## Hunger in NYC Fact Sheet

### Food Insecurity

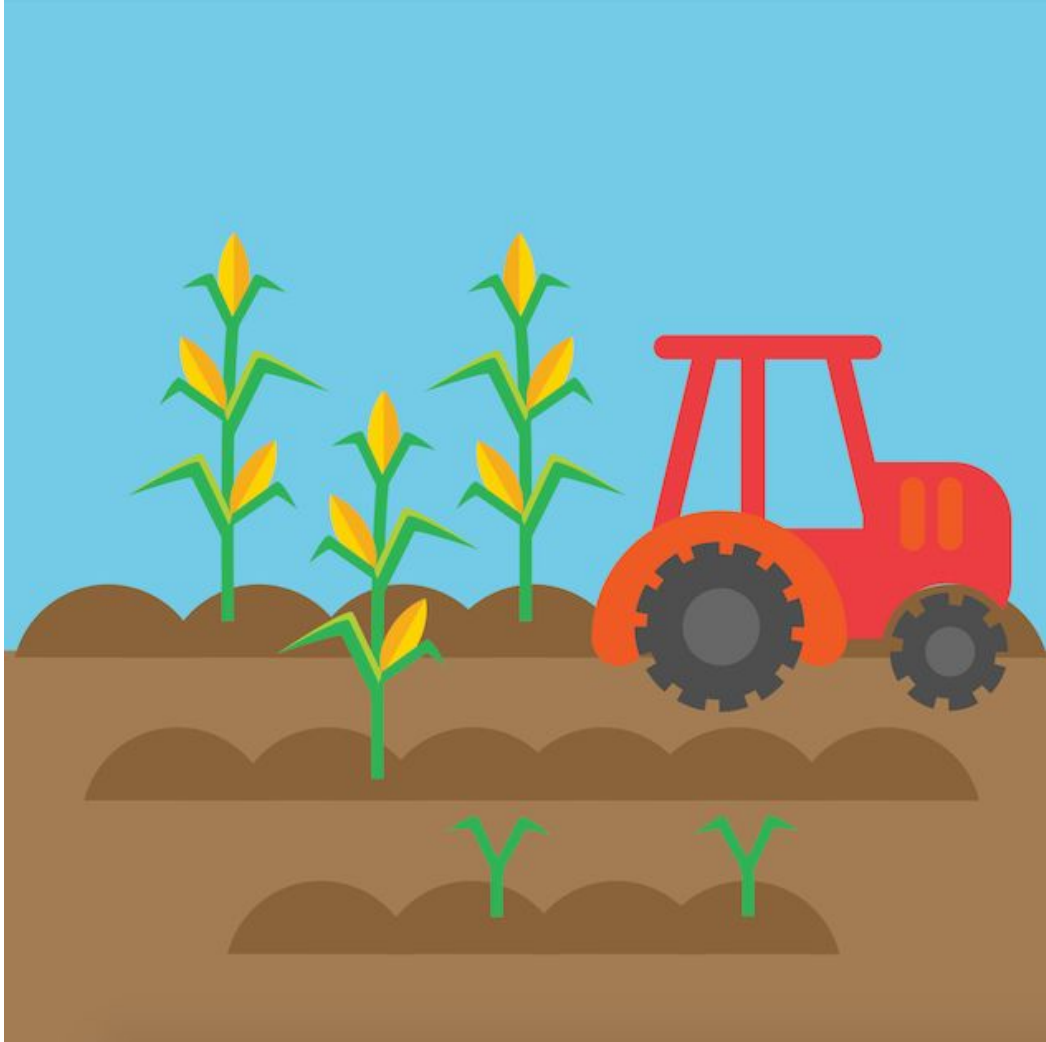
- Nearly 48.1 million United States residents, or 15.4%, are food insecure.
- More than 2.6 million New York State residents, or 13.5%, are food insecure.
- More than 1.3 million New York City residents, or 16.4%, are food insecure.
- New York City residents make up over half (51 %) of all food insecure people living in New York State.
- New York City's food insecurity rate is 6 % higher than the national rate, and 21.5 % higher than the New York State rate.

### The Meal Gap

- The meal gap for the United States is 8.49 billion; that is, US residents who experience food insecurity fall short of an adequate diet by 8.49 billion meals in a single year.
- The meal gap for New York State is approximately 472 million (471,801,700); that is, New York State residents who experience food insecurity fall short of an adequate diet by 472 million meals in a single year.
- The meal gap for New York City is nearly 242 million (241,956,200); that is, New York City residents who experience food insecurity fall short of an adequate diet by 242 million meals in a single New York City's meal gap makes up over half of New York State's meal gap.

Source: Research and Financial information from the Food Bank for New York City website. Data used in 2017.

# Unit 3 | Physical Availability of Food



Whittington, C. (2018). [Graphic Image]. Created for this curriculum.

The goal for this six-lesson unit is for students to understand where food comes from, how it gets to supermarkets, and how scarcity impacts consumers. The first component of food insecurity discussed in this curriculum is food availability. This curriculum will highlight how most of the food consumed in the world is produced on farms. Students will visit the Queens County Farm Museum and experience the work that goes into harvesting crops. The unit will conclude with students analyzing scarcity and experiencing food scarcity.

Lesson	Guiding Question & Key Concepts	Activities
<b>Unit 3   Physical Availability of Food</b>		
1	<p>Guiding Question: What is the journey of our food?</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Outline the journey of the food we eat including the workers</li> <li>● Comprehend that most of our food comes from farms</li> </ul> <p>Key Concepts: Food system</p>	<p>Warm Up (10 Minutes): View the <b>Pafarmbureau</b> video titled <b><i>From the Farm to the Table</i></b> on <b>YouTube</b> (roughly 6 minutes). Discuss the food system and how most of our food comes from farms, and the journey of food from the farm to the supermarket and finally tables. Include a discussion on the workers.</p> <p>Work Time (40 Minutes): Group students into groups of 3-5. Each group will create their own timeline poster of a crop from the farm to a supermarket.</p> <p>Show students the <b>From Farm to Table: The Journey of the All-American Chicken</b> graphic about chicken and discuss each number in the process.</p> <p>Students will view different on the production of a particular food. Students will watch the video twice and then gather images and create a timeline poster. Provide groups with index cards to map out each phase of the journey. Suggest to students that they might try going backwards in their thinking about the journey of their food. For example, milk in glass, carton, bought at supermarket, etc.</p> <p>YouTube videos include:</p> <ul style="list-style-type: none"> <li>● <b><i>How It's Made - 653 Olive Oil</i></b> (roughly 5 minutes)</li> </ul>



		<ul style="list-style-type: none"> <li>• <b><i>How It's Made Pineapples</i></b> (roughly 5 minutes)</li> <li>• <b><i>How It's Made Peanut Butter</i></b> (roughly 5 minutes)</li> <li>• <b><i>How It's Made Waffles</i></b> (roughly 5 minutes)</li> <li>• <b><i>Ice Cream Sandwiches   How It's Made</i></b> (roughly 5 minutes)</li> </ul> <p>Wrap Up (15 Minutes): Groups will present projects.</p>
2	<p>Pre-trip: Queens County Farm Museum</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>• Define the word farm</li> </ul>	<p>Show students the <b>Frayer Model</b> of the word farm in the pre-trip section of the Queens County Farm Museum packet to explore the word farm's meaning. Explain that a frayer model is a way to explore a word.</p> <p>Class discussion on what to expect on this teacher-led tour at the farm.</p>
3	<p>Field Trip: Queens County Farm Museum</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Compare and contrast the difference between a farmer's market and a supermarket</li> <li>• Harvest crops</li> </ul>	<p><i>30 Minutes: Welcome and Introduction to the Queens County Farm Museum</i></p> <p>At the Adriance Farmhouse, the Teacher will (TW) say, "We are at the Queens County Farm Museum, the only working farm in New York City. You will learn how farmers use specific tools and techniques to harvest crops and grow various kinds of produce. You will not buy your produce from a supermarket, but harvest them from the farm. You will be the farmers today!"</p> <p>TW say, "We will walk to various parts of the farm and you will complete different sections of the Queens County Farm Museum packet."</p>

	<p>Have a walking tour of the grounds.</p> <p>TW say, “Queens County Farm Museum participates in sustainable agriculture. Sustainable agriculture is the practice of growing food in a way that balances environmental stewardship and community development.”</p> <p>TW say, “Environmental stewardship is a fundamental part of the mission statement of Queens County Farm. The mission is to preserve this historic land for the enjoyment of the public. Furthermore, through education about its work the public is informed of how the farm’s practices are beneficial to the environment.” Explain the word stewardship.</p> <p>TW say, “Queens County Farm participates in community development by providing their surrounding communities with a beautiful space to walk, relax, interact, and learn. It is free to individuals and families most days of the year, unless the farm is having a special event. It also provides field trips to students such as yourselves. In addition, the farm participates in outreach at several fairs, libraries, and other community events because it wants to inform the public about sustainable agriculture and how important it is.”</p> <p>Have students respond to number one on the field trip section of the packet.</p> <p><i>20 Minutes: Farmer’s Market – Market or Store:</i> This session will take place in the</p>
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	<p>market or store, depending on which day the market is open. <i>Guiding Question: What do you know or have experienced at a farmers' market?</i></p> <p>TW say, "A farmers' market is a way for farmers and people who produce certain types of goods to offer direct contact between themselves and customers. Fruits and vegetables you buy at the farmer's markets are often the freshest and tastiest available because they have not traveled hundreds of miles. The farm sells its goods here, but also sells them to the Union Square Greenmarket in Manhattan."</p> <p>TW say, "Farmers' markets are an important part of food production because they reduce the distance food travels from the farm to your plate. Why do you think this is important?" Have students share thoughts.</p> <p>TW say, "They also provide an opportunity for farmers to have reliable and consistent income, and provide consumers with nourishing, seasonal food. Farmer's markets are also great places for people to gather and interact." <i>Guiding questions: Why do you think these components of a farmer's market are also important? How is buying food at a farmers' market different from buying it at grocery store. How is it the same?</i></p> <p>Have students respond to numbers two, three, and four in the field trip section of the packet.</p>
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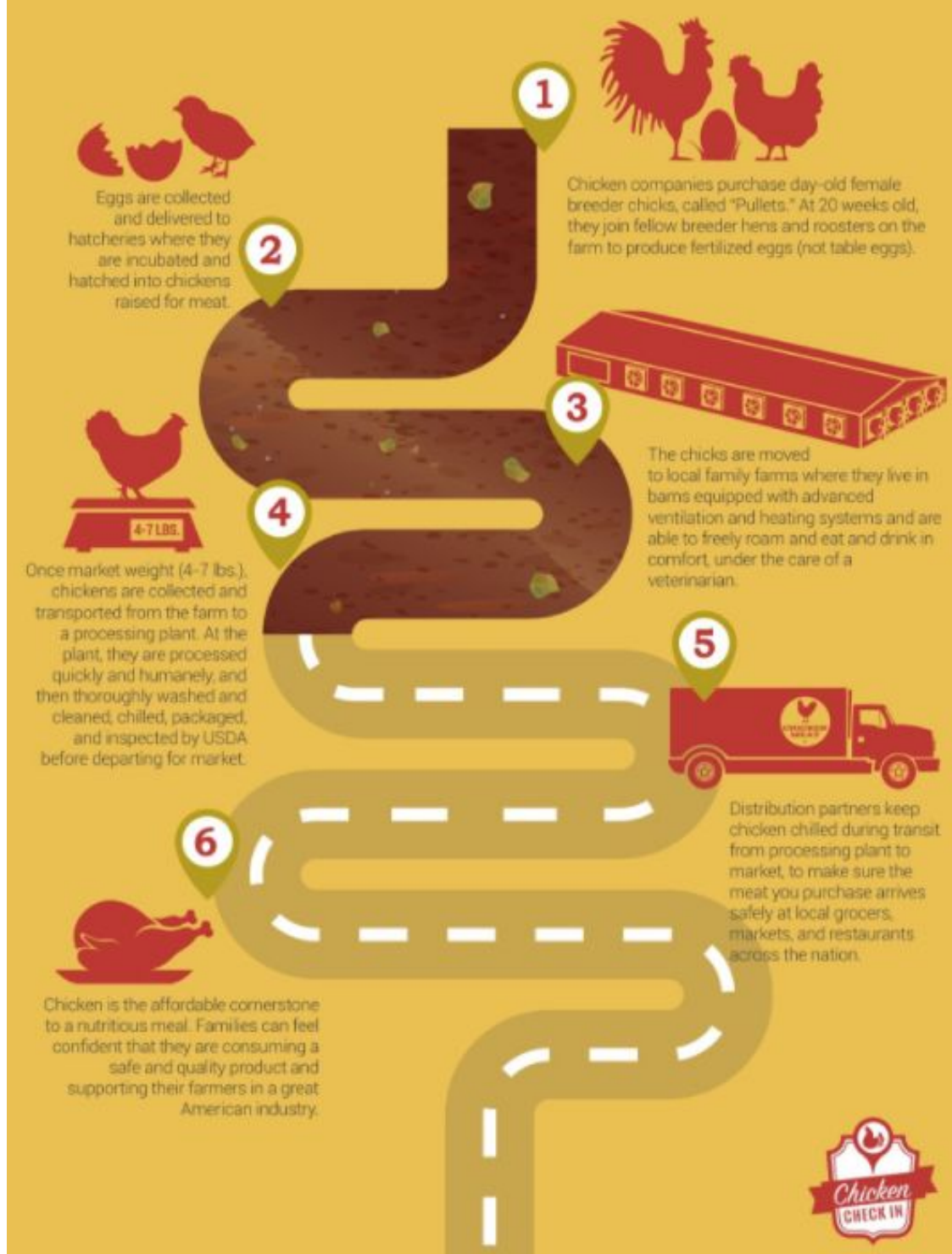
		<p><i>20 Minutes: Sustainable Techniques – Fields:</i> This session will take place in one of the fruit or vegetable fields.</p> <p>TW say, “Now you will be farmers. We will harvest fruits/vegetables and use specific tools to get the job done.”</p> <p>TW will hand out tools and eco-friendly bags to each student. He/she will then demonstrate how to harvest specific fruits and/or vegetables and which tools to use. Students will then harvest crops for a class potluck.</p> <p>Once crops have been harvested, TW say, “You will now do a 3-2-1 activity. You will be given a notecard. On the card, you will write 3 things you learned from today’s trip, 2 questions you have about what you experienced, and 1 way you can bring sustainable agriculture to your school, home, or neighborhood.”</p> <p>Class discussion on what students experienced on the farm and what to expect with the Just Food organization.</p>
4	<p>Post-Trip: Queens County Farm Museum</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>• Articulate why eating seasonal, local food is a better option nutritionally as well as financially</li> </ul>	<p>The nonprofit Just Food has a Community Chefs Training program where chefs have cooking demonstrations to advocate for the importance of eating seasonal, local food and how doing so connects to issues around an individual’s health and the overall wellness and health of ourselves, communities, and the planet. Food harvested from the Queens County Farm Museum will be used in this cooking</p>

		<p>session. Contact the Community Chefs program's Food Education Manager at 212-645-9880 ext 239.</p>
5	<p>Guiding Question: How does scarcity impact our needs and wants?</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>• Explain why scarcity exists</li> </ul> <p>Key Concepts: Scarcity</p>	<p>Warm Up (10 Minutes): Show the video <b><i>The Stall</i></b> from the website <b><i>The Economics of Seinfeld</i></b> (roughly 4 minutes). Class discussion on scarcity. <i>Guiding questions: What is the resource that is scarce? What is the response of the individual who has the resource? What is the response of the person who needs the resource? How was the issue resolved?</i></p> <p>Teacher will define scarcity and the 3 questions about scarcity which are: What will be produced? How will it be produced? Who will have access to what is produced?</p> <p>Work Time (30 Minutes): Students will participate in a jigsaw around scarcity. Groups will read different Newsela articles around a particular scarce resource. Have groups respond to the guiding questions. <i>Guiding questions: What is the resource that was scarce? Why is this resource scarce? How did the scarce resource impact the environment and/or human beings?</i> Students will then share information with other groups.</p> <p>Group 1 - <b><i>After Many Years, the Drought in California is Over at Last</i></b> (Scarcity of Water)</p> <p>Group 2 - <b><i>Flint Residents Must Now Pay for Their Water, but They Can't Drink</i></b> (Scarcity of Water)</p>

		<p>Group 3 - <b><i>A Type of Fish Native Americans Relied on in the Past is Now in Danger</i></b> (Scarcity of a type of Fish)</p> <p>Group 4 - <b><i>The World Loves Chocolate, but that Love is Hurting Rain Forests</i></b> (Scarcity of Trees)</p> <p>Wrap Up (5 Minutes): Journal Entry - What is scarcity and why does it exist?</p>
6	<p>Guiding Question: How does scarcity impact our access to food?</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>• Participate in an activity to experience what it means to have plenty or not enough</li> </ul> <p>Key Concepts: Scarcity</p>	<p>Warm Up (5 Minutes): Journal Entry - One community might need bread to use in a religious ceremony and another community might need bread to feed their families. How should this scarce resource be divided between these two groups and the different things they want or need to do with food?</p> <p>Work Time (20 Minutes): Inform students that they will make an açaí bowl for a snack. Tell them the ingredients for the dish. Call tables and hand them their bag of groceries.</p> <p>One team will have all the ingredients necessary. The other teams will have varying levels of scarcity. Do not inform groups about who has what resource, have groups discover this for themselves. When students begin to ask why they do not have all of the necessary ingredients, apologize and explain how you thought you bought enough for each group. Explain that there is nothing you can do and ask all groups to think about how they will solve the problem. Monitor how groups resolve the</p>

		<p>issue of scarcity. Provide guidelines for students to acquire the resources they need.</p> <p>Once bowls have been made, photographed, and enjoyed, have a class discussion on how it felt to experience scarcity. <i>Guiding questions: What was the problem? Why did the problem exist? How was the problem resolved? How did having enough or not enough food make you feel?</i></p> <p>Wrap Up (10 Minutes): Journal Entry - Students will add information about food availability to their KWHLAQ handout.</p>
<p style="text-align: center;">Unit Standards</p> <p>Common Core Standards ELA (LITERACY.W.4.2.B)</p> <p>National Standards for Family and Consumer Sciences Education (Consumer and Family Resources 2.1.2)</p> <p>National Standards for Family and Consumer Sciences Education (Food Production and Services 8.1.1)</p> <p>National Content Standards in Economics (Standard 1: Scarcity)</p>		

## FROM FARM TO TABLE: *the Journey of the All-American Chicken*



Source: *From Farm to the Table: The Journey of the All-American Chicken* graphic found on the [chickencheck.in](http://chickencheck.in) website.





(Untitled photographs of a barn and crops at the Queens County Farm Museum)

## Queens County Farm Museum - Where does our food come from?

Name \_\_\_\_\_

**Pre-Trip: Frayer Model - Farm**

Definition:	Facts/Characteristics:
Farm - Draw an Illustration	
Examples:	Non-Examples:

### Field Trip: Queens County Farm Museum

1.) List examples of the 2 parts of sustainable agriculture the farmers at Queens County Farm practice.

Environmental Stewardship

Community Development

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2.) Define a farmers' market:

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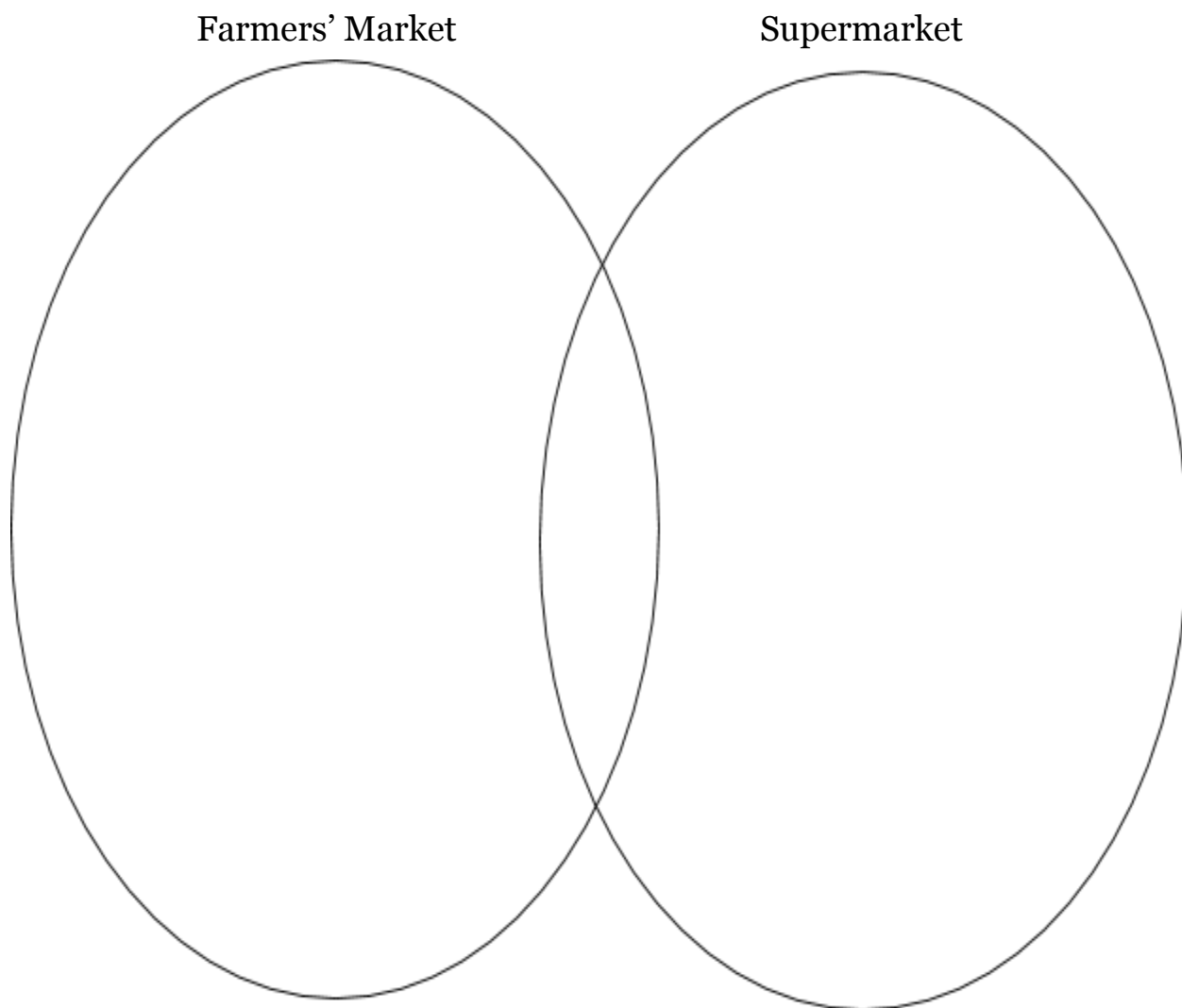
3.) Why are farmers' markets important?

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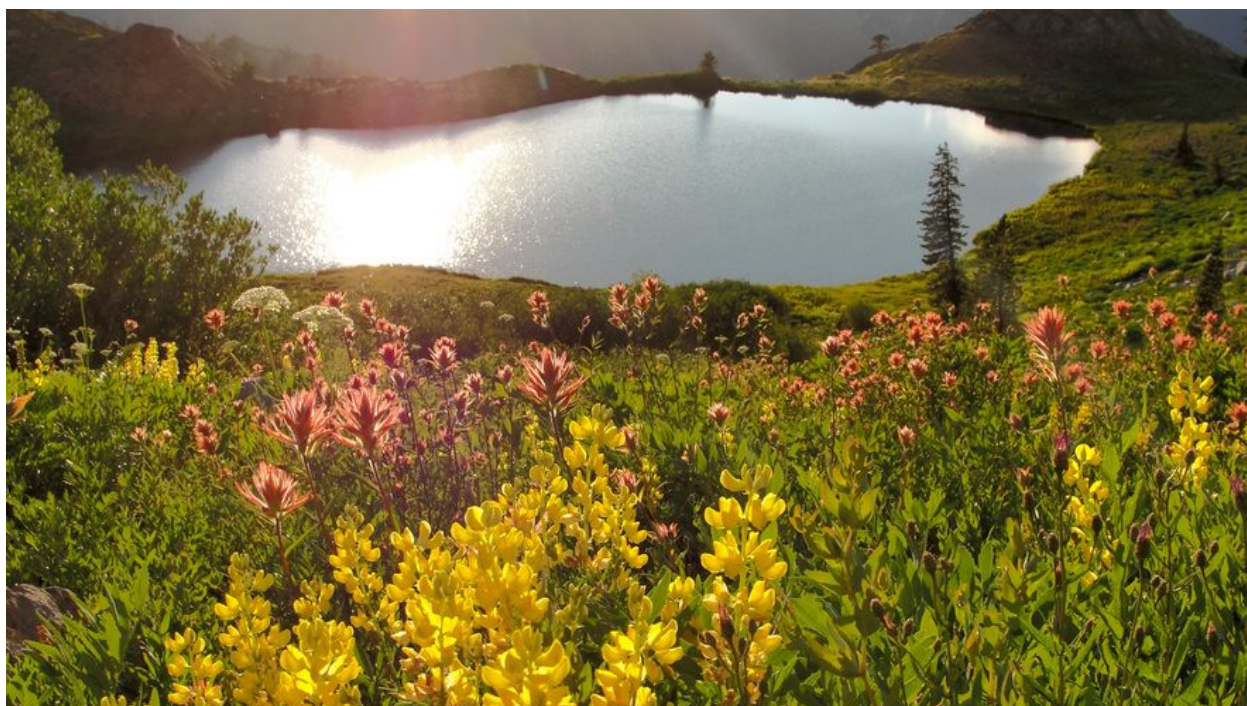
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4.) How is buying food at a farmers' market different from buying it at a grocery store. How is it the same? How is selling food at a farmers' market different for the farmer than selling to a store? How might it be the same? Use the Venn diagram to compare and contrast a farmers' market and a supermarket.



# After Many Years, the Drought in California is Over at Last

By Los Angeles Times, adapted by Newsela staff  
04/12/2017



Wildflowers bloom at Diamond Lake, California. The state's drought emergency has been lifted. Photo: Miguel Vieira via Flickr

LOS ANGELES, California — In California, the hills are green with plants. The rivers are full of water. So it was not surprising when California's governor made a declaration last week. The long California drought is over.

Governor Brown had called a drought emergency because there was not enough water. California had not gotten much rain and snow.

Last week, Brown gave an order that ends the emergency in most of the state. Only a few places still do not have enough water.

## Teaching People How To Save Water

He also said that the need for saving water continues. People should save water even if there is no drought, he said.

“The next drought could be around the corner,” Brown said.

Five years of sunny winters took a toll. People in cities were required to cut their water use. People took shorter showers and flushed less.

Farmers left some land without plants. In some towns, no water came out when people turned on the faucet. These places had to get bottled water delivered as a result.

### **California Did Not Suffer Too Much**

Overall, though, the state was strong in the drought.

Jay Lund works at the University of California. He studies water use. California did very well, he said.

Farming is the state’s biggest water user. Even without much water, farmers did not lose money. High prices for nuts and milk helped with that.

The drought did not cause much trouble for companies. The cuts did not change much of what companies made, Lund said.

Every big drought teaches California lessons.

### **Rewards For Using Less Water**

The last long drought was from 1987 to 1992. A huge reservoir was built in Southern California. Reservoirs hold the water that people use. This one helped to get Southern California through the drought.

Lately, there have been more water recycling programs. People also got rewarded for saving water. That slowed down water use.

Felicia Marcus works for the state of California. She had a tough job. Her job was to convince people to use less water. “In the late ’80s drought, we learned how much we can save indoors. In this drought we learned how much we can save outdoors,” she said.

Some people took out their grass. They put in plants that did not need as much water. Then, they got rewarded for using less water.

### **There Will Eventually Be Another Drought**

People have changed how they think, Marcus said. It is not just about water. Californians changed their thinking about which plants are beautiful, she said.

Governor Brown plans to continue saving water in California. Wasteful practices such as washing driveways will not be allowed.

Marcus said it will not be the last drought. California should be prepared for the next one.

# Flint Residents Must Now Pay for Their Water, but They Can't Drink it

By Washington Post, adapted by Newsela staff  
03/06/2017



This January 26, 2016, file photo shows a sign over the Flint River in Flint, Michigan. Virginia Tech researchers who exposed the lead-tainted water problem in Flint said last August the city's water quality had improved, based on tests at more than 160 homes. But residents still can't drink the water. Photo by: AP Photo/Carlos Osorio

People who live in Flint, Michigan, are about to start paying the full cost of their water again. However, that water is still polluted with lead. Lead is a dangerous chemical. It is not yet safe to drink straight from the tap.

On Wednesday, state leaders will end a city relief program. It has helped people in Flint pay their water bills for more than two years. The program started in 2014, when the city's water system became polluted with lead. Since that disaster, the state has spent about \$41 million in credits to help cover local water bills. The credits cover more than half of each person's monthly bill.



Anna Heaton is a spokeswoman for Michigan Governor Rick Snyder. She said the credits are ending "because the city's water meets all federal water quality standards." These standards are listed in two national laws. The first is the Lead and Copper Rule, and the second is the Safe Drinking Water Act. Heaton said the state will continue to send water filters to Flint. The filters help remove some of the lead from the water. They will assure people that the water is safe to drink, Heaton said.

The news about the relief program is causing frustration in Flint. The city has some of the highest water bills in the country.

### **Three Years Without Safe Tap Water**

"They want to make it look like they've resolved this thing," said Tim Monahan. After the water problems began, he suffered a painful case of Legionnaires' disease. The sickness causes breathing problems and fever. "It's been three years, and we still can't drink the water," Monahan said.

Flint Mayor Karen Weaver has argued against ending the credits. She said the state should pay for the water until it is clean enough to drink "without a filter."

"This is a trust issue," Weaver said. She criticized state officials for giving short notice about the credits ending. She wanted them to continue through March and possibly longer.

The Michigan Department of Environmental Quality has studied Flint's water system. Last month, it said the system met national standards. Lead levels were not much different from those in other cities, the department said.

### **Many People In Flint Rely On Bottled Water**

These results don't necessarily mean the water is safe. The city still advises people not to drink the water unless it has been filtered. Many people in

Flint still refuse to use it for cooking or bathing. They rely instead on bottled water.

The end of the city relief program will likely make problems worse. Of the 99,000 people who live in Flint, about 40,000 are poor. Many will have trouble paying their new water bills on time. As a result, they won't qualify to have their old water pipes fixed. Many of these aging pipes contain a significant amount of lead.

For many years, Flint paid to have water piped in from Lake Huron. Chemicals were added to the water to keep out lead from metal pipes. That changed in 2014 when the city came under the control of a new emergency manager. Officials switched to Flint River water to save money.

### **Huge Mistake Caused Major Health Problems**

The officials made a big mistake. They failed to make sure that chemicals were still added to the water to keep out lead. That mistake allowed rust, iron and lead to leach from aging pipes into the water. These pollutants then ended up in people's homes. The disaster exposed thousands of children to high levels of lead, which can cause many health problems. Lead can affect intelligence. It can also cause problems with speech, learning and behavior. More than a dozen officials have been charged with crimes for their part in the water crisis.

Nearly three years later, many people still don't trust the water. Government officials are trusted even less.

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# A Type of Fish Native Americans Relied on in the Past is Now in Danger

By National Geographic, adapted by Newsela staff  
07/06/2017



The Nass River in British Columbia is the last great eulachon fishery on Earth. Photo by: Connie Azak/Flickr

You have probably never heard of eulachon. Yet, this small fish is very important for many Native Americans.

Eulachon spend most of the year in the Pacific Ocean. Once a year they return to the rivers of the Northwest. They return to the place they were hatched. Then they spawn, or release their eggs.

The eulachon arrive at the end of winter. In the past, food supplies would be low by that point. Eulachon helped feed Native Americans up and down the Pacific coast. Without them, many people would have died.

The native people eat the fish. They also make it into fish grease. The oily grease is very healthy to eat.

Today, eulachon are in great danger. They are disappearing quickly. In many places where they were once common, younger people have never seen them.

There is still a chance eulachon can make a comeback. If they do, it will be thanks to Native people.

### **Eulachon Fish Were Very Common**

Eulachon were once all along the Pacific coast. They were common from northern California all the way up to Alaska.

The Cowlitz tribe lives in Washington state. For centuries, it fished eulachon on the Cowlitz River. In 1993, the fish did not return to the Cowlitz.

The Cowlitz and other coastal Native groups began worrying. They were the first to start asking questions.

Megan Moody belongs to the Nuxalk tribe. She grew up catching eulachon in the Bella Coola River in British Columbia, Canada. She is also a scientist who has studied eulachon.

Moody thinks she knows what is making eulachon disappear. Changes in the ocean are a big part of the problem, she says.

### **Rising Ocean Temperatures**

The Pacific Ocean's average temperature has been rising. This warming makes the food eulachon eat harder to find. It also brings in larger fish that eat the eulachon.

Scientists say climate change is causing the warming.

Climate change is also known as global warming. It is caused by the burning of fossil fuels. Coal and gas are two of the main fossil fuels.

Moody thinks climate change is only part of the problem. Ocean shrimp fishing made things even worse, she says. Shrimp nets kill large numbers of eulachon. They are caught by accident.

### **Eulachon Are Coming Back**

Today, shrimp boats are taking new steps to avoid killing eulachon. These changes have been helping.

In some places, the fish are already returning. In 2013, schools of eulachon arrived in the Bella Coola River. No one under 20 could remember such a scene.

Last year, the eulachon returned to the Bella Coola in great numbers. Hundreds of people sang and danced to welcome them. A totem pole was raised to face the sea.

That same season was a hard one on the Nass River.

There were enough fish to make grease. Still, it was not as many fish as the tribe was used to.

### **Making The Grease**

To make the grease, the aged eulachon are put into big tubs. The Nisga'a call them pots. They are huge, sealed tubs. They can cook tons of fish at a time.

During the cooking, the eulachon oil separates. It forms a see-through layer. Strained into buckets, the grease ranges in color. It can be pale gold. It can also be nearly black. It depends on how long the grease has aged.

A single round of cooking can take all day and all night. The job is smelly. After work, many men simply throw their clothes in the garbage.

# The World Loves Chocolate, but That Love is Hurting Rain Forests

By Ruth Maclean, The Guardian, adapted by Newsela staff

09/20/2017



People work at a cocoa sorting center in March 2017, in Sôbre, Ivory Coast, the world's largest cocoa producer. Photo: Sia Kambou/AFP/Getty Images

The world loves chocolate. Unfortunately, this love is hurting rain forests in Africa.

Nestlé, Hershey and other big companies make chocolate. Chocolate is made from cocoa beans.

Some cocoa beans are grown in areas where rain forests should be. A rain forest is a thick forest that gets heavy rainfall. Rain forests have amazing plant and animal life. Cocoa farmers have been cutting down these forests.

Cutting down trees is called deforestation.

Some forests are protected. It is against the law to cut down trees in protected forests.

### **Ivory Coast's Forests Are In Danger**

Most of the world's cocoa beans come from two countries in West Africa. These countries are Ivory Coast and Ghana.

Ivory Coast and Ghana also have the biggest problems with deforestation.

Mighty Earth is a group that works to protect the environment. It worries what will happen if nothing changes. The group said Ivory Coast's forests could be gone by 2030.

### **Trees Slowly Disappeared**

Salam Sawadougou is a cocoa farmer in Ivory Coast. His farm is in the Mount Tia protected forest. His farm has no more big trees. Only gray tree stumps remain.

"I burned it little by little," Sawadougou says. He said he needed full sun to grow his plants. Farmers think cocoa will grow better in the dirt where trees were cut down. They cut trees one by one. They plant more cocoa as they go.

Scientists say farmers will miss the trees. Their shade would have protected the plants from dry seasons. Without trees, the sun will be too strong for the plants.

The top chocolate companies said they want to use beans grown the right way. They also want to end deforestation. They hope this can happen by 2020. That is just a few years away.

### **Cocoa Traders And Farmers Have A Problem**

Nestlé is a company that makes chocolate. It said deforestation is "one of the worst environmental challenges facing the world."

It is a hard problem to solve. Many farmers have grown cocoa in protected areas for many years. Where would these farmers go? How will they make a living?

Cocoa traders are people who buy cocoa beans from the farmers. Then, they sell the beans to companies that make chocolate. It is against the law for cocoa traders to buy beans from protected forests. They rarely get in trouble for it.

### **Cocoa Farmers Are Poor**

In Ivory Coast, government workers are supposed to protect forests. Some are not doing their jobs honestly. Officials have accepted money to ignore people who break the law. This is how they are able to stay out of trouble.

Farmers know they are breaking the law. Sadly, they do not have many choices. They do not earn much money. The big chocolate companies make a lot of money. Working conditions are poor. Many farmers are paid too little.

Most cannot even afford to buy a bar of chocolate.



## Açaí Breakfast Bowl Recipe



(Untitled photograph of an açaia bowl)

### Ingredients:

- Two 4-ounce packets of unsweetened frozen açaí puree
- 1 Medium banana
- 1/4 cup of blueberries
- 1/4 cup of strawberries
- 1 tablespoon of agave honey
- 1 tablespoon of unsweetened coconut flakes

### Instructions

- 1.) Break the frozen açaí up a little by slapping the sealed packets on the table. Once broken up, open the packet and pour content into a bowl.
- 2.) Slice the banana and arrange the slices in the bowl.
- 3.) Slice the strawberries and arrange the slices in the bowl.
- 4.) Add the 1/4 cup blueberries and 1 tablespoon of coconut flakes in neat piles, rows, or design of your choice in the bowl. Add the 1 tablespoon of agave honey on top and then take a photo!

Source: Recipe adapted from the Acai Breakfast Bowl recipe on Food Network.

## Unit 4 | Food as Medicine: Food Utilization



Whittington, C. (2018). [Graphic Image]. Created for this curriculum.

This unit will center on the science of food and how the body utilizes healthy and unhealthy food and why unhealthy food, particularly food with high amounts of sugar, can be damaging to the body. This unit will highlight how eating only unhealthy food can be an indication of food insecurity. These five lessons will discuss how nutrition fact labels can inform individuals about the ingredients and calories in food. This unit will also entail students calculating the caloric value of food and sugar and highlight how herbs, vegetables, cooking, and a different food source could help and heal the body.

Lesson	Guiding Question & Key Concepts	Activities
<b>Unit 4   Food as Medicine: Food Utilization</b>		
1	<p>Guiding Question: What does healthy eating mean?</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Analyze Dan Piraro’s use of the word <i>farmacy</i> in his editorial comic to understand the author’s point of view on access to healthy food</li> <li>● Illustrate their own food farmacy</li> </ul> <p>Key Concepts: Fruits, Vegetables, Carbohydrates, Protein, Dairy, and Water</p>	<p>Warm Up (10 Minutes): Select a USDA’s MyPlate image and discuss the 5 food groups as well as the various foods found in each group.</p> <p>Explain that USDA suggests that children between 9-13 should have about 1 ½ whole fruits, 2 ½ cups of vegetables, 5-6 ounces of grains, 5 ounces of protein, 3 cups of dairy, and 5 teaspoons of oil a day (MyPlate.gov, n.d.). Have measurements available for students to see amount of healthy food they should be eating daily.</p> <p>Work Time (30 Minutes): Share several items found in a pharmacy. Have students guess where they would get these items from. Students will think-pair-share on the definition of pharmacy. Discuss comments.</p> <p>Students will view the ‘<i>Farmacy</i>’ editorial comic by Dan Piraro and unpack the message by using the <b>Analyzing an Editorial Comic</b> handout. Lead a discussion on what they think the artist is trying to highlight in this editorial comic using words and illustrations.</p> <p><b>Note to Educators:</b> Editorial comics are illustrations in which an individual expresses or offers an opinion and analysis about current events. Editorial comics often question authority, condemn government corruption, highlight social injustices, and</p>

		<p>create caricatures of various government and public personalities. The objective of an editorial cartoon is to persuade the reader to see the artist's point of view (Sterling, 2009).</p> <p>Students will use the <b>Food Farmacy Illustration</b> handout to draw what they imagine a food farmacy would look like. Students can use the internet to find different kinds of fruits, vegetables, grains, etc. to include in their food farmacy.</p> <p>Wrap Up (5 Minutes): Journal Entry - What food are you trying to highlight in your food farmacy? Why?</p>
2	<p>Guiding Question: What can nutrition labels teach you about nutrients in food?</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Analyze and discuss what details are provided on Nutrition Facts panels</li> <li>• Compare nutrients between two or more food labels</li> </ul> <p>Key Concepts: Nutrition labels</p>	<p>Warm Up (10 Minutes): Show students images of a fast food menu. <i>Guiding question: What do these foods have in common?</i> Inform students that these foods are high in fat, sugar, and salt. Explain that too much fat, sugar, and salt is unhealthy.</p> <p>Inform students that you can find the information for fat, sugar, and salt on a food label. <i>Guiding question: Where do you see Nutrition Fact food labels? Besides the information mentioned, what other kind of information can you get from a food label?</i> Go over the information on the <b>Chef Solus Food Label Guide</b> and the <b>Food Label Reference Guide</b> infographic.</p> <p><b>Note to Educators:</b> USDA has updated the Nutrition Facts labels to include a stylistic and nutritional value shift. The type size for “Calories,” “servings per</p>

		<p>container,” and the “Serving size” has increased, and the number of calories and the “Serving size” is now bold. In addition, manufacturers must now declare the actual amount, in addition to percent Daily Value of vitamin D, calcium, iron and potassium. They can voluntarily declare the amount for other vitamins and minerals. The amount of Vitamin A, C, and Calcium US consumers were getting were deficient in the 1990s but that is no longer the case in the twenty-first century. Vitamin D and potassium are the nutrients US consumers are not getting enough of today. “Added sugars,” in grams and as percent Daily Value, will now be included on the label. According to the FDA, it is difficult for consumers to meet their nutritional needs while staying within their calorie limits if they consume more than 10 percent of your total daily calories from added sugar. The goal for these new updates is to provide consumers with more information in order to make better health choices for themselves and their families. These updates should be met by January 1, 2020. For the purpose of this curriculum, the original version will be utilized (Food and Drug Administration-Changes to Nutrition Facts Label, n.d.).</p> <p>Work Time (30 Minutes): Students will go to the Hy-vee aisles online website and get label information for various foods. Discuss with students how to use food labels and focus on 3 components: 1.) Serving Size and Calories, 2.) Fat,</p>
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	<p>Cholesterol, Sodium, and Sugar, and 3.) Vitamins and Minerals.</p> <p>Students will compare two food labels and decide which product is a better, healthier option. Model activity using Annie's Chocolate Chip Cookies. Show the following steps:</p> <ul style="list-style-type: none"> <li>● Go to the Hy-vee aisles online website</li> <li>● In the search box, type the name of the product and click search</li> <li>● Click on the product</li> <li>● Click on the Nutrition Facts tab</li> <li>● Write the information on the <b>Food Label Math Fun</b> handout</li> </ul> <p>The following products will be compared:</p> <ul style="list-style-type: none"> <li>● Frozen Pizza - DiGiorno Original Crust Supreme and Amy's Margherita Pizza</li> <li>● Bread - Food for Life Low Sodium Bread Sprouted Grain, Ezekiel 4:9 Low Sodium Sprouted Whole Grain Bread, and Pepperidge Farm Farmhouse White Hearty Sliced Bread</li> <li>● Potato Chips - Ruffles Original Potato Chips and Popchips</li> </ul> <p>Wrap Up (5 Minutes): Show students two products with the same caloric value but different nutritional value. Journal Entry - Compare an unhealthy option and a healthy option with the same caloric value and explain how one option is a better choice for nutrients than the other.</p>
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3	<p>Guiding Question: How does an ingredient list inform you about the nutrients in food?</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Identify ingredients listed on nutrition facts panels of food packaging</li> <li>• Gain understanding of food quantities and units of measure</li> </ul> <p>* Lesson adapted from Jennifer Morris and Sheri Zidenberg-Cherr's <i>Nutrition to grow on: A garden-enhanced curriculum for upper elementary school children.</i></p>	<p>Warm Up (10 Minutes): Ask true and false questions and have students walk to the right for truth and left for false. <i>Guiding statements: 1.) If an ingredient is listed as the first on a Nutrition Facts label, it means the food contains more of that ingredient. 2.) Only the vitamins and minerals that are in the food are listed on a food label. 3.) The same ingredient in a food will not be listed separately. For example, sugar and corn syrup, which is another type of sugar, will be listed as sugar on a food label.</i></p> <p>Answers: 1.) True, ingredients are listed in order from greatest to least based on the amount of it there is the entire product. 2.) True, though the types of vitamins and minerals the FDA is requiring manufacturers to include on a label are changing, vitamins and minerals are the things we should consume more of and eating foods that contain 10% or more of these nutrients are a healthier option. 3.) False, manufacturers separate sugar into its natural and man-made forms. The FDA will now require labels to include added sugar.</p> <p>Work Time (40 Minutes): Pair students. Provide groups with several cookbooks. Have them select a recipe. Students will go to the US USDA Food Composition Databases. Students will utilize a graphic organizer to calculate percentages of the ingredients as well as their vitamin and mineral value.</p>
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	<p>Inform students that they will:</p> <ol style="list-style-type: none"> <li>1.) Write down all of the ingredients and their food groups in the recipe.</li> <li>2.) Write the amount of each individual ingredient.</li> <li>3.) Look up the caloric value of each of the ingredients in the recipe in the USDA Food Composition Databases and calculate the caloric amount.</li> <li>4.) Look up the Vitamin A, Vitamin C, Calcium, and Iron content of each ingredient and list their values.</li> <li>5.) Add the calories of all of the ingredients together.</li> </ol> <p>Teacher will model with ingredients in ice cream, which include:</p> <ul style="list-style-type: none"> <li>● 4 large egg yolks</li> <li>● <math>\frac{2}{3}</math> cup granulated sugar</li> <li>● 1 <math>\frac{1}{2}</math> cups whole milk</li> <li>● 1 vanilla bean or 1 teaspoon vanilla extract</li> <li>● 1 <math>\frac{1}{2}</math> cups heavy cream</li> </ul> <p><b>Note to Educators:</b> Vitamin A, Vitamin C, Calcium, and Iron were some of the nutrients consumers do not get enough of. Inform students that Vitamin A helps keeps eyes, skin, teeth, and bones healthy. Vitamin C helps heals cuts and wounds, and fights bugs when we are sick. Calcium helps keep our bones and teeth strong. The body needs Iron to produce red blood cells. Red blood cells transport oxygen to the body's tissues in exchange for carbon dioxide, which is carried to and eliminated by the lungs (USDA-MyPlate.gov - Nutrients and Health Benefits, n.d.).</p>
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		<p>Students will utilize the 2-page <b>Nutritional Value of a Homemade Dish</b> handout to list the percentages of nutrients in a food.</p> <p>Wrap Up (10 Minutes): Class discussion on the difference between eating packaged food and eating and cooking at home. <i>Guiding questions: Do you prefer to eat out or cook at home with your family? What are some of your favorite places to eat out? What are some of your favorite dishes to cook at home? What is the difference between eating out and cooking your food at home, particularly what ingredients are in the food?</i></p>
4	<p>Guiding Question: How much sugar is in our food?</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Define sugar</li> <li>● List types of natural and man-made sugar</li> <li>● Summarize the potential dangers of consuming too much sugar</li> <li>● Determine how many grams of sugar are in products</li> </ul> <p>Key Concepts: Sugar</p>	<p>Warm Up (10 Minutes): Show the <b><i>How It's Made 01 Sugar</i></b> video on <b>YouTube</b> (roughly 10 minutes).</p> <p>Teacher will define sugar. Show students different types of sugar including honey, maple syrup, and powdered sugar.</p> <p><b>Note to Educators:</b> Explain to students that there is a difference between sugar occurring naturally like honey and adding processed sugar to food like Dominoes and high-fructose corn syrup. Too much sugar in any form is not ideal to maintain a healthy body, however added sugar is particularly damaging. The average US consumer eats an additional 18 grams of added sugar a day. Show amount in Dominoes cubes. Also when you drink an 8-ounce glass of orange juice, you are getting more sugar into your system than if</p>

	<p>you just ate one orange. An 8-ounce glass of orange juice is the same as eating 2-4 oranges. You're consuming too much natural sugar (USDA-MyPlate.gov - Other Ingredients, n.d.).</p> <p>Work Time (40 Minutes): Class discussion on sugar. <i>Guiding question: Why do you think doctors and scientists encourage us to limit our consumption of sugar?</i> Show the <b>Sikuvideo</b> titled <b><i>Sugar is Killing Us</i></b> video on <b>YouTube</b> (roughly 4 minutes).</p> <p>Students will use the <b>Sugar, Sugar, Everywhere</b> handout. They will select at least 2 products from each station and calculate how many grams of sugar are in each product. Students will use Dominoes sugar cubes to show amount. The following stations examples are below:</p> <p>Station 1 - Food: Canned soup, canned fruit, granola bars, and breakfast cereals.</p> <p>Station 2 - Drinks: Sports drink, chocolate milk, flavored coffee, and vitamin water.</p> <p>Station 3 - Food: Low fat yogurt, canned beans, frozen meals, and applesauce.</p> <p>Station 4 - Sauces: Barbecue sauce, spaghetti sauce, and ketchup.</p> <p>Teacher will use the <b>Sample Nutrition Facts Label</b> to model how to calculate how many total grams of sugar are in the product by using the equation: _____</p>
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		<p>(servings) x _____ (grams of sugar) = _____ (total grams).</p> <p>Teacher will also model how to calculate how many cubes of sugar are in the entire product by using the equation: _____ (total grams from the equation above) ÷ _____ (grams of sugar in each Domino cube) = _____ (total cubes).</p> <p><b>Note to Educators:</b> Remember that different Domino cubes have varying grams of sugar depending on the size of the cube.</p> <p>Class discussion on the amount of sugar in food. <i>Guiding questions: Were you surprised by how much sugar was in a product? Why do you think manufacturers don't include the full amount of sugar in a product? Which drink has absolutely no sugar or calories?</i></p> <p>Wrap Up (5 Minutes): Journal Entry - What are some ways you can reduce your sugar intake each day?</p>
5	<p>Guiding question: How is food like medicine?</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>Analyze the health benefits of food and how a healthy diet impacts a person physically as well as mentally</li> </ul> <p>Key Concepts: Herbal Medicine</p>	<p>Warm Up (10 Minutes): Teacher will write the word medicine on the board. Give students an index card and have students write the first word they associate with medicine along with their name on their index cards.</p> <p>Divide students into two groups. Have group A stand on one side of the room and group B on the other side. Group A will throw their paper to someone in group B. Group B will pick up an index card and say the student's name. The two individuals will meet and discuss group A thoughts on</p>

		<p>medicine. The same steps will take place for group B. Gather as a class and share thoughts about the word medicine.</p> <p>Work Time (30 Minutes): Groups will participate in a jigsaw about various types of food/health practices. Students will read Newsela articles on topics.</p> <p>Group 1 - <b><i>Issue Overview: Should People Become Vegetarians?</i></b></p> <p>Group 2 - <b><i>Native Americans and Traditional Plant Use</i></b></p> <p>Group 3 - <b><i>Scientists Study the Health Benefits of Turmeric</i></b></p> <p>Group 4 - <b><i>A Cooking-as-Medicine Revolution is Entering the Healthcare World</i></b></p> <p>Group 5 - <b><i>Don't Bug Out: Eating Bugs Might be the Future for Meals Around the World</i></b></p> <p>Optional: Invite individuals who are knowledgeable or engage in these food/health practices to discuss with students these health options.</p> <p>Wrap Up (10 Minutes): Journal Entry - Students will add information about food utilization to their KWHLAQ Chart.</p>
<p style="text-align: center;">Unit Standards</p> <p>Common Core Standards ELA (LITERACY.RL.4.1)</p> <p>Common Core Standards ELA (LITERACY.SL.4.4)</p>		

Common Core Standards ELA (LITERACY.SL.4.1.C)

Common Core Standard Math (Content.4.NBT.B.5)

National Health Education Standard (5.5.5)

National Standards for Family and Consumer Sciences Education (Nutrition and Wellness 14.2.4)



Piraro, D. (2011, February 2). [Editorial Comic] *Bizarro*. Used with permission.

Name \_\_\_\_\_

### Analyzing an Editorial Cartoon

Directions: Read the editorial cartoon by Dan Piraro and answer the following questions.

Describe the people in this panel.

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What are they doing?

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What social issue do you think inspired this panel?

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How did the cartoonist use the word “farmacy” to discuss his point of view on this social issue?

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Do you think this illustration is effective? Why or why not?

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Do you agree or disagree with the cartoonist’s opinion of the issue? Explain your answer.

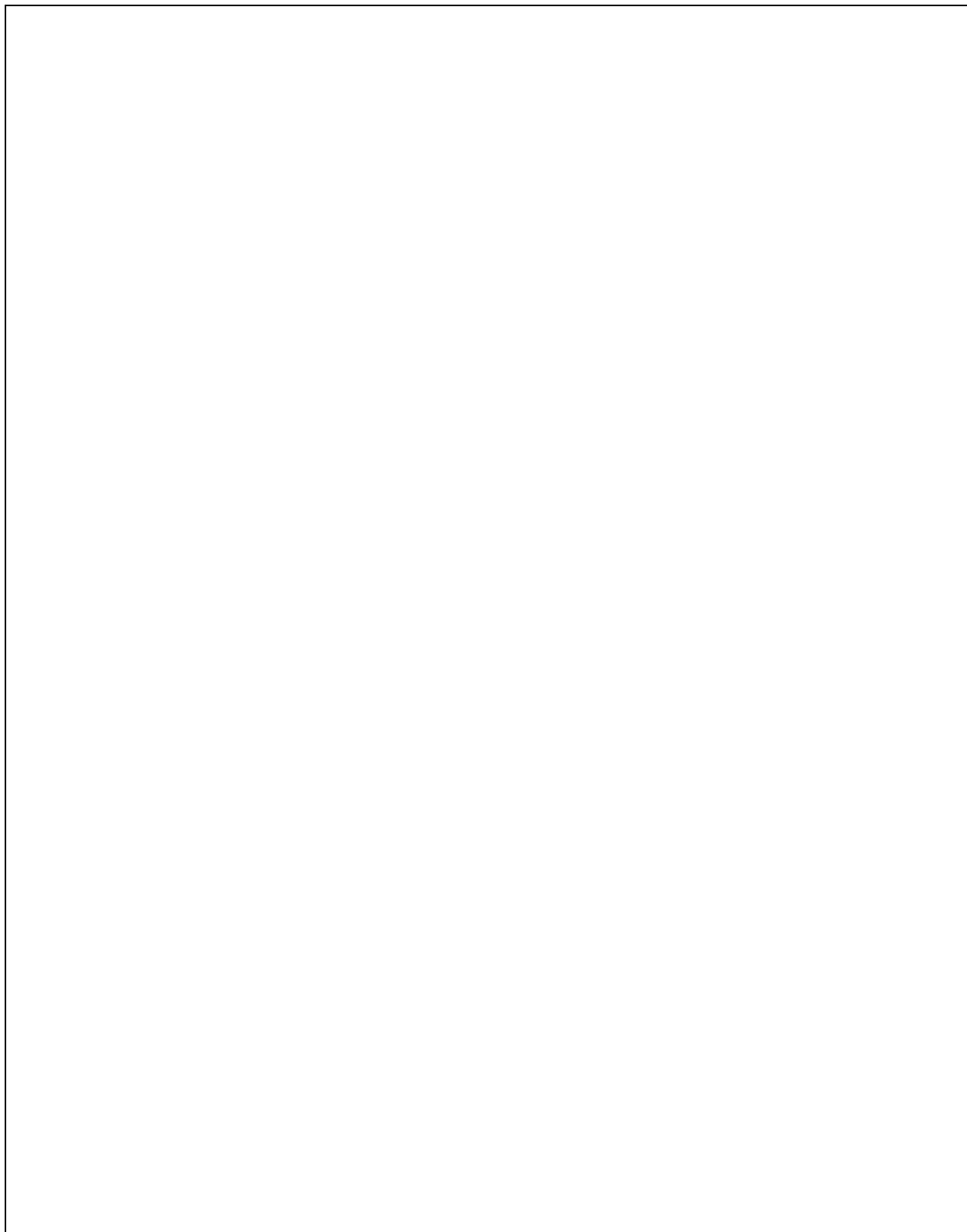
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Source: Adapted from the Library of Congress’ Cartoon Analysis Guide.

Name \_\_\_\_\_

### Food Pharmacy Illustration





# Chef Solus Food Label Guide



Food labels can seem confusing but if we break them up into blocks, you will see they are actually very easy to use! All the blocks work together to help you pick smart foods that will keep you healthy and feeling great!

Start with the **Serving Size**. All the numbers are based on one serving size. The package might actually contain several servings. This is very important information that will help you with portion control.

Start at the top!



The **Servings Per Container** tells you how many servings in that package. Some foods are low in calories and fat if you have only one serving. But if you eat more than one serving, then calories and fat can really add up! See how many servings this label shows - 2 servings!

**Calories:** This tells you how much energy you will get from one serving of this food. If you don't use up that energy, it gets stored as fat.

**Calories from Fat:** This tells you how much energy of that food comes from fat. Your heart likes foods lower in fat.

**Total Fat** is the amount of all the different kinds of fat in one serving. Your body needs some fat. Avoid foods high in saturated fats and look for zero Trans fats. These fats are not good for your heart.

Cholesterol and sodium (salt) tells you how much of that nutrient is in one serving. Pick foods that are low in cholesterol and sodium. Look for 5% or less!

## Nutrition Facts

Serving Size 1 cup (228g)  
Servings Per Container 2

Amount Per Serving	
<b>Calories</b> 250	Calories From Fat 110
% Daily Value	
<b>Total Fat</b> 12g	<b>18%</b>
Saturated Fat 3g	<b>15%</b>
Trans Fat 3g	
<b>Cholesterol</b> 30mg	<b>10%</b>
<b>Sodium</b> 470mg	<b>20%</b>
<b>Total Carbohydrate</b> 81g	<b>10%</b>
Dietary Fiber 0g	<b>0%</b>
Sugars 5g	
<b>Protein</b> 5g	
Vitamin A	<b>4%</b>
Vitamin C	<b>2%</b>
Calcium	<b>20%</b>
Iron	<b>4%</b>

The % (**Percent**) **Daily Value (DV)** is a number on the label given in percentages. These percentages are the amount of a certain nutrient that a person will eat in one serving. (based on 2000 calorie diet)

**Fiber:** This tells you how much fiber is in one serving. Fiber helps your food move through your body easily. Foods with 4 grams or more is high in fiber and good for you!

**Sugars** is the total amount of natural sugar and added sugar that is in the one serving. Our body does not need too much sugar. Sugar can add a lot of calories that we don't need.

**Protein** is very important because it is the building blocks for all cells. Read carefully. High protein foods can be high in fat.

### Vitamin Section:

See if these foods are high in vitamins. Vitamins help your body stay healthy. 20% or more is high and makes your body very happy!

More Nutrition Fun [www.ChefSolus.com](http://www.ChefSolus.com)

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The Meal Gap: A Food Activist Curriculum

# Food Label Reference Guide

Watch out for the red areas. Don't get fooled by forgetting to look at how many servings are in the package. The nutrition information is based on only 1 serving!



<b>Pretzels</b>	
<b>Nutrition Facts</b>	
Serving Size 28g (about 42 pretzels)	
Servings Per Container 15	
Amount Per Serving	
<b>Calories</b> 110	Calories from Fat 10
% Daily Value*	
<b>Total Fat</b> 1g	<b>1 %</b>
Saturated Fat 0g	<b>0 %</b>
Trans Fat 0g	
<b>Cholesterol</b> 0mg	<b>0 %</b>
<b>Sodium</b> 440mg	<b>18 %</b>
<b>Total Carbohydrate</b> 21g	<b>7 %</b>
Dietary Fiber 1g	<b>4 %</b>
Sugars 1g	
<b>Protein</b> 3g	
Vitamin A 0% • Vitamin C 0%	
Calcium 0% • Iron 10%	
*Percentage Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.	
Use the 5% and 20% rule.	

Look for foods that are high in these green areas. That's the good stuff your body need!



5% is low and 20% is high for any of these nutrients.

Go higher in the Green areas

Stay lower in the red areas



More Nutrition Fun [www.ChefSolus.com](http://www.ChefSolus.com)  
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Name \_\_\_\_\_

## Food Label Math Fun

Name of Food A _____	Name of Food B _____
1.) How many servings are there per container? _____	1.) How many servings are there per container? _____
2.) How many calories are there for one serving? _____	2.) How many calories are there for one serving? _____
3.) If you ate the whole container, how many calories would you have eaten? _____ (Calories) x _____ (Number of servings in package) = _____ (Total calories)	3.) If you ate the whole container, how many calories would you have eaten? _____ (Calories) x _____ (Number of servings in package) = _____ (Total calories)
4.) Calories from Fat _____	4.) Calories from Fat _____
5.) Sugar per serving _____	5.) Sugar per serving _____
6.) Sodium per serving _____	6.) Sodium per serving _____
7.) Dietary fiber _____	7.) Dietary fiber _____
8.) Vitamin A _____	8.) Vitamin A _____
9.) Calcium _____	9.) Calcium _____

Circle the food label that is best describes:

- |                               |         |         |
|-------------------------------|---------|---------|
| 1.) More calories from fat    | Label A | Label B |
| 2.) More sugar per serving    | Label A | Label B |
| 3.) More sodium per serving   | Label A | Label B |
| 4.) More calories per serving | Label A | Label B |
| 5.) Less dietary fiber        | Label A | Label B |
| 6.) Less Vitamin A            | Label A | Label B |
| 7.) Less Calcium              | Label A | Label B |

Which food item do you think is a healthier choice and why?

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Source: Adapted from the Nourish Interactive's Food Label Math Fun and Compare Labels Worksheets.

## Nutrition Guidelines

Children between the ages of 9 and 13 should consume no more than **1600 calories** a day. A food is nutritious if it meets at least 4 of the following guidelines:

- **200 Calories** or fewer
- **10%** or fewer total **Fat**
- **10%** or more **Fiber**
- **10%** or more of **Vitamin A**
- **10%** or more of **Vitamin C**
- **10%** or more of **Calcium**
- **10%** or more of **Iron**
- **10%** (5g) or more **Protein**

Source: Adapted from the Label-Ease handout, developed by the National Dairy Council.

Name \_\_\_\_\_

## Nutritional Value of a Homemade Dish

Dish \_\_\_\_\_

Categories	Nutrition Value	Nutrition Value	Nutrition Value
Name of Food			
Food Group			
Measurement			
Calories			
Total Fat			
Protein			
Vitamin A			
Vitamin C			
Calcium			
Iron			
How many points does this food have?			

Categories	Nutrition Value	Nutrition Value	Nutrition Value
Name of Food			
Food Group			
Measurement			
Calories			
Total Fat			
Protein			
Vitamin A			
Vitamin C			
Calcium			
Iron			
How many points does this food have?			

What is the total caloric count for this dish? \_\_\_\_\_

If 9- to 13-year-olds should eat about 1,600 calories a day, is this dish a healthy option? Why or why not?

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Source: Adapted from Jennifer Morris and Sheri Zidenberg-Cherr's *Nutrition to grow on: A garden-enhanced curriculum for upper elementary school children lesson on Food Labels*.

## Sample Nutrition Facts Label

<b>Nutrition Facts</b>			
Serving size 70g			
Servings Per Container about 2			
	2.5 Oz (About 1/2 box, Makes About 1 Cup) As Package	2.5 Oz (About 1/2 box, Makes About 1 cup) As Prepared	
Amount Per Serving			
Calories	260	300	
Calories from Fat	25		
	%DV*	%DV*	
<b>Total Fat</b> 3g	5%	18%	
Saturated Fat 1.5g	8%	15%	
<i>Trans</i> Fat 0g			
<b>Cholesterol</b> 10mg	3%	10%	
<b>Sodium</b> 510mg	21%	20%	
<b>Total Carbohydrate</b> 48g	16%	10%	
Dietary Fibers 1g	4%	0%	
Sugars 7g			
<b>Protein</b> 10g			
Vitamin A	0%	6%	
Vitamin C	0%	0%	
Calcium	30%	40%	
Iron	10%	10%	
* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.			
	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Source: Nourish Interactive. Sample Food Label.



Name \_\_\_\_\_

## Sugar, Sugar, Everywhere

Food

Product	Product
<p>1.) How many total grams of sugar are in the product?</p> <p>_____ (servings) x _____ (grams of sugar) = _____ (total grams)</p>	<p>1.) How many total grams of sugar are in the product?</p> <p>_____ (servings) x _____ (grams of sugar) = _____ (total grams)</p>
<p>2.) How many cubes of sugar are in the entire product?</p> <p>_____ (total grams) ÷ _____ (grams of sugar) = _____ (total cubes)</p>	<p>2.) How many cubes of sugar are in the entire product?</p> <p>_____ (total grams) ÷ _____ (grams of sugar) = _____ (total cubes)</p>

Food

Product	Product
<p>1.) How many total grams of sugar are in the product?</p> <p>_____ (servings) x _____ (grams of sugar) = _____ (total grams)</p>	<p>1.) How many total grams of sugar are in the product?</p> <p>_____ (servings) x _____ (grams of sugar) = _____ (total grams)</p>
<p>2.) How many cubes of sugar are in the entire product?</p> <p>_____ (total grams) ÷ _____ (grams of sugar) = _____ (total cubes)</p>	<p>2.) How many cubes of sugar are in the entire product?</p> <p>_____ (total grams) ÷ _____ (grams of sugar) = _____ (total cubes)</p>

## Drinks

Product	Product
<p>1.) How many total grams of sugar are in the product?</p> <p>_____ (servings) x _____ (grams of sugar) = _____ (total grams)</p>	<p>1.) How many total grams of sugar are in the product?</p> <p>_____ (servings) x _____ (grams of sugar) = _____ (total grams)</p>
<p>2.) How many cubes of sugar are in the entire product?</p> <p>_____ (total grams) ÷ _____ (grams of sugar) = _____ (total cubes)</p>	<p>2.) How many cubes of sugar are in the entire product?</p> <p>_____ (total grams) ÷ _____ (grams of sugar) = _____ (total cubes)</p>

## Sauces

Product	Product
<p>1.) How many total grams of sugar are in the product?</p> <p>_____ (servings) x _____ (grams of sugar) = _____ (total grams)</p>	<p>1.) How many total grams of sugar are in the product?</p> <p>_____ (servings) x _____ (grams of sugar) = _____ (total grams)</p>
<p>2.) How many cubes of sugar are in the entire product?</p> <p>_____ (total grams) ÷ _____ (grams of sugar) = _____ (total cubes)</p>	<p>2.) How many cubes of sugar are in the entire product?</p> <p>_____ (total grams) ÷ _____ (grams of sugar) = _____ (total cubes)</p>

# Issue Overview: Should People Become Vegetarians?

By ProCon.org, adapted by Newsela staff  
11/21/2016



TOP: A cow eats hay at the Faria Dairy Farm in Escalon, California, June 2, 2009. Justin Sullivan/Getty Images. MIDDLE: Livestock pens at Chicago's Union Stockyards, which Upton Sinclair wrote about in "The Jungle," Wikimedia Commons. BOTTOM: USDA's MyPlate nutritional guide icon.

The average American eats more than 100 pounds of meat every year. Vegetarians do not eat any meat. This includes fish and chicken. In the United States, about 3 in every 100 people are vegetarian.

People who support being vegetarian say eating meat is not healthy. They say it is bad for the planet. Raising animals for meat wastes water and land. It also creates pollution. Many vegetarians also say that killing animals for food is cruel.

On the other side, people say eating meat is healthy. They say animals can be killed in ways that are not too painful. They also say that people have been eating meat for many years.

## **Veg Out**

Being vegetarian goes back to ancient Greece. The famous mathematician Pythagoras was a vegetarian. So was the philosopher Plato.

The American Vegetarian Society was formed in 1850. Its founder was Sylvester Graham. He was a nutrition expert. He also invented the Graham Cracker. Graham believed being vegetarian made you healthier.

In the late 1800s, a new group of Christians formed in the U.S. They were called Seventh-Day Adventists. Adventists are vegetarian. They believe people are supposed to protect animals, not eat them. Other religions also follow vegetarian diets. It's part of their belief in non-violence. These groups include Quakers, Buddhists and Hindus.



In 1906, an important book called "The Jungle" was published. It was written by Upton Sinclair. The book was about meat-packing plants in Chicago. It showed that these places were unclean and unsafe. In response, new laws were passed. They said meat must be inspected before it can be shipped to stores.

## **Lots Of Back And Forth**

Interest in being vegetarian grew in the U.S. in the 1970s. Not long after, though, the meat industry became bigger. It could supply more meat for less money. Soon, Americans started eating more meat.

The American Dietetic Association is a group of nutrition experts. In 1987, this group said that it supports the vegetarian diet.

The Center for Consumer Freedom disagrees. This group formed in 1996. It says eating meat is a "personal choice."

In 2005, Dr. T. Colin Campbell published a study. The study took 20 years. Dr. Campbell found that people who ate the most plant-based foods were the healthiest. People who ate the most animal-based foods were less healthy. The study was criticized by the Weston A. Price Foundation, a pro-meat group. It said the study was "biased."

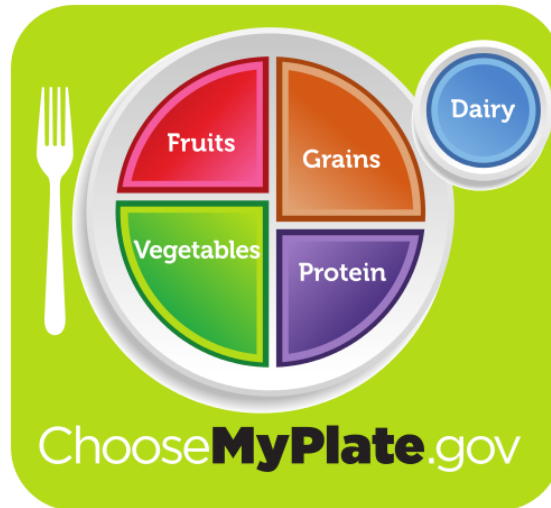
## **More Meat-Free Options**

In the U.S., people are buying more vegetarian foods. These include fake meat and non-dairy milks like soy milk. In 2006, shoppers spent over \$1 billion on these items.

Vegetarians are still a small group. In most countries, only 3 to 5 out of every 100 people is vegetarian. This is not true in India, though. There, 1 out of every 3 people is vegetarian. The vegetarian diet has been passed down for many years.

In 2012, a survey found that about 1 in 20 Americans is vegetarian. About 1 in every 50 Americans is vegan. Vegans do not eat any animal products, including milk and cheese. They also don't believe in using animals for clothes or entertainment.

## A Full Plate



In June 2011, Michelle Obama unveiled a new USDA "My Plate" image. It replaced the older "Food Pyramid." "My Plate" represents the 5 most important food groups. It renamed the "Meat & Beans" category to "Protein." It changed the "Milk" to "Dairy." The other 3 categories, Grains, Vegetables and Fruits, stayed the same.

The amount of meat Americans are eating has gone down recently. In 2004, the average American ate 184 pounds of meat. In 2012, they ate 166 pounds of meat.

*Source: [vegetarian.procon.org](http://vegetarian.procon.org)*

# Native Americans and Traditional Plant Use

By National Park Service, adapted by Newsela staff

07/14/2017



Glacier National Park in Montana. Bands and tribes traveled here and just across the border, in Canada, to gather plants and trade. Photo: U.S. National Park Service

Native groups have lived in almost every part of North America. Some settled in deserts. Others made the cold Arctic their home. No matter where they were, they learned to use the environment around them. To survive, they had to know how to use the plants in their area.

This was certainly true for the Blackfeet, Ktunaxa and Salish peoples. All three are native groups who lived in the American West.

## The Early Blackfeet

The Blackfeet lived in modern-day Montana and Canada. They were proud hunters. The Blackfeet mostly lived off the herds of bison that fed on the grasslands.

But the Blackfeet knew how to make the most of native plants. For example, they ate the berries they found. They also used lodgepole pine trees to build homes.



Blackfoot tipis in Logan Pass, Mount Reynolds, Montana. Photo: U.S. National Park Service.

Lodgepole pines had many uses. Lodgepoles are thin, strong and straight. The Blackfeet used them as poles for their tipis. These were homes that could be easily built and taken down again.

The sap from pine trees was also useful. Sap is the fluid that comes from plants. The Blackfeet used the sap from lodgepoles to make medicine.

The Blackfeet were not farmers. But they planted gardens to grow certain plants like tobacco. These plants were burned during religious ceremonies.



## **The Early Ktunaxa (Kootenai)**

The Ktunaxa lived near the Blackfeet. They were more at home in the foothills and mountains.

Like the Blackfeet, the Ktunaxa were also hunters. They ate red meat and plants, as well as fish.

Old Ktunaxa stories honor the grizzly bear. The stories say this big bear is the protector of berries and roots.



Camas flowers, whose roots were also a source of food for Northwest Native Americans. Photo: U.S. National Park Service.

Serviceberry was a useful food for the Ktunaxa. Its bushes were used to make arrows. The Ktunaxa also picked chokecherries and huckleberries.

They dug up roots, such as bitterroot and wild carrots. They also ate wild onions.

Like the Blackfeet, the Ktunaxa had many uses for lodgepoles. These pines were used for houses, food and medicine. The Ktunaxa built canoes from cedar and birch trees.

### **The Early Salish**

The Salish lived in the valleys between mountains. They were friendly with the Ktunaxa. The two protected each other from the Blackfeet. They shared hunting grounds and traded the plants that they gathered.

The Salish ate both plants and meat. They used the same plants as the Ktunaxa. For example, they both grew tobacco for religious ceremonies.

The Salish and Ktunaxa held ceremonies to pray for a good harvest. Some ceremonies took place at the end of the gathering season. Others were held to give thanks for “first fruits.”

Salish stories tell of medicine trees with spirits in them. These spirits granted gifts, protection and visions of the future.

### **Native American Influence**

The Blackfeet, Ktunaxa and Salish were different tribes. Yet they all found many uses for the plants around them. They knew how to use what the land offered them. They did not change or harm the land as people do with today's technology.

# Scientists Study the Health Benefits of Turmeric

By Atlas Obscura, adapted by Newsela staff

08/04/2017



A woman at a Hindu festival throwing yellow turmeric, Mumbai, India, February 2003. Photo by: Martin Godwin/Getty Images.

An old spice is becoming popular again. It's called turmeric.

Turmeric is a bright yellow powder. In the U.S., it can be easily found at the grocery store.

Now, in the U.S., turmeric is being used in fancy health foods. People are using it to heal cuts. It is seen as a natural way to heal.

Using turmeric in this way is actually an old idea. It was used like this in South Asia. People there have been using turmeric for 3,000 years. South Asia includes countries like India and Pakistan.

The spice comes from the root of the turmeric plant. Its roots are shaped like bulbs. If you cut into the root, it is yellow inside. The root is boiled, dried and ground down into a yellow powder. The powder has a slightly bitter taste.

### **Turmeric Has Many Uses In India**

Turmeric is talked about in Hindu writings. These writings go back thousands of years. Hinduism is a popular religion in the country of India.

The yellow spice became popular in Indian food. It was used around the house. It was also used as medicine. Ancient healers believed it could fix many health problems.

Chitra Banerjee Divakaruni wrote a book called "Mistress of Spices." She talks about how turmeric is used in religious events. The plant is seen as a magical spice. It is used to protect people and bring good luck. This is why turmeric is put on a baby's head when it's born.

Turmeric is still important in many Indian weddings. Before getting married, the bride and groom are often covered with a turmeric paste. This is said to bring them happiness, money and children.

Turmeric is also used for beauty in India. In old Indian writings, shiny yellow skin is described as beautiful. The color is thought to make women pretty.

### **It Helps Reduce Arthritis Pain**

Today, many people still rub turmeric into their skin. It is used like makeup.

Scientists are still studying turmeric. They wonder if it really is good for people's health.

Many people have an illness called arthritis. It makes parts of the body stiff and painful. Scientists found out that turmeric helps with this pain. Turmeric may be as good as any other medicine a doctor could give.

Scientists will keep studying how turmeric can help people.

Whatever happens, turmeric will stay popular in India. The yellow powder is a deeply important part of India's culture.

# Don't Bug Out: Eating Bugs Might be the Future for Meals Around the World

By AFP, adapted by Newsela staff  
04/25/2017



Chef Nowshad Alam Rasel serving up his famous cricket dish. Photo from Getty Images/Saeed Khan.

Nowshad Alam Rasel is a cook in Sydney, Australia. He makes some **unusual** food at his restaurant. He serves fried crickets!

Nine-year-old Alexandria ate at Mr. Rasel's restaurant. She winced when she nibbled on the crickets. She said it felt "weird" to eat an insect. Normally, she eats meat.

In some countries, bugs for dinner is no big deal. More than two billion people around the world eat bugs. Beetles, caterpillars and crickets are favorites. Some people even eat spiders.



Sous chef Rasel finishing the plating of his cricket dish in March 2017. Photo from Getty Images/Saeed Khan.

## **Bugs Creeping Onto Menus**

In Australia, however, eating bugs for dinner is definitely unusual. Still, it is becoming popular there. All kinds of bugs are creeping into restaurants — on **purpose!** Mr. Rasel says people are **curious** about eating insects. They are a bit **nervous**, too.

Skye Blackburn is a scientist who studies bugs. She also owns a bug shop in Sydney. People can buy bugs to eat there. She says two kinds of people visit her store.

"The first kind of people are grossed out," says Ms. Blackburn. These people just want to take a peek.

The second group of people are more curious. They want to learn about bugs they can eat. Some end up eating one. Others do not. Ms. Blackburn

say that is okay. She thinks they will still spread the word about what they see at the shop.



At a market in Mexico, you can find roasted crickets for sale. This snack is called chapulines. It is common in Mexico. Photo from: Wikimedia Commons.

## Health Benefits Of Bugs

There are good reasons to munch on insects. For one, bugs have health **benefits**. They have a lot of protein. Protein helps you grow. Bugs are cheap to raise, too. It takes much less money to raise bugs than cows or pigs on a farm.

Still, eating bugs is a hard sell for many people. They think insects are just pests. They do not see them as food.



Ms. Blackburn wants to change that idea. Every week, she raises hundreds of pounds of bugs. She makes honey-roasted ants and salty crickets. She even raises cockroaches. Restaurants buy her bugs for their dishes.

### **A Little Like Potato Chips**

Ms. Blackburn also sells her bugs at farmer's markets. One man tried them. He ate a big handful of mealworms, ants and crickets. He said they tasted like potato chips.

"It's great. I love 'em, I love bugs," he said.

# Medical Schools are Now Teaching Cooking as a Form of Medicine

By Star Tribune (Minneapolis), adapted by Newsela staff

01/11/2018



Olivia Beisler (right), a health coaching graduate student, chats with medical student McKenna Campbell-Potter (center) and doctorate of nursing practice student Ann Hayden while cooking on December 6, 2017, at the Food Matters for Health Professionals class held at Good Acres Kitchen in Falcon Heights, Minnesota. Photo by: Lelia Navidi/Minneapolis Star Tribune/TNS.

Doctors may soon be telling us to eat more than medicine. They will also say what healthy foods to eat.

Some schools in the United States are making new classes. The classes teach doctors and nurses how to cook. They want doctors to learn to eat better. Then, the doctors may teach **patients** to eat better.

Dr. Kate Shafto and Jenny Breen teach one class like this. It is at the University of Minnesota.

Dr. Shafto is a doctor and teacher at the school. Breen is a cook and health expert.

They say people often forget how important healthy eating is. Also, schools do not teach doctors enough about healthy eating. They should pass this on to patients, the teachers say.

### **Teaching About Healthy Food**

Now, 10 U.S. medical schools teach cooking-and-health classes.

Breen says a healthy way of life can help stop diseases.

Poor diets can cause serious health problems. People can become very overweight, or get diseases like diabetes.

Our society was once based on farming, Shafto said. Now, better **technology** allows us to shop in grocery stores. This change has affected the food system and our health, she added. Our foods do not have enough healthy vitamins and minerals.

The cooking health course teaches about good foods to eat. In the class, students learn how to think about what they eat. They learn to take deep breaths before eating. They sit down to eat with others. They also slow down and really try to taste their food.

During the class, the students kept a **journal**. They wrote down what they were eating.

"They were amazed at how much they weren't paying attention," Breen said.

### **Creating Meals For Patients**

For their **final task**, the students formed teams. They were told about a make-believe patient. The patient had a certain health problem. Each team needed to make a main dish and a side dish designed to help their patient.

McKenna Campbell-Potter is in the class.

Her patient was "Maria." This woman had put on too much weight. Maria worries about heart disease. She has tried several diets, or healthy eating plans, in the past. They have not worked.

Campbell-Potter and her teammates looked online. They searched for good dishes Maria could eat.

They decided to make salmon. They served it with mashed cauliflower.

Salmon is a fish with healthy fats. These taste good and make the patient feel full, Campbell-Potter explained. And the mashed cauliflower is like mashed potatoes, but healthier.

## Unit 5 | Economic Access to Food



Whittington, C. (2018). [Graphic Image]. Created for this curriculum.

The seven lessons in the Economic Access to Food unit will center on how finances impact people's access to food. Students will gain an understanding of economic wants and how cost, prices, money, and a budget impact the types of food individuals will be able to buy for their homes. Students will visit two supermarkets and calculate the unit price of food as well as which store offers the most bang for their buck.

Lesson	Guiding Question & Key Concepts	Activities
<b>Unit 5   Economic Access to Food</b>		
1	<p>Guiding Question: What is an economic choice?</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Define economic choice</li> <li>● Define opportunity cost</li> <li>● Analyze decisions based upon opportunity cost</li> </ul> <p>Key Concepts: Choice, decision-making, economic choice, and opportunity cost</p>	<p>Warm Up (10 Minutes): As a class, create and discuss a T-Chart on food insecurity. On the left side of the chart, list the negative outcomes of food insecurity. On the right side of the chart, list the positive outcomes of ending food insecurity.</p> <p>Work Time (20 Minutes): Inform students that they will draw a split image illustration of themselves deciding between two foods, a healthy and an unhealthy option. They will illustrate themselves reaching for one to indicate their selection. Beneath the illustrations, students will write why he/she make the food choice they did. <i>Guiding questions: Why did you select the food that you did? What influenced your decision in selecting the food that you did? Was it a difficult decision not to select the other item? Do you think your choice was worth it?</i></p> <p>Inform students that when they make a decision between two or more objects, experiences, etc., one must give up something. Tell students that food they select is an economic choice, the one they do not select is labeled opportunity cost. Explain that thinking about the opportunity cost of something will help them make better decisions about what they will be giving up and why.</p>

		Wrap Up (10 Minutes): Students will participate in a concentric circle. They will rotate and share their illustrations.
2	<p>Guiding Question: What is an economic want?</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>Understand how the cost of products can impact the social and economic needs of an individual</li> </ul> <p>Key Concepts: Cost, money, and economic wants</p>	<p>Warm Up (10 Minutes): Teacher will define the word cost. As a class use the <b>Explain the Phrase</b> handout to examine the word cost. Phrases include: At all cost (at any cost), cost an arm and a leg, and cost someone dearly. Teacher will define economic wants.</p> <p>Work Time (30 Minutes): Read-aloud of <b>Chicken Sunday</b> by Patricia Polacco. Discuss the economic want in the book and the ways the characters attempted to meet their economic needs. <i>Guiding questions: What is the good or product in the book the children want to get for Miss Eula? What two ways did Patricia, Stewart, and Winston attempt to get enough money to buy the hat for Miss Eula? What was the result of Patricia, Stewart, and Winston selling their eggs at Mr. Kondiski's shop?</i></p> <p>Students will write a story in their journals about a time in which they earned money to buy something they wanted or make up a story about a character earning money to buy something.</p> <p>Wrap Up (15 Minutes): Pair-share on stories.</p>
3	<p>Guiding Question: How do people earn money to satisfy their needs and wants?</p> <p>Objective:</p>	<p>Warm Up (10 Minutes): Play a song(s) which focuses on money and have students guess the topic. Provide lyrics for students with the word money missing. Barrett</p>

	<ul style="list-style-type: none"> <li>• Understand how money and unemployment impacts the social and economic needs of an individual</li> </ul> <p>Key Concepts: Money, access, wants, and unemployment</p>	<p>Strong's <b><i>Money (That's What I Want)</i></b> is provided as an example.</p> <p>Before playing the song, have students fill in what word they think belongs in the blank spaces. Play the song and have students write the word money in the spaces. Discuss any themes they noticed mentioned in the song(s). Possible songs include Donna Summer's <b><i>She Works Hard for the Money</i></b>, Barrett Strong's <b><i>Money (That's What I Want)</i></b>, or Dean Martin's <b><i>The Money Song</i></b>.</p> <p>Work Time (30 Minutes): Read-aloud of <b><i>A Shelter in Our Car</i></b> by Monica Gunning. Class discussion on how not having enough money can lead to food insecurity. <i>Guiding questions: What were the circumstances around Nettie and her mother living in a car? Besides sleeping in their car, what other outcomes took place because of this financial hardship? How did the illustrations help you understand the problem in the story?</i></p> <p>Class will map the story by creating a reinforcing feedback loop about what might happen to the characters after Nettie's mom gets a full-time job. Use the <b>Shelter in Our Car Feedback Loop</b> handout. This will be a reinforcing loop. Explain that a reinforcing loop is when one thing such as Zettie's mom getting a part-time job, causes another thing, like their housing situation to change in a positive way. They now are living in a hotel.</p>
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		<p><b>Note to Educators:</b> Explain that a reinforcing loop is one that maintains the same pattern, often depending or worsening a bad situation such as a job loss, loss of health, loss of ability to get a job, etc., which then leads to further loss of health. One can break out of a reinforcing loop by making a different choice, by changing the pattern. Reinforcing loops can be either positive or negative.</p> <p>Have students think critically about the characters' new situation, <i>potential guiding questions: How will Zettie's access to food now possibly change? Do you think Zettie will be as worried about going to school, if she knows that she will be sleeping in a hotel instead of a car each night? Zettie and her mom now have a place to stay every night, how do you think this will impact their safety?</i></p> <p><b>Note to Educators:</b> Explain that a job and finances are only part of the solution. It is not all contingent upon this one event. Have students think about where else opportunities for change might exist. Have students think about education, food, shelter, health, and safety.</p> <p>Wrap Up (10 Minutes): Journal Entry - What is the relationship between economic choice and economic want?</p>
4	<p>Pre-trip: Supermarkets</p> <p>Objective:</p>	<p>Teacher will select 10-20 grocery items. Students will answer the pre-trip section titled <b>Check-Out</b> and <b>Vend-O-Price in A Tale of Two Supermarkets</b> packet.</p>

	<ul style="list-style-type: none"> <li>Estimate the prices of groceries</li> </ul>	<p>Students will estimate how much they think items will cost in the Price is Right Games' Check-Out and Vend-O-Price.</p> <p>Check-Out - Students will be shown several items. Students will select five grocery items and write down what they think the price is for each item. Students will then add the total. The goal is for students to select items they think will total \$10 or less. Teacher will then reveal the price of each item.</p> <p>Vend-O-Price - Students will be shown 3 grocery items. Students will be informed that the item on the left is the least expensive, and the item on the right is the most expensive. Teacher will not disclose the price of each item. After the teacher has described the items, he/she will place multiple quantities of each item behind the first item. Students must then select which group of items are the most expensive. Teacher will then reveal the price of each item.</p> <p>Class discussion on what to expect and experience at the supermarkets.</p>
5	<p>Field trip: Supermarkets</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>Gain understanding of food quantities and units of measure, in terms of food pricing</li> </ul>	<p>Teacher will explain the term unit price and model calculating unit prices for students. Examples include:</p> <p>1.) You paid \$30 for 6 hamburgers, what is the unit price of a hamburger? Are you willing to pay x amount for one hamburger? Use a calculator to divide 30 by 6.</p>

		<p>2.) If a store has a sale on blueberries and sells 4 packs for \$12.50 total, what is the unit price of each pack? Are you willing to pay x amount for one pack? Use a calculator to divide 12.50 by 4.</p> <p>Students will answer the field trip section titled <b>Compare the Unit Cost</b> in the packet and use a calculator and compare food and prices from two supermarkets. Students will focus on which items are a better value and why by analyzing the unit price.</p>
6	<p>Post-trip: Supermarkets</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>• Create a shopping list within an assigned budget</li> </ul>	<p>Teacher will create pairs and provide a weekly food budget for different types of families based upon the USDA's food plans. Have students consider essential questions about what kinds of foods are important to buy. Provide students with the different stores they can shop from, flyers, and supermarket websites.</p> <p>Students will use the post-trip section titled <b>What to Buy?</b> in the packet to highlight what they will buy and why for breakfast, lunch, and dinner. There are four different types of families and budgets. Each packet will have only one family and budget to focus on.</p>
7	<p>Guiding Question: What have you learned about economic access about food insecurity and what do you want to know?</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>• Add details to their KWHLAQ handout</li> </ul>	<p>Warm Up (5 Minutes): Journal Entry - Students will add information about economic access to the KWHLAQ class.</p> <p>Work Time (20 Minutes): Students will add information about economic access to their KWHLAQ handout (What do I think I know? What do I want to learn? How do I</p>

		<p>find out? What have I <i>learned</i>? What <i>action</i> will I take? What new <i>questions</i> do I have?) chart on food insecurity with the class. Have students place a star next to their questions that have been answered.</p> <p>Students will discuss any new information they have added to their handouts with their table.</p> <p>Wrap Up (5 Minutes): Students will share one question or comment they have about food insecurity and why this question or comment is important to them or the class.</p>
<p style="text-align: center;">Unit Standards</p> <p>Common Core Standards ELA (LITERACY.RL.4.1)  Common Core Standards ELA (LITERACY.RL.4.7)  National Standards for Family and Consumer Sciences Education (Consumer and Family Resources 2.7.3)  National Content Benchmarks in Economics (Decision Making -1)  National Content Benchmarks in Economics (Decision Making - 2)  National Content Benchmarks in Economics (Allocation - 2)  National Content Benchmarks in Economics (Markets and Prices - 1)  National Content Benchmarks in Economics (Money and Inflation - 1)</p>		

Name \_\_\_\_\_

### Explain the Phrase

Phrase	Predicted Meaning	Revised Meaning
At all cost (at any cost)		
Cost an arm and a leg		
Cost someone dearly		

Name \_\_\_\_\_

Barrett Strong's \_\_\_\_\_ (*That's What I Want*)

The best things in life are free  
But you can give them to the birds and bees

I want \_\_\_\_\_

That's what I want

That's what I want

That's what I want

Your love is such a thrill

But your love won't pay my bills

I want \_\_\_\_\_

That's what I want

That's what I want

That's what I want

\_\_\_\_\_ don't get everything it's true

What it don't get, I can't use

I want \_\_\_\_\_

That's what I want

That's what I want

That's what I want

I want \_\_\_\_\_

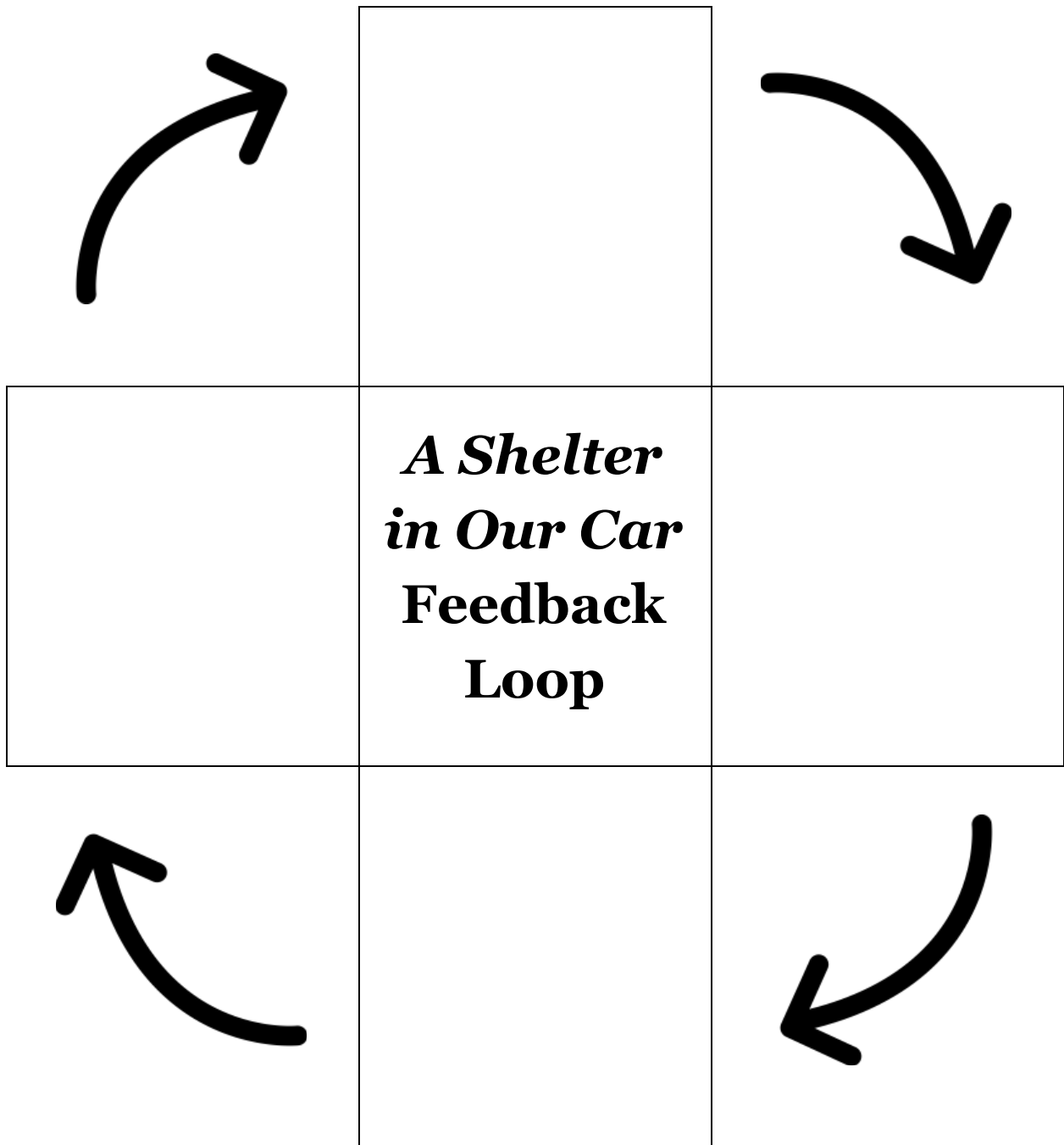
I want lots of \_\_\_\_\_

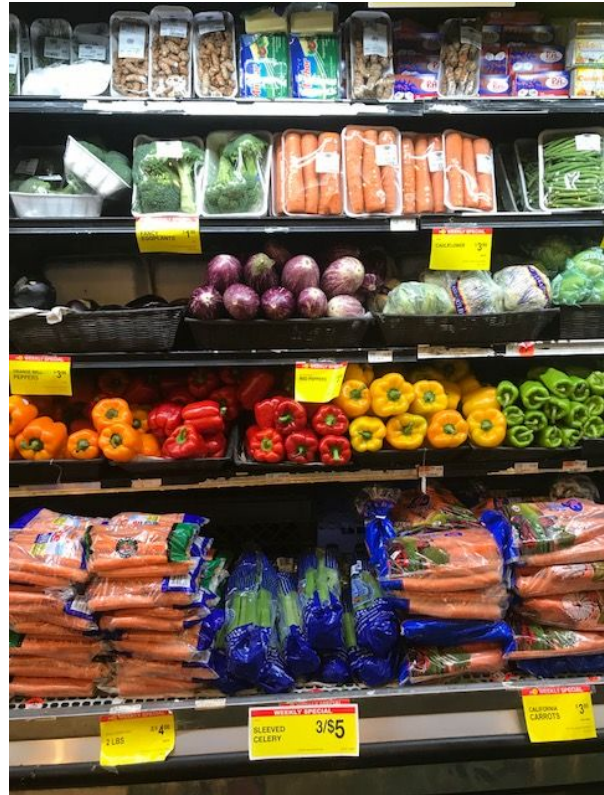
In fact, I want so much \_\_\_\_\_

Give me your \_\_\_\_\_

Just give me \_\_\_\_\_

Name \_\_\_\_\_





Shepherd, K. (2018). [Untitled photographs of food in two supermarkets].

## A Tale of Two Supermarkets

Name \_\_\_\_\_



### Pre-Trip - Check-Out

Item	Item	Item	Item	Item
Price	Price	Price	Price	Price
<p>What is the total amount for all 5 items? Is your total amount correct \$10 or less?</p>				

### Vend-O-Price

Item	Item	Item
Individual Price	Individual Price	Individual Price
Quantity	Quantity	Quantity
Total Price	Total Price	Total Price
<p>Which items do you think are the least expensive? Is your total amount correct?</p>		

## Field Trip - Compare the Unit Cost

Store 1 \_\_\_\_\_

Items	Price	Unit Price

Store 2 \_\_\_\_\_

Items	Price	Unit Price

Which store offers the consumer the most goods for his/her money and why?

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Which store would you prefer to buy your goods from and why?

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### Post Trip - What to Buy? - Family of 4

**Family Members:** You are a family of four, two adults ages 30 and 35 and two children ages 2 and 3.

**USDA's Food Plan Budget:** You have a thrifty plan budget, which is \$129 week for food. According to the USDA's thrifty plan budget, adults between 30 and 35 need approximately \$42 each a week for food. Children ages 2 and 3 need approximately \$22.50 each a week for food.

#### Breakfast

Store	Items	Price	Amount Purchased

Breakfast Total \$ \_\_\_\_\_

Why did you purchase the items from the store(s) you selected?

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#### Lunch

Store	Items	Price	Amount Purchased

Lunch Total \$ \_\_\_\_\_

Why did you purchase the items from the store(s) you selected?

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Dinner

Store	Items	Price	Amount Purchased

Dinner Total \$ \_\_\_\_\_

Why did you purchase the items from the store(s) you selected?

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### Post Trip - What to Buy? - Family of 2

**Family Members:** You are a family of two, two adults age 55.

**USDA’s Food Plan Budget:** You have a moderate cost budget, which is \$135 week for food. According to the USDA’s moderate cost budget, two adults age 55 need approximately \$67.50 each a week for food.

#### Breakfast

Store	Items	Price	Amount Purchased

Breakfast Total \$ \_\_\_\_\_

Why did you purchase the items from the store(s) you selected?

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#### Lunch

Store	Items	Price	Amount Purchased

Lunch Total \$ \_\_\_\_\_

Why did you purchase the items from the store(s) you selected?

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Dinner

Store	Items	Price	Amount Purchased

Dinner Total \$ \_\_\_\_\_

Why did you purchase the items from the store(s) you selected?

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## Post Trip - What to Buy? - Single Person

**Family Members:** You are a single person age 40.

**USDA's Food Plan Budget:** You have a low cost budget, which is \$52 week for food. According to the USDA's low cost budget, one adult age 40 needs approximately \$52 a week for food.

### Breakfast

Store	Items	Price	Amount Purchased

Breakfast Total \$ \_\_\_\_\_

Why did you purchase the items from the store(s) you selected?

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### Lunch

Store	Items	Price	Amount Purchased

Lunch Total \$ \_\_\_\_\_



Why did you purchase the items from the store(s) you selected?

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Dinner

Store	Items	Price	Amount Purchased

Dinner Total \$ \_\_\_\_\_

Why did you purchase the items from the store(s) you selected?

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### Post Trip - What to Buy? - Family of 4

**Family Members:** You are a family of 4, three adults ages 22, 35, 70, and one child age 8.

**USDA's Food Plan Budget:** You have a liberal cost budget, which is \$303 week. According to the USDA's food budget, one adult age 22 needs \$85 a week for food. One adult age 35 needs \$85 a week for food. One adult age 70 needs \$70 a week for food. An 8-year-old child needs \$63 a week for food.

#### Breakfast

Store	Items	Price	Amount Purchased

Breakfast Total \$ \_\_\_\_\_

Why did you purchase the items from the store(s) you selected?

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#### Lunch

Store	Items	Price	Amount Purchased

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Lunch Total \$ \_\_\_\_\_

Why did you purchase the items from the store(s) you selected?

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Dinner

Store	Items	Price	Amount Purchased

Dinner Total \$ \_\_\_\_\_

Why did you purchase the items from the store(s) you selected?

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## Unit 5 | Stability & Social Safety Nets



Whittington, C. (2018). [Graphic Image]. Created for this curriculum.

Students will learn about one of the key components of food insecurity which is the stability of availability of food, food utilization, and economic access. Students will learn about the various types of government and nonprofit safety nets people can utilize if they experience food insecurity. Students will discover how food deserts are an indication of food insecurity. These nine lessons will conclude with a visit to the Hunts Point Cooperative Market where students will sort donated food.

Lesson	Guiding Question & Key Concepts	Activities
<b>Unit 6   Stability of the other 3 Dimensions &amp; Social Safety Nets</b>		
1	<p>Guiding question: What is the food landscape around your school?</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● List examples of types of food goods</li> <li>● Explore the food landscape in their school neighborhood</li> </ul> <p>Key Terms: Food landscape, Goods, Food and Beverage Industry</p>	<p>Warm Up (10 Minutes): Teacher will define a good. Give students one large post-it. Have students write down a good based on a food that starts with the letter of their first name. Place post-its on the board and discuss the various goods listed.</p> <p>Work Time (40 Minutes): Teacher will define food landscape and lead a discussion on food insecurity. Students will discuss the type of food and drink businesses they have seen or visited in the neighborhood around school and list them.</p> <p>Class will visit 3-4 food businesses and use the <b>Food Landscape</b> handout to assess the food businesses available in the area.</p> <p>Potential businesses include: Bodega, pharmacy, gardens, supermarkets, street vendors, restaurants, pastry shop, health food store, juice shop, etc.</p> <p>In the classroom, discuss the food landscape of the neighborhood. <i>Guiding questions: What are some food stores you think a neighborhood should have? Do you think this neighborhood has food that the community needs or wants?</i></p> <p>Wrap Up (10 Minutes): Journal Entry - Would you consider this food landscape to be food secure or insecure? Why or why not?</p>

2	<p>Guiding question: How does an environment impact the food choices people make?</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Describe the components of a food desert</li> <li>• Analyze how the food a person buys connects to what type of access they have</li> </ul> <p>Key concepts: Stability and Food Deserts</p>	<p>Warm Up (10 Minutes): Show the video <b><i>Food Deserts - By Nelson, Brox, and Ryan</i></b> by <b>Ryan Smith</b> on <b>YouTube</b> (roughly 5 minutes). Teacher will define a food desert. Students will write definition in their journals. Class discussion on the components of a food desert.</p> <p>Work Time (40 Minutes): Show <b>WFAA's <i>Verify: Living in a Food Desert</i></b> video on <b>YouTube</b> (roughly 7 minutes).</p> <p>Students will be paired to create a storyboard about food insecurity. Students will utilize the <b>Storyboardthat.com</b> website and select the 3-framed storyboard. Storyboards will be based upon one of the following scenarios.</p> <p>Scenario 1: A story about a person who does not live in a food desert, but feels as if they are experiencing all of the components because their local supermarket has fresh fruits and vegetables that either is tasteless or tastes like chemicals. Share ways to remedy this problem in their storyboard.</p> <p>Scenario 2: A story about someone who works in a food secure area, but does not have access to these options because of their income. Share ways to remedy this problem in their storyboard.</p> <p>Scenario 3: A story about someone who lives in an area where their cultural foods are not available. Share ways to remedy this problem in their storyboard.</p>
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	<p>* The content in this lesson is adapted from the lesson by Rebecca Felt in the <i>Power to the People</i> curriculum.</p>	<p>On the <b>Storyboardthat.com</b> website, students will select a scene, characters, textables, and search for various foods to include in their storyboards.</p> <p>Teacher will demonstrate the process of storyboarding by describing a short scene and utilizing the 3-frame layout on the website. Ask students to shout out directions. <i>Guiding question: Where should this scene take place? Who are the characters? What should happen next?</i> After frames have been completed, take a screenshot and print frames.</p> <p>Class will be divided into groups that will share their storyboards with the class.</p> <p>Wrap Up (10 Minutes): Journal Entry: Which story interests you the most and why?</p>
3	<p>Guiding Question: How are communities and the government tackling food insecurity?</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Identify organizations which aim to provide food for those in need</li> <li>● List organizations goals in providing food for those in need</li> </ul> <p>Key Concepts: Nonprofit</p>	<p>Warm Up (10 Minutes): Teacher will describe some of the social safety nets such as government agencies and nonprofits organizations that people utilize to help them gain access to food.</p> <p>Work Time (30 Minutes): Students will pair up and research either a government agency or a nonprofit organization that aims to reduce food insecurity. Students will utilize the <b>Government Agency</b> or <b>Nonprofit Organization</b> handouts to guide them in their research.</p>

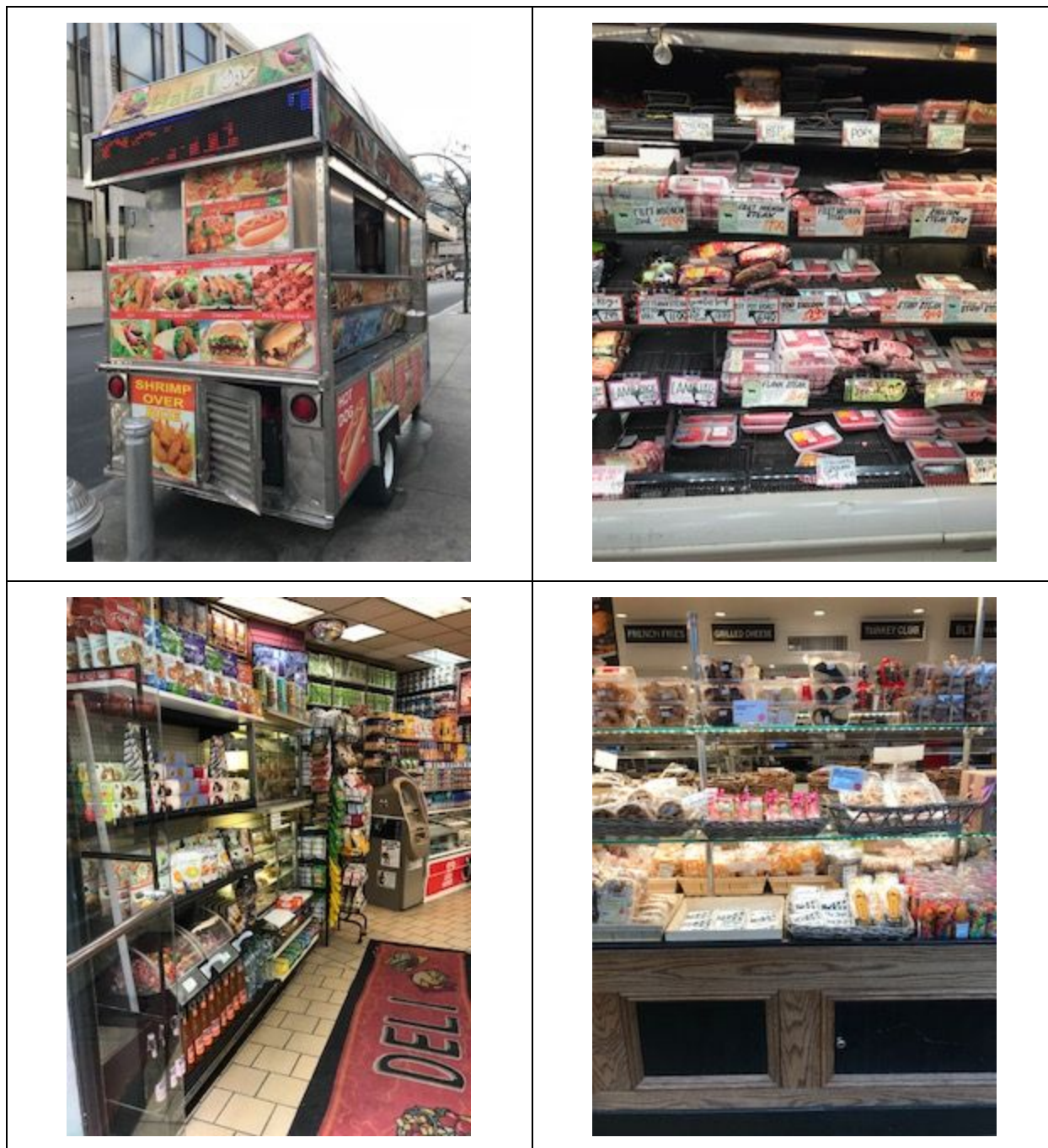
		<p>Students will create a PowerPoint responding to the guiding questions on the handout. They will also utilize the government and nonprofit websites to gather information.</p> <p>Organizations include: SNAP, National School Lunch Program, Backpack Program, 412 Food Rescue, Amp Your Good, Center for a Livable Future, City Harvest, Excess NYC, Natural Resource Defense Council (NRDC), Community Plates, Food Policy Action, Food Recovery Network, Hungry Harvest, Lovin' Spoonfuls, and ReFED.</p> <p>Wrap Up (10 Minutes): Journal Entry - If you could create a nonprofit that provided food for individuals, what type of services would you have and why? Where will you get your food from?</p>
4	Continue from previous lesson	Students will present projects and participate in a Q&A about their nonprofit or government agency.
5	<p>Guiding Question: What is food waste and how does it impact people having access to food?</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Explain why food waste is an ecological and environmental problem</li> <li>● Describe what happens to food waste</li> </ul> <p>Key Concepts: Food waste and Greenhouse gases</p>	<p>Warm Up (10 Minutes): <b>Preview Ad Council's <i>The Extraordinary Life and Times of Strawberry</i> on YouTube</b> (roughly 2 minutes). Show pictures from students' plates or trays to highlight the amount of food they have thrown away. Discuss the individual's role in food waste.</p> <p>Work Time (30 Minutes): Show images of a landfill and discuss how food is wasted. <b>Preview Pulitzer Center's <i>The Big Waste: Why Do We Throw Away So Much Food?</i> video on YouTube</b> (roughly 10 minutes). Discuss society's role in food</p>



		<p>waste. <i>Guiding question: Why is food waste an economic and social problem? Describe what happens to the food that is wasted.</i></p> <p>Tables will brainstorm and list creative ways to resolve the issue of food waste. Tables will respond to the following prompt: <math>\frac{1}{3}</math> of the people in a community are experiencing food insecurity and <math>\frac{2}{3}</math> of the people in the community are throwing away excess food, how would you solve this problem?</p> <p>Wrap Up (5 Minutes): Journal Entry - What actions will you take at home and at school to reduce how much food you waste?</p>
6	<p>Pre-trip: Food Bank for New York</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>• Discuss the word philanthropy</li> </ul>	<p>Discuss the word philanthropy. Have students share a time when they or their family gave either their time or money to help someone in need or a specific cause. Teacher can share a time when they were philanthropic to aid student thinking.</p> <p>Read-aloud of <b><i>Uncle Willie and the Soup Kitchen</i></b> by Dyanne DiSalvo-Ryan. <i>Guiding questions: What is a soup kitchen? Who would need to go to a soup kitchen? Why do you think the boy didn't want to shake someone's hand at the soup kitchen? How did the illustrations help you understand the problem in the story?</i></p> <p>Class discussion on volunteering. <i>Guiding questions: What is the difference between volunteering your time to a specific cause like volunteering at a soup kitchen and</i></p>

		<p><i>only donating money to a specific soup kitchen?</i></p> <p>Show the <b>VirtualTable's Food Bank of NYC</b> video on <b>YouTube</b> (roughly 7 minutes).</p> <p>Discuss what to expect and experience at the cooperative.</p>
7	<p>Field trip: Food Bank for New York</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>Sort food for those in need</li> </ul>	<p>Students will be going to the <b>Hunts Point Cooperative Market</b> to sort donated food which will then be distributed to member organizations or emergency food programs.</p> <p>Contact the Food Bank for New York City nonprofit to set up date and time. Email the nonprofit at <a href="mailto:volunteer@foodbanknyc.org">volunteer@foodbanknyc.org</a> or call at 212.566.7855, dial 5.</p> <p>Class discussion on what students experienced at the cooperative.</p>
8	<p>Post-trip: Food Bank for New York</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>Express their ideas around the role of government agencies and nonprofit organizations</li> </ul>	<p>Students will paint a scene highlighting how government agencies or nonprofit organizations help individuals tackle food insecurity.</p>
9	<p>Guiding Question: What have you learned about the stability of the other 3 dimensions and social safety nets and what do you want to know?</p>	<p>Warm Up (10 Minutes): Journal Entry - Students will add information about the stability of the other 3 dimensions and social safety nets to their KWHLAQ class chart.</p>

	<p>Objective:</p> <ul style="list-style-type: none"> <li>• Add details to their personal and class KWHLAQ handout</li> </ul>	<p>Work Time (20 Minutes): Students will add information about stability and social safety nets to their KWHLAQ handout (What do I think I <i>know</i>? What do I <i>want</i> to learn? <i>How</i> do I find out? What have I <i>learned</i>? What <i>action</i> will I take? What new <i>questions</i> do I have?) chart on food insecurity with the class. Have students place a star next to their questions that have been answered.</p> <p>Students will discuss any new information they have added to their handouts with their table.</p> <p>Wrap Up (5 Minutes): Students will share one question or comment they have about food insecurity and why this question or comment is important to them or the class.</p>
<p style="text-align: center;">Unit Standards</p> <p>Common Core Standards ELA (LITERACY.RL.4.1)  Common Core Standards ELA (LITERACY.RL.4.7)  Common Core Standards ELA (LITERACY.W.4.2)  National Standards for Family and Consumer Sciences Education (Consumer Services 3.2.1)  International Society for Technology in Education (Empowered Learner 1C)  International Society for Technology in Education (Knowledge Constructor 3A)  International Society for Technology in Education (Knowledge Constructor 3D)  International Society for Technology in Education (Global Collaborator 7B)</p>		



Shepherd, K. (2018). [Untitled photographs of food businesses].

## Food Landscape

Name \_\_\_\_\_

## Store No. 1

What is the name of this store?

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What type of store is this?

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What type of goods do you notice in this store?

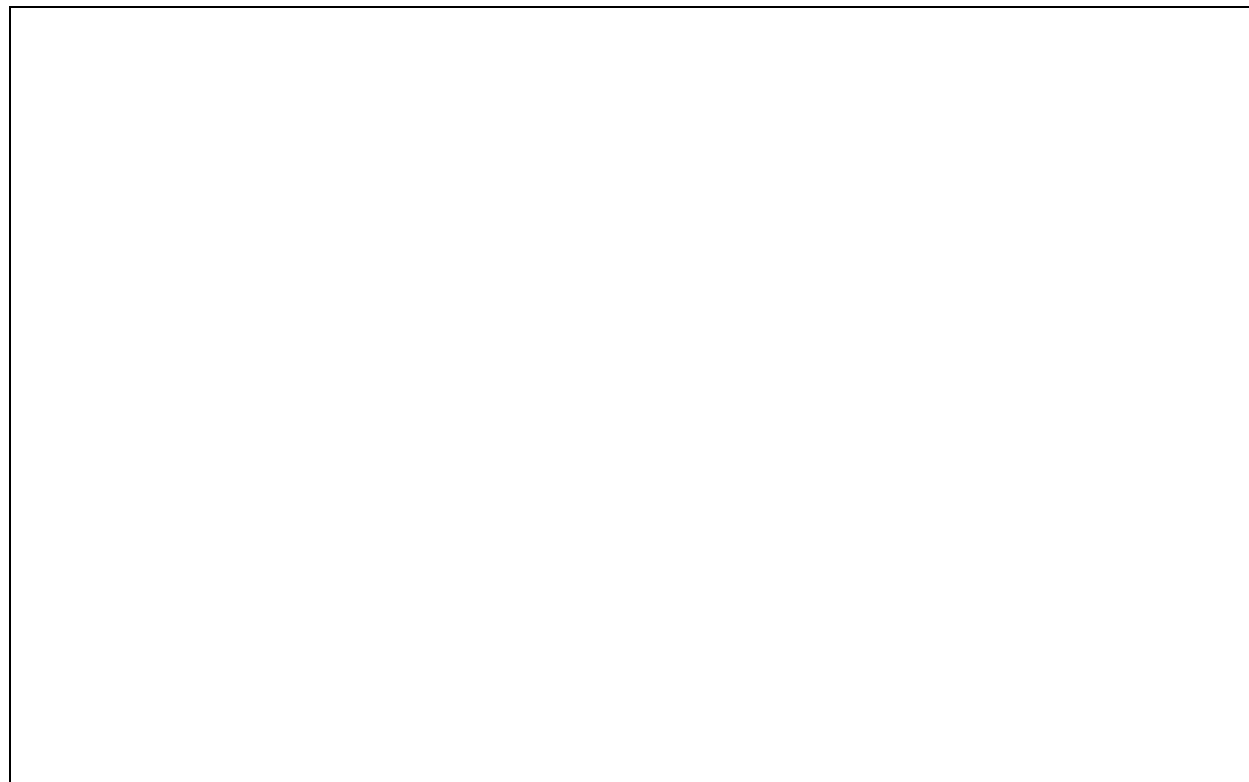
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What is the price range in this store? Is it Affordable \$, Medium Priced \$\$, or High End \$\$\$? How do you know?

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Draw a detailed sketch of this location.



## Store No. 2

What is the name of this store?

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What type of store is this?

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What type of goods do you notice in this store?

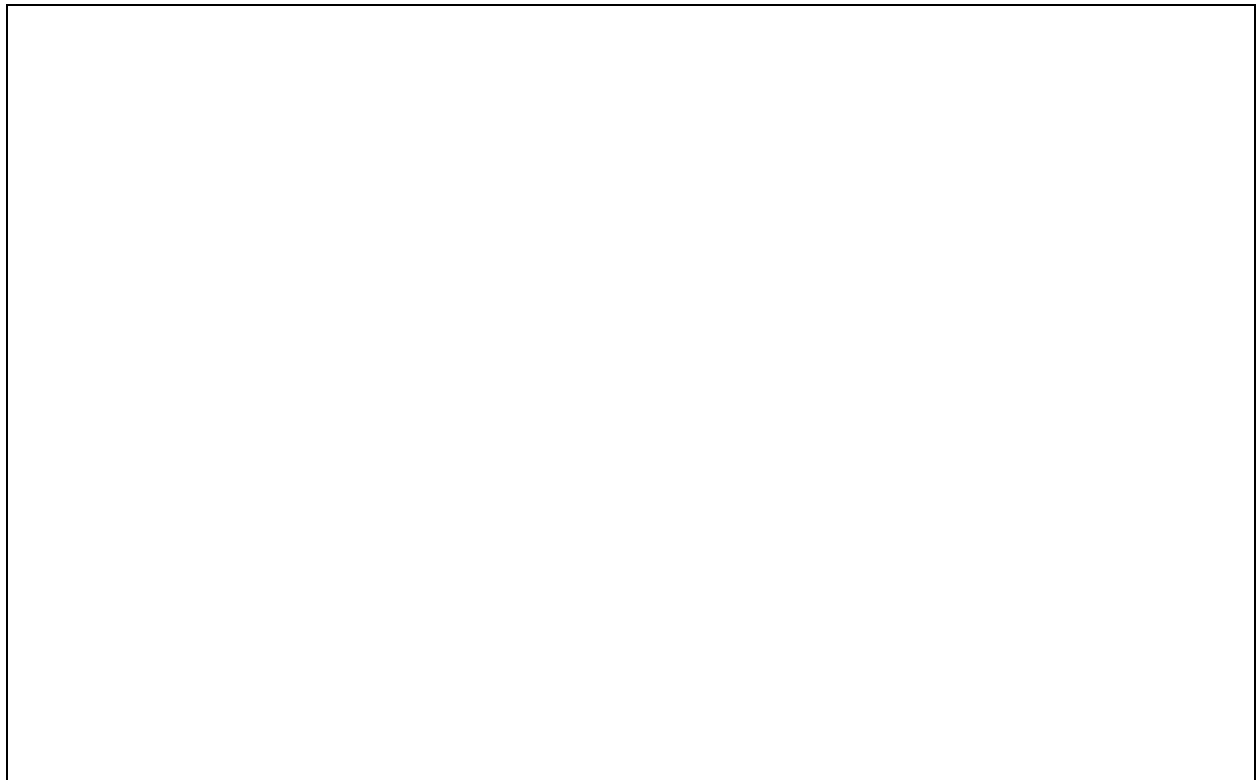
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What is the price range in this store? Is it Affordable \$, Medium Priced \$\$, or High End \$\$\$? How do you know?

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Draw a detailed sketch of this location.



## Store No. 3

What is the name of this store?

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What type of store is this?

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What type of goods do you notice in this store?

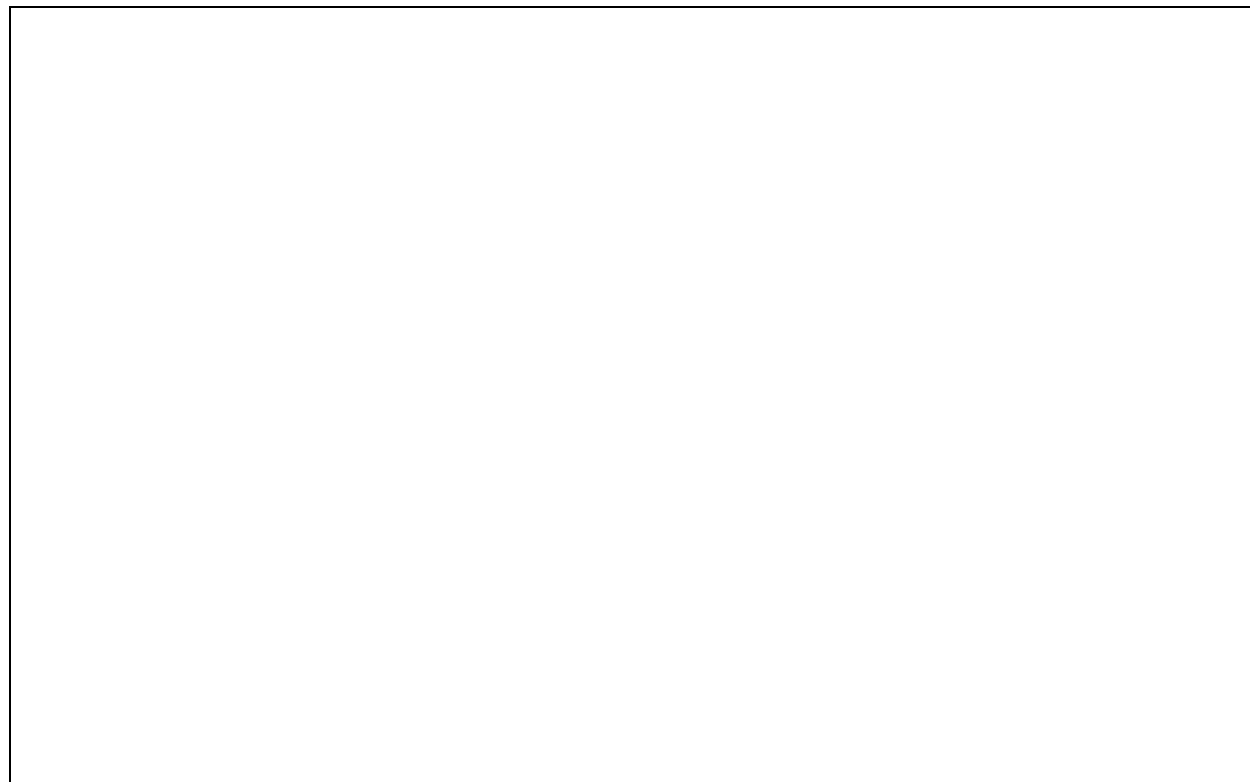
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What is the price range in this store? Is it Affordable \$, Medium Priced \$\$, or High End \$\$\$? How do you know?

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Draw a detailed sketch of this location.



## Store No. 4

What is the name of this store?

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What type of store is this?

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What type of goods do you notice in this store?

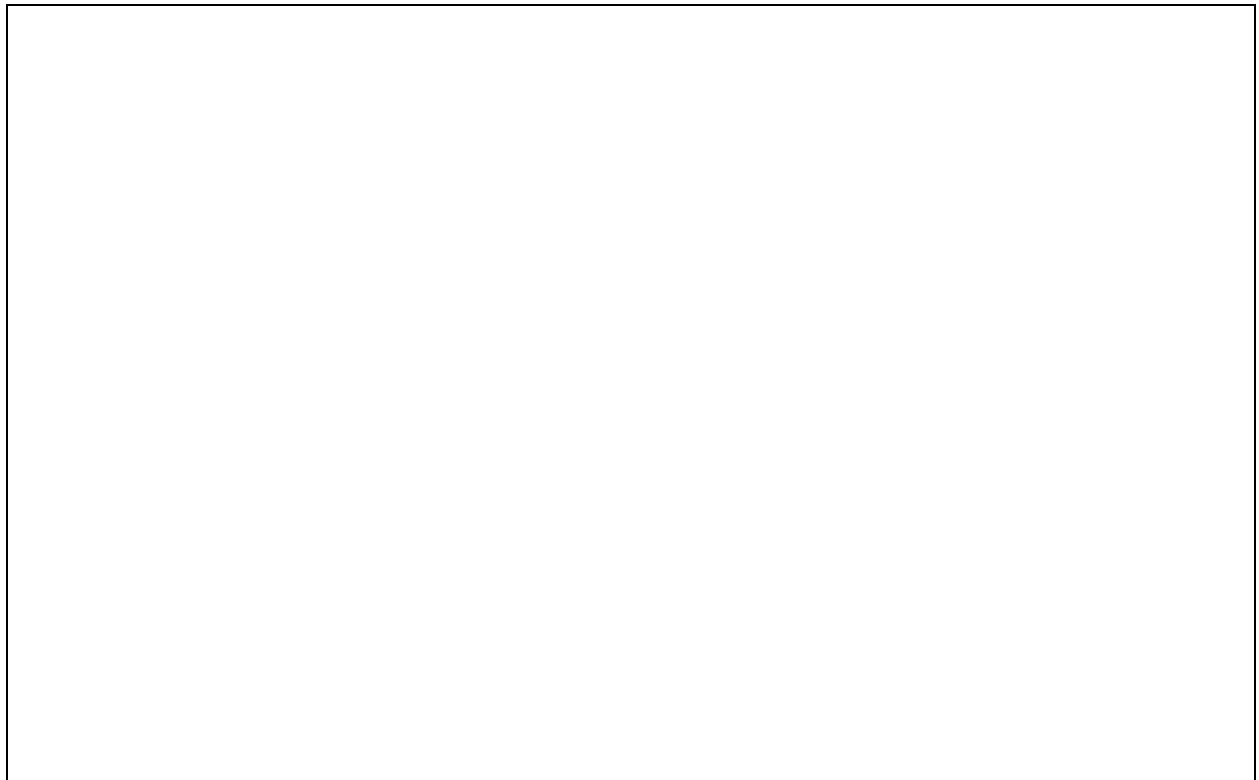
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What is the price range in this store? Is it Affordable \$, Medium Priced \$\$, or High End \$\$\$? How do you know?

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Draw a detailed sketch of this location.





Name \_\_\_\_\_

Government Agency

What is the history of this organization?

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Why was it started?

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What is the goal of this agency?

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How does one qualify to get this government assistance?

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What do you think of this agency and how it responds to food insecurity?

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Name \_\_\_\_\_

### Nonprofit Organization

What is the history of this organization?

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Why was it started?

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What is the goal of this agency?

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Is it a regional or a national organization?

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Who are the volunteers and why do they volunteer?

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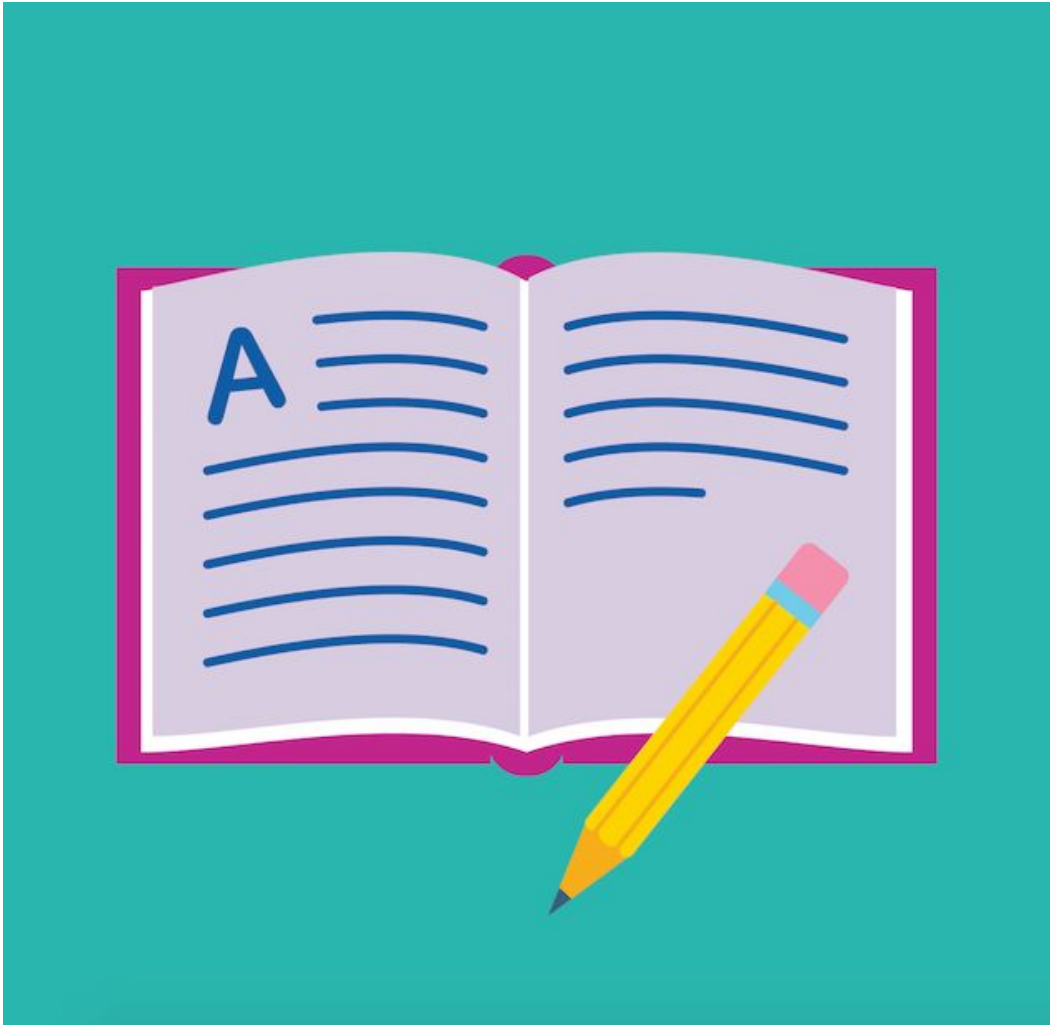
What do you think of this organization and how it responds to food insecurity?

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## Unit 7 | Students as Food Activists



Whittington, C. (2018). [Graphic Image]. Created for this curriculum.

The final unit in the *Meal Gap* curriculum centers on students learning about food activism and sharing their knowledge about food insecurity by creating a children's book that highlights availability of food, food utilization, economic access, and stability. These fifteen lessons will empower students to create literature that will be a vehicle for social awareness and change.

Lesson	Guiding Question & Key Concepts	Activities
<b>Unit 7   Students as Food Activists</b>		
1	<p>Guiding Question: What is an activist?</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Understand the morphological breakdown of the word “activism and activist”</li> <li>● Identify the goals, strategies, and achievements of food activists</li> </ul> <p>Key Concepts: Activist</p>	<p>Warm Up (10 Minutes): Give students the <b>Activist Word Study</b> handout. Students will use dictionaries to breakdown the morphology of “activism/activist” and discuss parts of speech.</p> <p>Work Time (40 Minutes): Students will be introduced to five food activists or organizations:</p> <ul style="list-style-type: none"> <li>● <b>Michelle Obama - Achievements Page</b> <a href="https://letsmove.obamawhitehouse.archives.gov/achievements">https://letsmove.obamawhitehouse.archives.gov/achievements</a></li> <li>● <b>Jamie Oliver - About Page</b> <a href="http://www.jamiesfoodrevolution.org/about">http://www.jamiesfoodrevolution.org/about</a></li> <li>● <b>Chef Ann Foundation - Our Story and Chef Ann Pages</b> <a href="http://www.chefannfoundation.org/">http://www.chefannfoundation.org/</a> and <a href="http://www.chefannfoundation.org/about-us/chef-ann/">http://www.chefannfoundation.org/about-us/chef-ann/</a></li> <li>● <b>Big Green - About US - Our History, What is a Learning Garden?, Learning Gardens Pages</b> <a href="https://biggreen.org/">https://biggreen.org/</a></li> <li>● <b>FoodCorps - About Page</b> <a href="https://foodcorps.org/">https://foodcorps.org/</a></li> </ul> <p>Give groups the <b>Food Activist Study</b> handout. Students will use the websites</p>

	<p>* The content in this lesson is adapted from the lesson by Rebecca Felt in the Power to the People Curriculum.</p>	<p>listed above to find information about these activists and organizations and identify the goals, strategies, and achievements of the specific activist they will be studying.</p> <p>Groups will present information from their handouts. Class will have a discussion on information presented.</p> <p>Wrap Up (5 Minutes): Journal Entry - Which food activist or organization are you interested in knowing more about and why?</p>
2	<p>Guiding Question: How can literature serve as a vehicle for social change?</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>Demonstrate ability to select a topic and develop a storyboard</li> </ul> <p>Key Concepts: N/A</p>	<p>Warm Up (10 Minutes): Students will brainstorm questions to ask author Lois Brandt Skype.</p> <p>Work Time (30 Minutes): Author Lois Brandt Skype visit to inform students about how their books can lead to social change. Email Lois Brandt at <a href="mailto:Lois@LoisBrandt.com">Lois@LoisBrandt.com</a> to check availability. Have students generate questions for this Q&amp;A. <i>Guiding questions: Where did the idea for Maddi's Fridge come from? Why did you decide to become an author? Will you write any other books on a social justice topic? Are you an activist?</i></p> <p>Wrap Up (10 Minutes): Journal Entry - What did you learn about food insecurity and the writing process from Lois Brandt?</p>
3	<p>Guiding: How do we create literature to serve as a vehicle for social change?</p>	<p>Warm Up (10 Minutes): Post a sheet of poster paper at the front of the room. Ask students to brainstorm at least three issues or problems that affect people in their community ("their community" can be</p>

		<p>defined as their peers, people of their ethnicity, race, gender, age, etc.).</p> <p>Work Time (30 Minutes): Students will then work collaboratively to create a 3-framed storyboard about any social issue. Based on topics suggested by students, teacher will assign each group a topic and will use 3-frames to tell the beginning, middle, and end of a story.</p> <p>Wrap Up (10 Minutes): Class Discussion - How was it developing ideas with your group? Did you feel everyone contributed equally? What role did you take on in the group?</p>
4	<p>Guiding Question: What ecological, economic, or social issues about food security do you think would be an interesting topic for a children's book?</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Recognize societal and personal issues that are of interest and importance to them</li> <li>● Use critical thinking, analysis, and prioritizing skills in order to brainstorm picture book topics</li> </ul> <p>Key Concepts: N/A</p>	<p>Warm Up (10 Minutes): Journal Entry - We have been studying the social, economic, and ecological issues of food insecurity. What food insecurity issues are of greatest concern to you right now? What issues or topics do you want to know more about? What do you think other people would be interested in learning about?</p> <p>Inform students that they will be writing a children's picture book based on one of the 4 dimensions of food insecurity as a group.</p> <p>Work Time (30 Minutes): Have students write down as many topics as possible. Create a classwide combined list on poster paper of possible children's book topics by having students share their top three topics with the entire class. Class with then vote on topics to narrow the list.</p>

	<p>* The content in this lesson is adapted from the <i>Youth-Powered Video: A Hands-On Curriculum for Teaching Documentary</i> by Gretchen Baudenbacher and Steve Goodman.</p>	<p>Wrap Up (10 Minutes): Journal Entry - Of the topics we selected, list 3 of your favorite topics. Which one are you most interested in pursuing for creating a picture book? Why do you think this would make a good picture book? How have your topic ideas changed during this class?</p>
5	<p>Guiding Question: What is an effective way to select a picture book topic?</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Demonstrate ability to make a persuasive argument as they “pitch a topic”</li> <li>● Become familiar with consensus decision-making</li> </ul> <p>Key Concepts: N/A</p> <p>* The content in this lesson is adapted from the <i>Youth-Powered Video: A Hands-On Curriculum for Teaching Documentary</i> by Gretchen Baudenbacher and Steve Goodman.</p>	<p>Warm Up (15 Minutes): Divide the students into groups of 3 based on their first or second topic choices and inform them of their chosen topic. Have students gather in those groups. Distribute the <b>Developing a Picture Book Topic</b> handout to students. Ask students to complete the sheet individually, answering the questions for their selected topic.</p> <p>Work Time (30 Minutes): Individually, students will write about an aspect of their group’s topic they are interested in writing more about. and then write a description on what they think the final topic will be. Students will then “pitch” their idea to the other members of their group. Each member will take a turn presenting their final idea to the group. When all students have finished pitching their ideas, tell students that they will now decide as a group based on one final topic.</p> <p>Wrap Up (5 Minutes): Journal Entry - What is your first, gut reaction to the final topic you selected? What did you like best and least about the process of choosing a final topic? What are your hopes or concerns about this project?</p>

6	<p>Guiding Question: What are the basic features of a picture book?</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>• Demonstrate ability to develop a storyboard</li> </ul> <p>Key Concepts: N/A</p>	<p>Warm Up (15 Minutes): Revisit some of the picture books shared throughout this unit as mentor texts and have groups discuss the characters, plot, setting, theme, and illustrations.</p> <p>Work Time (30 Minutes): Groups will work together and use the <b>Group Story Map</b> handout for their picture books.</p> <p>Wrap Up (5 Minutes): Journal Entry: Which part of the story do you agree with and think is a really strong element? Which part of the story do you disagree with and think should be revised?</p>
7	<p>Guiding Question: How do writers use words to tell a story? Part 1</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>• Sequence the story to include the beginning, middle, and end portions</li> </ul> <p>Key Concepts: N/A</p>	<p>Warm Up (15 Minutes): Students will read their journal entries from the previous day to their groups and discuss any changes or revisions they think should take place in the story.</p> <p>Work Time (30 Minutes): Groups will use their <b>Group Story Maps</b> to do a quick write as a group about the beginning, middle, and end of their picture books. One individual (or pair) will use the <b>Beginning of Your Story, Middle of Your Story, and End of Your Story</b> handouts.</p> <p>Teacher will conference with each group during this time to provide feedback.</p> <p>* This will take multiple days to complete. Allow necessary time.</p>



		Wrap Up (5 Minutes): In their groups, students will read a section of the story they wrote and share why they like it.
8	<p>Guiding Question: How do writers use words to tell a story? Part 2</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>Sequence the story to include the beginning, middle, and end portions</li> </ul> <p>Key Concepts: N/A</p>	<p>Work time (40 Minutes): Students will read their section to their classmates to ensure that the story is cohesive. Groups will then use a laptop to transcribe their work.</p> <p>Teacher will conference with each group during this time to provide feedback.</p> <p>* This could take multiple days to complete. Allow necessary time.</p>
9	<p>Guiding Question: How will you choose the illustration style for your book? Part 1</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>Observe the illustrations from several of the stories read throughout the curriculum</li> <li>Select and utilize an illustration technique for their picture book</li> </ul> <p>Key Concepts: N/A</p>	<p>Warm Up (15 Minutes): Show students images from the various picture books read during the curriculum and have them describe the artistic style. <i>Guiding questions: What kinds of things do you see in this illustration? How does it make you feel? What does it make you think of and why?</i></p> <p>Work Time (30 Minutes): Groups will select an illustration style and draw preliminary sketches for their sections.</p> <p><b>Note to Educators:</b> This will be an exploration while groups continue to write their books.</p> <p>Wrap Up (10 Minutes): Groups will share with the class the illustration style they selected and why.</p>
10	<p>Guiding Question: How will you choose the illustration style for your book? Part 2</p>	<p>Work Time (40 Minutes): Students will continue to write and continue to draw preliminary sketches of their books.</p>

	<p>Objective:</p> <ul style="list-style-type: none"> <li>Select and utilize an illustration technique for their picture book</li> </ul> <p>Key Concepts: N/A</p>	<p>* This could take multiple days to complete. Allow necessary time.</p>
11	<p>Guiding Question: How can we provide and receive meaningful feedback in order to create a strong children's picture book?</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>Demonstrate the ability to provide meaningful feedback to their peers</li> </ul> <p>Key Concepts: N/A</p>	<p>Warm Up (15 Minutes): On poster paper, groups will <b>Story Map</b> their rough draft of their picture book.</p> <p>Work Time (40 Minutes): Each group will read their rough drafts aloud to the whole group. Once all groups have shared their stories, groups will rotate and provide feedback using sticky notes on the large <b>Story Map</b> on poster paper.</p> <p>After groups have rotated back to their tables, inform them that they should read the feedback given by other classmates. Inform groups that the choice is ultimately up to them and they may or may not take the recommendations suggested. Groups will discuss the suggestions and make any edits they feel are necessary.</p> <p>Wrap Up (10 Minutes): Gather as a class to reflect on feedback. <i>Guiding questions: Did feedback by your peers impact any revisions you might or might not make? If so, what are they and why?</i></p>
12	<p>Guiding Question: What are you excited about in your story? What can be improved? Part 1</p>	<p>Work Time (40 Minutes): Provide groups time to revise their words and illustrations.</p> <p>Schedule a conference with each group.</p>

	<p>Objective:</p> <ul style="list-style-type: none"> <li>Articulate the strengths in their books as well as elements that can be improved</li> </ul> <p>Key Concepts: N/A</p> <p>* The content in this lesson is adapted from the <i>Youth-Powered Video: A Hands-On Curriculum for Teaching Documentary</i> by Gretchen Baudenbacher and Steve Goodman.</p>	<p>Gather as a class to reflect on their stories. <i>Guiding question: What makes you excited about this picture book? What are some things that can be improved?</i></p> <p>* This could take multiple days to complete. Allow necessary time.</p>
13	<p>Guiding Question: What are you excited about in your story? What can be improved? Part 2</p> <p>Objective:</p> <ul style="list-style-type: none"> <li>Articulate the strengths in their books as well as elements that can be improved</li> </ul> <p>Key Concepts: N/A</p> <p>* The content in this lesson is adapted from the <i>Youth-Powered Video: A Hands-On Curriculum for Teaching Documentary</i> by Gretchen Baudenbacher and Steve Goodman.</p>	<p>Work Time (40 Minutes): Once groups have made necessary revisions, students will work on their final drafts. Provide groups with an editing checklist to complete final picture book.</p> <p>* This could take multiple days to complete. Allow necessary time.</p>
14	<p>Guiding Question: What learning took place for you in this process?</p>	<p>Warm Up (10 Minutes): Class discussion on their learning process. <i>Guiding questions: What did you learn in the process of</i></p>

	<p>Objective:</p> <ul style="list-style-type: none"> <li>• Articulate their learning</li> </ul> <p>Key Concepts: N/A</p> <p>* The content in this lesson is adapted from the <i>Youth-Powered Video: A Hands-On Curriculum for Teaching Documentary</i> by Gretchen Baudenbacher and Steve Goodman.</p>	<p><i>writing a picture book? What did you enjoy about the process? What was challenging about the process?</i></p> <p>Work Time (30 Minutes): Students will write a personal reflection on the work of collaborating on a picture book. Their introductions should be written in paragraph form.</p> <p>Wrap Up (10 Minutes): Class discussion on theme in their stories. <i>Guiding questions: What did you learn about food insecurity? What is the message of your story?</i></p>
15	<p>Guiding Question: How can we celebrate the learning from our curriculum on food insecurity?</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Present on their children's book</li> <li>• Describe the needs and wants of the characters in their children's book</li> </ul> <p>* The content in this lesson is adapted from the <i>Youth-Powered Video: A Hands-On Curriculum for Teaching Documentary</i> by Gretchen Baudenbacher and Steve Goodman.</p>	<p>Publishing Celebration! (60 Minutes): Groups will present their books and read their introductions to audience members.</p> <p>After reading, celebrate with a class potluck!</p>
<p style="text-align: center;">Unit Standards</p> <p>Common Core Standards ELA (LITERACY.W.4.3)  Common Core Standards ELA (LITERACY.W.4.4)  National Social Studies Standards (Power, Authority and Governance)  National Social Studies Standards (Civic Idea and Practices)</p>		

National Health Education Standards 5.5.6

National Core Art Standards VA:Cr1.1.4

National Core Art Standards VA:Cr1.2.4

National Core Art Standards VA:Cr3.1.4

National Core Art Standards VA:Re7.2.4

Name \_\_\_\_\_

## Activist Word Study

**act:** \_\_\_\_\_ **ism:** \_\_\_\_\_ **ist:** \_\_\_\_\_**activism**

Morphology definition: \_\_\_\_\_

Part of speech: \_\_\_\_\_

Class definition: \_\_\_\_\_

\_\_\_\_\_

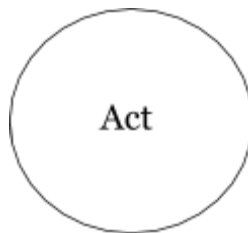
**activist**

Morphology definition: \_\_\_\_\_

Part of speech: \_\_\_\_\_

Class definition: \_\_\_\_\_

\_\_\_\_\_

**Directions:** Make a web of as many words as you can think of with the root “act.”**STOP AND THINK:**

1. Choose 1 word that connects to activism and activists.
2. Turn to a partner and share. Be prepared to share with the class.

Source: Adapted from the lesson by Rebecca Felt in the *Power to the People* curriculum.

Name \_\_\_\_\_

## Food Activist Study

Directions:

- 1.) Assign roles in your group: **reader, scribe, or presenter**
- 2.) Read the attached passage and complete the graphic organizer.

Reader: \_\_\_\_\_

Scribe: \_\_\_\_\_

Presenter: \_\_\_\_\_

<b>Activist:</b> (Who were/are they? What problem or issue around food did your activist notice and want to solve?)	<b>Food Goals:</b> (What did/does your activist hope to achieve around food?)
<b>Strategies:</b> (What methods did/does your activist use to work towards their food goal? For example, Did they write books or make speeches?)	<b>Achievements:</b> (What successes has your activist had when working towards their food goals?)

Source: Adapted from the lesson by Rebecca Felt in the *Power to the People* curriculum.

Name \_\_\_\_\_

### Developing a Picture Book Topic

1.) Of the topics brainstormed last class, which food insecurity topic do you like best?

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2.) What is your personal interest in this topic? In other words, how does this topic affect you personally?

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3.) What are some specific questions that you have about this topic that you would like to explore? (List at least 3)

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4.) Who would be interested in reading a children's book about the topic? Why would they be interested?

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5.) Describe the creative ideas that will express your ideas and feelings about this topic (for example: original poetry or images).

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Source: Adapted from the *Youth-Powered Video: A Hands-On Curriculum for Teaching Documentary* by Gretchen Baudenbacher and Steve Goodman.



Name \_\_\_\_\_

## Group Story Map

Which theme is the story focusing on: utilization, availability, access, or stability?	
Who is the main character? Describe him or her (physical traits and character)?	
Who are the supporting characters? Describe their physical traits and character.	
Where is this story taking place?	
What is the food insecurity issue in the story?	
How will the main character work to resolve the food insecurity problem?	
How will the food insecurity problem finally be resolved?	



Name \_\_\_\_\_

Group Topic \_\_\_\_\_

### Middle of Your Story

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Name \_\_\_\_\_

Group Topic \_\_\_\_\_

End of Your Story

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Campbell, T. C., & Jacobson, H. (2013). *Whole: Rethinking the science of nutrition*.

Dallas, TX: BenBella Books, Inc.

Dr. Thomas Colin Campbell, a biochemist, and Dr. Howard Jacobson, a health educator, are asserting in *Whole* that the best diet is the consumption of whole foods, particularly plant-based food as close to its natural state as possible. Avoiding ultra-processed foods and minimizing one's sugar, salt, and oil intake are also necessary to maintain a healthy diet. The goal of this text is to educate consumers about the effects of nutrition on their health and what personal changes they can make to live a longer, healthier life. Information from *Whole* is used throughout the curriculum particularly units 1 and 5.

Cohen, D. (1972). *The learning child: Guidelines for parents and teachers*. New York,

NY: Schocken Books Inc.

Dr. Dorothy Cohen was a Bank Street alum and professor and a prolific writer in the field of child development and education. *The Learning child* is a significant source of information on children ages 8-11 and their academic, physical, social, and emotional development.

Day, H. R., Foltz, M., Heyse, K., Marksberry, C., Sturgeon, M., & Reed, S. (1997).

*Teaching economics using children's literature*. Indianapolis, IN: Center for School Improvement and Performance.

*Teaching Economics Using Children's Literature* is an interdisciplinary curriculum on utilizing children's books to teach economic principles. This curriculum provided the foundational idea and structure for *The Meal Gap*.

Dewey, J. (1938). *Experience and education*. New York, NY: Free Press.

John Dewey's *Experience and Education* helped me frame my educational philosophy which centers on exposure, experience, and application. Over the course of three years, I have embarked on a progressive education exploration, which has caused me to examine the differences between the progressive Bank Street approach I am now immersed in and the traditional educational model that framed my years of academic experience. The all-knowing authoritarian educator and the customary dull worksheet model I once knew have evolved into a child-centered, interactive approach to teaching and learning.

Ettlinger, S. (2007). *Twinkie, deconstructed: My journey to discover how the ingredients found in processed foods are grown, mined (yes, mined), and manipulated into what Americans eat*. New York, NY: Plume Printing.

The catalyst for *Twinkie, Deconstructed* came from a conversation Ettlinger had with his daughter about the ingredients in her ice cream bar. He wanted more information on what the "strange-sounding ingredients" were in his food and started on a quest to know more about the origin of some of the most iconic and nostalgic packaged foods in American history. Utilizing the Twinkie, Ettlinger lists the ingredients, the chemicals, and the manufacturing process of this

product. This text is meant to bring awareness to individuals about what they are actually eating.

Food and Agriculture Organization of the United Nations. (June 2006). Policy Brief: Food security. Retrieved from <http://www.fao.org/forestry/13128-0e6f36f27e0091055bec28ebe830f46b3.pdf>

The FAO's Food Security document provided the foundational content for this curriculum. I utilized the FAO's definition of food security rather than the USDA's because it goes beyond economic access, and highlights the need of food appropriate to one's culture.

Food and Drug Administration of the United States. (n.d.). *Changes to the nutrition facts label*. Washington, DC: Author. Retrieved from <https://www.fda.gov/food/guidanceregulation/guidancedocumentsregulatoryinformation/labelingnutrition/ucm385663.htm>

This website provided questions and answers to the new label guidelines manufacturers will have to comply with by 2020. These changes are significant because they highlight current dietary practices such as an increase in serving size and why these changes are taking place.

Layton, L. (2015, January 16). Majority of U.S. public school students are in poverty. *The Washington Post*. Retrieved from [https://www.washingtonpost.com/local/education/majority-of-us-public-school-students-are-in-poverty/2015/01/15/df7171d0-9ce9-11e4-a7ee-526210d665b4\\_story.html?utm\\_term=.1f7adcab5dd2](https://www.washingtonpost.com/local/education/majority-of-us-public-school-students-are-in-poverty/2015/01/15/df7171d0-9ce9-11e4-a7ee-526210d665b4_story.html?utm_term=.1f7adcab5dd2)

According to *The Washington Post* website, Layton has covered issues concerning national education since 2005. Her article provides data on how pervasive poverty is in the US, particularly for public school children. The article uses free and reduced-price lunch numbers for K-12 to determine the level of poverty children across the US are experiencing. Access to food, or food insecurity, is directly related to poverty.

O'Dare Wilson, K., & Radey, M. (2016). But Where Can We Buy an Ounce of Prevention? Sprawl, Access, and Fresh Fruit and Vegetable Consumption. *Social Work In Public Health, 31*(4), 316-327. doi:10.1080/19371918.2015.1137507

Kellie O'Dare Wilson is a professor at University of West Florida and also is employed at the Florida Department of Health Tobacco and Cancer programs. Melissa Radey works at the Florida State University in the College of Social Work. *But Where Can We Buy an Ounce of Prevention?* is from the perspective of social workers and what role they can play in increasing fresh fruit and vegetable consumption (FFV) in under-resourced communities. This text highlights how lack of access to fresh fruits and vegetables can lead to fundamental health problems. This text also notes how travel, finances, and personal prioritization are some of the causes of a lack of FFV intake. If people have to travel far to get fresh fruits and vegetables, they will consume fewer. If fresh fruits and vegetables are expensive, people in low income areas will not buy them and if people perceive that the cost is too high for FFVs they will not consume them. This text was unique in the food insecurity discussion because it highlights how people



perceive fruits and vegetables. A negative perception of cost will prevent those from consuming and reaping the benefits of eating fruits and vegetables.

Pollan, M. (2008). *In defense of food: An eater's manifesto*. New York, New York: The Penguin Press.

Michael Pollan's *In Defense of Food* echoes Dr. Campbell and Dr. Jacobson's views on eating healthy. Pollan argues that eating mostly whole foods, such as plants, and reducing portion sizes, meat consumption, and foodlike substances will be beneficial to one's health. The objective is not to promote vegetarianism but to articulate scientific proof on the benefits of eating more fruits and vegetables and less packaged food.

Rights and Resources Initiative. (2015). *Who owns the world's land? A global baseline of formally recognized indigenous and community land rights*. Washington, DC: RRI. Retrieved from <https://www.globalagriculture.org/fileadmin/files/weltagraberbericht/GlobalAgriculture/o8Landgrabbing/OwnsLand.pdf>

The Rights and Resources Initiative (RRI) is a global coalition of 15 partnerships which advocates for the land and forest rights of Indigenous Peoples and local communities around the world. RRI focuses on advocating for gender justice, engaging the private sector to think critically about the role it plays in land redistribution, recognizing the rights of local people, and engaging local communities in the dialogue around climate change. Some members of RRI include the Center for International Forest Research, Landesa, and the

Samdhana Institute. Information from RRI's text *Who owns the world's land?* Is used in unit 1 to highlight how the Honduran people do not have access to better land due to the land grab. This text discussed the historical impact of how access to healthy land can lead to food insecurity for local communities.

Slater, J. J. (2017). Food Literacy: A Critical Tool in a Complex Foodscape. *Journal Of Family & Consumer Sciences*, 109(2), 14-20. doi:10.14307/JFCS109.2.14

Joyce Slater is a professor in the Department of Human Nutritional Sciences at the University of Manitoba. This article is adapted from the keynote presentation at the Canadian Symposium XIII: Issues and Directions in Home Economics on February 27, 2015. This article was unique because it centers on how a lack of knowledge about cooking is one of the foundational issues with students not understanding the current food landscape. Cheap, processed food is now the norm in eating habits of 21st century children, and Slater is articulating that to prevent obesity and a slew of other health related issues, households need to get back to basics by cooking at home. I do agree with this perspective; cooking at home is often cheaper and healthier than buying processed food or eating out.

Sowell, T. (2015). *Basic economics: A common sense guide to the economy* (3rd ed.). New York, NY: Basic Books.

Thomas Sowell is currently a Senior Fellow at the Hoover Institution at Stanford University and has written over 30 books around economics and education. *Basic Economics* is considered to be one of the most popular books on “common sense

economics” and provides bare-bones information for those who feel economics is beyond their understanding.

United States Department of Agriculture. (2018). Retrieved from <https://www.choosemyplate.gov/MyPlate>

The USDA’s ChooseMyPlate website provided information on the type of foods adults and children should be eating to maintain a healthy body, measurements of the types of food people should be consuming, nutritional value in food and how these impact the body. The website also provides food packing guidelines. This website was profoundly useful in supporting endeavors on nutritional needs and adults and children as well as facts and figures for unit 4.

United States Department of Agriculture. (June 2017). *Official USDA food plans: Cost of food at home at four levels, U.S. average, June 2017 1*. Retrieved from <https://www.cnpp.usda.gov/sites/default/files/CostofFoodJun2017.pdf>

Data on the four types of food plans or categories households within the US fall into include a thrifty plan, which is the lowest food plan, followed by low-cost, moderate-cost, and liberal. Used in unit 5 to focus on food budgets for households, this data is particularly useful in providing students with the various types of food budget people have access to.

Vascellaro, S. (2011). *Out of the classroom and into the world: learning from field trips, educating from experience, and unlocking the potential of our students and teachers*. New York, NY: The New Press.

Salvatore Vascellaro is currently a professor at Bank Street Graduate School. His book *Out of the Classroom and Into the World* echoes my belief that out-of-classroom learning time is important to the academic and social-emotional growth of a child. As a museum educator, I believe that out-of-classroom learning time, in all its forms, can deepen and strengthen content taught in the classroom. There will be four field trips in this curriculum. Which will focus on a different component of the food insecurity issue.

Wood, C. (2015). *Yardsticks: Children in the classroom ages 4-14* (3rd ed.). Turners Falls, MA: Center for Responsive Schools, Inc.

Wood's *Yardsticks* is one of the most recognized texts on child development. Though this text is not as comprehensive as Cohen's *The Learning Child*, for the 8-11 age range, *Yardsticks* does highlight cognitive growth indicators, gross motor activity indicators, as well as the type of curriculum 8-11 year olds are interested in. Woods and Cohen's texts aided me in thinking about including more movement, art, and discussions into my curriculum.

## Annotated Bibliography of Children's Literature

Brandt, L. (2014). *Maddi's fridge*. Brooklyn, NY: Flashlight Press.

A book based on the author's own experience with a friend, *Maddi's Fridge* highlights a growing problem in the United States, food insecurity. Maddi and Sophia live in the same neighborhood and often go rock climbing in their local playground. One day after playing in the park, Sophia runs to Maddi's apartment for something to eat and discovers that Maddi has no food in her fridge. Maddi asks Sophia to keep her empty fridge a secret and Sophia agrees. However, Sophia sets about trying to get her friend food and makes two unsuccessful attempts, but on the third attempt is successful with a burrito and milk. Sophia, realizing that this would only be one meal, informs her mother and they bring groceries to Maddi's home. The text also highlights how Sophia attempts to help Maddi secure food, while Maddi helps Sophia become a better rock climber. Vogel's colorful digital illustrations juxtaposing Sophia's fridge to Maddi's and the socioeconomic switch of Sophia, a Hispanic girl having high food security and Maddi, a Caucasian girl having very low food security is a hallmark of the book. This book is the catalyst for *The Meal Gap* and will be used throughout the curriculum.

Cronin, D. (2000). *Click, clack, moo: cows that type*. New York, NY: Simon & Schuster Books for Young Readers.

Whoever heard about cows, chickens, and eventually ducks making demands from the farmer about what they need and or want on the farm? Well the animals

did and it caused quite a bit of negotiating between the farmer and the animals. The animals wanted heat and the farmer wanted milk and eggs. The story ends with both groups compromising in order to get their needs and wants met. This book will be used in the first lesson to feature the various needs and wants that individuals, humans, and animals have. This text will highlight the concept of needs and wants in an accessible way.

DeFelice, C. (2006.) *One potato, two potato*. New York: NY: Farrar, Straus and Giroux.

The O'Gradys are an elderly couple living by themselves on their small farm. They are quite poor and share everything from one potato a day to a threadbare blanket. Their only prized possession is one gold coin. They are lonely and hungry until they find a magic pot that multiplies everything. They multiply their last potato, their gold coin, even their candles. They are no longer hungry but still lonely until Mrs. O'Grady and Mr. O'Grady go into the pot. Then, there are 2 Mr. O'Gradys and 2 Mrs. O'Gradys. The story culminates with the original O'Gradys gaining new friendships. U'Ren uses pen and gouache to illustrate the story with vivid colors and simple designs. This story will also be used to emphasize the needs and wants of the elderly.

DiSalvo-Ryan, D. (1991). *Uncle Willie and the soup kitchen*. New York, NY: William Morrow & Company, Inc.

A book based on the author's own experience, DiSalvo-Ryan's *Uncle Willie and the Soup Kitchen* tells the story of a young boy who spends one day with his uncle working in the local soup kitchen. Like many of DiSalvo-Ryan's other texts, she

highlights in this book how neighborhoods support and take care of the community members. The book shares how soup kitchens operate and the hardships of those who utilize the soup kitchen including people who are homeless and the working poor. The reluctance of the boy to shake the patrons' hands juxtaposed with his uncle's warmth and kindness towards the patrons highlights how uncomfortable we can be around those who are less fortunate versus seeing those in need as human beings, not to be ignored or discarded. The book is based upon DiSalvo-Ryan's volunteer experience. Her watercolor illustrations adds a level of sensitivity to the content.

Galdone, P. (1973). *The little red hen*. New York, NY: Clarion Books.

The classic tale of work avoidance and perseverance, *The Little Red Hen* is a story about a Hen who needs assistance in tilling, planting, harvesting, grinding and baking during the week, but finds no one to help her. When it is time to eat, though those same individuals who put no effort into the making of the bread, then want to partake, which the hen promptly denies. This story pinpoints needs and wants in a very humorous way.

Gunning, M. (2004). *A shelter in our car*. San Francisco, CA: Children's Book Press.

Zettie and her mother emigrated from Jamaica to the United States when her father passed away, only to find hardship and disappointment. Zettie's mom struggles to find employment which subsequently leads them to struggle to find housing. The only consistent housing they get is living in their car. Moving from location to location in the hopes of not being discovered they must be vigilant

about police officers. They meet other individuals and families who are also struggling with finding affordable housing. Zettie is teased at school by bullies and is called “Junk Car Zettie.” The pair finally find housing in a hotel when Zettie’s mom finds employment assisting other people find housing. Pedlar’s use of chalk pastels and full page illustrations draw attention to the emotional and financial hardships the characters are experiencing in the book. This tale highlights childhood homelessness and how the loss of a family member or any other type of unexpected event can put a family in economic risk, while demonstrating strong familial relationships.

McGovern, A. (1997). *The lady in the box*. New York, NY: Turtle Books.

During the holidays Ben and Lizzie notice an elderly woman, Dorrie, living in a box on their street. The pair are concerned for Dorrie’s wellbeing and give her things to eat and a scarf to keep her warm. When a shop owner angrily forces the woman away from his store, the siblings finally tell their mother what they have been up to and their mother reprimands the shop owner for his callousness and convinces him to allow her to stay. The family realizes that they can make a difference and decide to volunteer at a soup kitchen. There they see Dorrie who smiles at the family. Illustrator Mari Backer uses oil pastels to create beautiful illustrations about a very sensitive topic.

Milway, K. S. (2010). *The good garden: How one family went from hunger to having enough to eat*. Tonawanda, NY: Kids Can Press Ltd.



Based on the true story of Don Elias Sanchez and his work with rural Honduran farmers, *The Good Garden* chronicles the Duarte family's transition from food insecurity to food security. The book is from the perspective of Maria Duarte, a young girl who lives on a small plot of land with her family. The crop yield one year is weak and Maria's father leaves the family to find work. While her father is away, the village gets a new teacher, Don Pedro Morales. Morales not only educates the children but educates the farmers on how to compost and create terraces. He also teaches the farmers to sell directly to consumers instead of borrowing money from coyotes, or grain buyers, who give seed loans to poor farmers and require three times the price in return. The village eventually flourishes financially and ecologically. Don Pedro Morales moves on to other cities and spreads his knowledge across Honduras. Daigneault's colored-pencil pictures focus on the hope and progress of the people. This book provides students with ways they can be gardeners, whether in rural towns or urban cities, and more knowledgeable about promoting food security.

Nivola, C. A. (2008). *Planting the trees of Kenya: The story of Wangari Maathai*. New York, NY: Francis Foster Books.

*Planting the Trees of Kenya: The Story of Wangari Maathai* tells the tale of Wangari Maathai, a trailblazer in environmental activism, who returned home from the United States to see the environmental and nutritional impact deforestation had on the land and the people. In the story, Maathai sets in motion a revolutionary plan to replant trees in her village which eventually helps the

women gain access to clean food and water. They no longer spend their meager funds on store bought food but remembered their traditions and cooked and planted what they needed for themselves. With its watercolor illustrations, author/illustrator Claire A. Nivola's unique tale highlights what one individual did to help the economic and food needs of her community. This narrative gives students a window into physical and environmental needs and wants as well as activism and self-motivation.

Petrie, K. (2012). *Food culture: Celebrating diverse traditions*. Edina, MN: ABDO Publishing Company.

Petrie's *Food Culture* is one of the few nonfiction children's books that specifically highlights how food plays a significant part in various cultures around the world. The photographs depict how food is utilized in celebrations, customs, and folklore. *Food Culture* also highlights what types of foods children should eat to be healthy. This book will be utilized to engage students in thinking about cultural and traditional practices around food.

Silverstein, S. (1992). *The giving tree*. New York, NY: HarperCollins Children's Books.

*The Giving Tree* is a powerful tale of give and take. The boy asks for the tree's apples, branches, and trunk, which the tree willingly and happily supplies because she loves the boy. One day the tree realizes that she has given everything to the boy and she is not quite so happy. The story ends with the boy wanting nothing from the tree but a place to sit and rest, and once again the tree happily

provides. Simply illustrated, the tale juxtaposes the needs and wants of the boy in the story with the wants and needs of the tree.

Stevens, J. (1995). *Tops & bottoms*. Orlando, FL: Harcourt, Inc.

Janet Steven's *Tops & Bottoms* is a trickster story, about a wily Hare who uses his wits to outsmart the lazy Bear. After losing a bet to a tortoise, he sold his land to the Bear and had been left with nothing. The Hare will work the Bear's land and the parties will split the crops in half. The Bear chooses tops, so Hare plants root crops, leaving Bear with no crops. Bear then chooses bottoms and Hare plants corn, leaving Bear, once again, without any crops. Bear eventually learns his lesson and plants his own crops and Hare has earned enough money to buy back his land from Bear. Stevens uses a variety of materials including watercolors, colored pencils, and gesso on paper to illustrate this clever story.

Williams, L. E. (2010). *The can man*. New York, NY: Lee & Low Books Inc.

*The Can Man* is story about helping others in their time of need. Tim is a young man who wants to get his own skateboard, but his parents inform him that they do not have the funds necessary to buy such an expensive gift. Tim sees a former resident of his building, The Can Man, scouring trash barrels for cans to redeem at the redemption store. He gets an idea to earn money for his skateboard by searching for cans throughout his neighborhood. He realizes how hard the work is and also realizes that he is taking money away from The Can Man. In the end Tim foregoes getting a new skateboard and gives the money he has earned to The Can Man who subsequently buys a warm coat. The Can Man in return, fixes up an

old skateboard for Tim and leaves it as his apartment building as a gift. This story will be a very useful text in this curriculum because it discusses how loss of income can impact a person's needs and wants.

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