

Science

Unit 1

Food

- What is food and why is it important?
- How do we study food in Science?

Unit Guide¹

¹ Approximately 30 lessons are summarized in this guide. Lessons are organized into sets of 4-6 that focus on key knowledge and/or skills. A set is roughly a week of lessons, but can be slightly longer or shorter. The guides are intended to support 6-8 weeks of instruction, as some lessons will take more than one class period, depending on your students and daily teaching time.

UNIT AT A GLANCE

SET	GUIDING QUESTIONS	STUDENT UNDERSTANDINGS
<p>1</p> <p>5 lessons</p>	<p>What do people eat for breakfast in the U.S. and in their home countries? Why is breakfast important?</p>	<p>Our bodies need food to survive and that food provides our bodies with energy. Breakfast is an important meal because it helps provide energy, nutrients for growth, keeps us healthy, keeps us awake during the day, and helps with learning. We make choices about food depending on many things, such as availability, affordability, and cultural experiences. Food connects us to our culture and memories and sharing about our foods builds community in our class.</p>
<p>2</p> <p>5 lessons</p>	<p>How do I classify foods into food groups?</p>	<p>We make decisions about food we eat every day. Foods can be categorized into bigger groups called food groups (grains, fruits, vegetables, proteins, dairy, and other), which are connected to where the food comes from. People eat different foods across the world, but all from the same food groups. A healthy meal will have a balance of these different food groups.</p>
<p>3</p> <p>5 lessons</p>	<p>How do we observe and get information about foods using sight and touch?</p>	<p>We use our bodies' senses (sight, touch, taste, hear, smell) to observe the world around us. These observations help us sort foods according to shared properties. Sometimes we use more than one sense when making observations to get more details.</p>
<p>4</p> <p>5 lessons</p>	<p>How do we observe and get information about foods using taste and smell?</p>	<p>When we eat, we use our senses of taste and smell. Taste buds on our tongue help us identify foods. Smells work with taste to help us identify flavors of foods. Smells also connect to memories and emotions. They can remind us of stories and experiences of eating from our culture.</p>

<p>5 5 lessons</p>	<p>How do we use tools to help us get more detailed observations of our food?</p>	<p>Our senses are limited. In order to know more details about the world around us, we use tools to help enhance our senses. Such tools include hand lenses to magnify our sense of sight and scales to measure mass of foods. We can represent this data in tables and graphs, and can analyze it to know the nutrition of foods. This is important for staying healthy and it helps us choose more healthful foods to eat.</p>
<p>6 6 lessons</p>	<p>How do I describe my breakfast experience in my home?</p>	<p>Breakfasts that we eat for special occasions in the home may include cultural and personal traditions, stories, and memories. Each person's experience is different from another's. It is valuable to share this information with others to learn about our classmates and see similarities and differences among food choice, preparation, and eating preferences.</p>

SET 1: CONTENT

GUIDING QUESTION	
<p><u>What do people eat for breakfast in the U.S. and in their home countries? Why is breakfast important?</u></p> <p>Our bodies need food to survive and that food provides our bodies with energy. Breakfast is an important meal because it helps provide energy, nutrients for growth, keeps us healthy, keeps us awake during the day, and helps with learning. We make choices about food depending on many things, such as availability, affordability, and cultural experiences. Food connects us to our culture and memories and sharing about our foods builds community in our class.</p>	
OVERVIEW	
DESCRIPTION	<p>In Set 1, students will describe to the class what they eat for breakfast daily (in their life in the U.S.) and in their home countries. (Please see the Teacher's Guide for more information on the student Science Journals.) Students will describe when they eat certain types of breakfasts, and identify similar breakfast foods and beverages eaten in their countries and other countries. (<i>Note: In Lesson 1, students will answer the Unit Essential Questions as part of the Beginning Assessment.</i>)</p>
RATIONALE	<p>The content focus of this course is food, particularly in the form of breakfast. Food is essential to our survival, but it is also something that has deep cultural connections. Breakfast is an important meal nutritionally. It provides energy and essential nutrients that fuel us throughout the day. All organisms—plants and animals, including humans—need to eat in order to survive. Looking at what the world eats for breakfast, both every day and on special occasions, teaches students critical vocabulary that will be revisited throughout this unit and course.</p>
GOALS	<p>By end of the week, students will be able to draw, label, and describe the foods eaten for breakfast every day and on special occasions, compare common breakfast foods from their country to others, describe when certain breakfasts occur, and visually see how breakfast choices are shown in a bar graph.</p>

TEXTS & OTHER INPUT	
<u>Non-Print: Images/Video</u>	
<p>Video: <i>What Does the World Eat for Breakfast?</i> (https://www.youtube.com/watch?v=ry1E1uzPSU0)</p>	

SET 1: LANGUAGE

VOCABULARY	
Abstract Academic Concepts	Academic & Basic Terms
similarities	<p>things we eat: bread, cereal, grains*, fruit*, vegetable* eggs, rice, yogurt, dairy*, meat*, sausage, banana, piece of toast, sugar, meal (<i>Note: Add any additional words students need to list breakfast foods from home culture.</i>)</p> <p>things we drink: coffee, milk, juice, tea, glass of milk, beverage*, smoothie (<i>Note: Add any additional words students need to list things they drink at breakfast from home culture.</i>)</p> <p>ways we prepare breakfast: make coffee, pour juice, cook eggs, toast bread, butter bread, fry/scramble/boil eggs, cut cheese/fruit, blend smoothie, spread jam/butter</p> <p>other food words: raw*, cooked*, natural*, processed*, survive/survival*, health/healthy, easy to make, tastes good</p> <p>scientific visual representations: drawing, label/labeling, bar graph, data table</p> <p>culture: culture*, tradition*, holidays*, weekends*, in common*</p>

FUNCTIONS	FORMS & FRAMES
Describe	<p>Describe the foods and beverages we eat for breakfast.</p> <ul style="list-style-type: none"> • I usually eat _____ for breakfast. • I usually drink _____ for breakfast. • I eat _____ every day for breakfast. • I drink _____ every day for breakfast. • We eat _____ every day for breakfast. • We drink _____ every day for breakfast. <p>Describe when I eat breakfast.</p> <ul style="list-style-type: none"> • I eat _____ on _____ (holidays, weekends, other). • I drink _____ on _____ (holidays, weekends, other).
Compare	<p>Compare what is eaten for breakfast in my country to other countries.</p> <ul style="list-style-type: none"> • In _____, people eat _____. In my country, we also eat _____.

	<p>_____.</p> <ul style="list-style-type: none"> In _____, people drink _____. In my country, we also drink _____.
<p>Identify</p>	<p>Identify foods and beverages eaten in my country.</p> <ul style="list-style-type: none"> In _____ (country), I eat _____, _____, and _____ for breakfast. In _____ (country), I drink _____, _____, and _____ for breakfast.

SET 1: LESSON SUMMARIES

1	Kinesthetic Experience: Sharing and Graphing Breakfast Foods					
<p>Daily Question: <i>What foods do we usually eat for breakfast in the U.S.?</i></p> <p>Content Target: I can describe my breakfast foods in home language groups. I can understand a bar graph of the breakfast foods we eat.</p> <p>Language Target: I can describe what I usually eat and drink for breakfast. I can describe what the class usually eat and drinks for breakfast.</p> <p><i>I usually eat _____ for breakfast. I usually drink _____ for breakfast.</i></p> <p><i>I eat _____ every day for breakfast. I drink _____ every day for breakfast.</i></p> <p><i>We eat _____ every day for breakfast. We drink _____ every day for breakfast.</i></p>						
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; background-color: #eee;">Summary</th> <th style="width: 50%; background-color: #eee;">Materials</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> Beginning Assessment: In home-language groups, have students translate the Essential Questions and try to answer them orally. Circulate and monitor while students are working. Discuss food and why it is important. Elicit answers, such as: We need food for survival; without it, we would die; it helps keep us healthy; it helps us learn/think; we need it to grow; etc. (Keep in mind that the more scientific concepts of energy and nutrition will be covered in Set 2.) Students respond to daily question in their Science Journals (via writing or drawing) and then share what they usually have for breakfast in home-language groups. (This can be orally or an image pointed to from the Common Breakfast Foods Glossary.) Emphasize that when we describe habits that happen often or every day, we use the present tense. Make a bar graph on chart paper depicting typical breakfast foods students eat, using colored Post-its to represents different food groups (e.g., cereal, bread, eggs, yogurt, fruit). Discuss the results of the bar graph using the language frames. Record student responses on chart paper. Also ask students why they eat these items for breakfast (e.g., it's easy to make, it tastes good, it's part of my culture/tradition, my parents make it). Review vocabulary as needed. Students use these supports to answer the Exit Ticket. </td> <td style="vertical-align: top;"> <p>Common Breakfast Foods Glossary</p> <p>Chart paper[^]</p> <p>Colored Post-its[^]</p> <p>>><u>Formative Assessment</u>: Exit Ticket</p> </td> </tr> </tbody> </table>			Summary	Materials	<ul style="list-style-type: none"> Beginning Assessment: In home-language groups, have students translate the Essential Questions and try to answer them orally. Circulate and monitor while students are working. Discuss food and why it is important. Elicit answers, such as: We need food for survival; without it, we would die; it helps keep us healthy; it helps us learn/think; we need it to grow; etc. (Keep in mind that the more scientific concepts of energy and nutrition will be covered in Set 2.) Students respond to daily question in their Science Journals (via writing or drawing) and then share what they usually have for breakfast in home-language groups. (This can be orally or an image pointed to from the Common Breakfast Foods Glossary.) Emphasize that when we describe habits that happen often or every day, we use the present tense. Make a bar graph on chart paper depicting typical breakfast foods students eat, using colored Post-its to represents different food groups (e.g., cereal, bread, eggs, yogurt, fruit). Discuss the results of the bar graph using the language frames. Record student responses on chart paper. Also ask students why they eat these items for breakfast (e.g., it's easy to make, it tastes good, it's part of my culture/tradition, my parents make it). Review vocabulary as needed. Students use these supports to answer the Exit Ticket. 	<p>Common Breakfast Foods Glossary</p> <p>Chart paper[^]</p> <p>Colored Post-its[^]</p> <p>>><u>Formative Assessment</u>: Exit Ticket</p>
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[^]Not provided in lesson materials.

Teacher Notes:

SET 1: LESSON SUMMARIES

2

Oral Language Building: Drawing My Special Occasion Breakfast

Daily Question: *What foods do we eat for breakfast on special occasions?*

Content Target: I can share a breakfast meal in my home language group. I can share a breakfast meal in a drawing.

Language Target: I can identify breakfast foods that are eaten in my culture. I can describe when I eat these foods.

In _____ (country), I eat _____, _____, and _____ for breakfast.

In _____ (country), I drink _____, _____, and _____ for breakfast.

I eat _____ on _____ (holidays, weekends, other).

I drink _____ on _____ (holidays, weekends, other).

Summary	Materials
<ul style="list-style-type: none"> Review some common breakfast foods we usually eat or eat every day, and discuss why we eat them (e.g., cost, availability, portability, preparation). Ask students if this is different from what they eat for breakfast in their home countries. Formative Assessment: Think-pair-share: Students draw the foods of their special occasion breakfast and label in home language with paper and colored pencils. (Limit drawing to ensure that there is time to discuss and share breakfast with groups. Students can re-visit these drawings in Set 6, as these drawings will be drafts for the Performance Task.) Circulate and monitor while students then work in home-language groups. Finally, students share what they have for breakfast on a special days (e.g., What do you eat for breakfast on a weekend? Holidays?). Rephrase this question using <i>when</i>, stressing the word <i>when</i> to help students understand the question. Using the Common Breakfast Foods Glossary, present words and images for some common breakfast foods and drinks in English (e.g., cereal, sausage, milk, coffee). Label foods in English and home language. Home-language groups try to classify breakfast items from today and yesterday into groups, such as: food from plants, food from animals, food in natural form (raw), food not in natural form (processed). Teacher facilitates class share out. 	<p>>>Formative Assessment: Paper, colored pencils[^]</p> <p>Common Breakfast Foods Glossary (provided in Set 1, Lesson 1)</p>

[^]Not provided in lesson materials.

Teacher Notes:

SET 1: LESSON SUMMARIES

<div style="display: flex; align-items: center; justify-content: space-between; padding: 5px;"> 3 Reading Text: Comparison of Common Breakfast Foods </div>	
<p>Daily Question: <i>What are common breakfast foods?</i></p> <p>Content Target: I can identify common breakfast foods in different countries and the different forms they can take.</p> <p>Language Target: I can compare what is eaten for breakfast in my country to other countries.</p> <p><i>In _____, people eat _____. In my country, we also eat _____. In _____, people drink _____. In my country, we also drink _____.</i></p>	
Summary	Materials
<ul style="list-style-type: none"> Watch <i>What Does the World Eat for Breakfast?</i> List the words and images that are repeated in video (e.g., bread, eggs, fruit). Give class the prepared screenshots of breakfasts from countries represented in class from video. Assess comprehension using point to-show me: Read aloud the foods found in the screenshots of breakfasts. Groups then hold up the screenshot that matches what you read. Co-create an LEA text from the video about what is eaten for breakfast around the world, pointing out similarities (e.g.: eating bread in Italy, eating naan in India). Stress the importance of <i>also</i> as a way to signal commonality or similarity between the two sentences and breakfast foods in different countries. Consider translating <i>also</i> into home languages to develop deeper comprehension. <ul style="list-style-type: none"> Optional Extension Activity: state the different forms of food people eat (e.g., eating eggs that are scrambled/fried/boiled). Include the student breakfast foods from every country in the class in the LEA activity. If a county is not there, ask students to add sentence about what is eaten in their country at end of LEA activity. Look for opportunities for repetition. Translate common breakfast foods into home language. 	<p><i>What Does the World Eat for Breakfast?</i>[^] https://www.youtube.com/watch?v=ry1E1uzPSU0</p> <p>>>Formative Assessment: 5-8 screenshots of different breakfasts from countries represented in class from video[^] (<i>Note: Use breakfasts that represent countries of students in class.</i>)</p>

[^]Not provided in lesson materials.

Teacher Notes:

SET 1: LESSON SUMMARIES

4	Writing: Describing My Special Occasion Breakfast	
<p>Daily Question: <i>How can I write a description of my breakfast?</i></p> <p>Content Target: I can identify and describe the foods and beverages I eat and drink for breakfast.</p> <p>Language Target: I can describe in writing what I eat and drink for breakfast.</p> <p><i>In _____ (country), I eat _____, _____, and _____ for breakfast.</i></p> <p><i>I drink _____ for breakfast.</i></p>		
Summary		Materials
<ul style="list-style-type: none"> • Distribute the envelopes with food images to student pairs. Have students identify images of foods they eat for breakfast. • Pairs share their breakfast foods with each other. • Read the LEA text from Lesson 3, with students following along. • Students use language and translations from Lesson 3 to write sentences (in English or home language) in their Science Journals describing their breakfast. Students can be provided a visual word bank (or use words from images in envelope sort). • Before they write, model this with traditional American breakfast. • Picture-label-write: Students add these sentences to their breakfast drawings from Lesson 2. 		<p>Envelopes with food images[^]</p> <p>LEA text[^] (created in Set 1, Lesson 3)</p>

[^]Not provided in lesson materials.

Teacher Notes:

SET 1: LESSON SUMMARIES

5	Reviewing/Assessing Skills: Sharing My Breakfast	
<p>Daily Question: <i>How can I share my special occasion breakfast?</i></p> <p>Content Target: I can talk about the foods of my breakfast.</p> <p>Language Target: I can describe when I eat this type of breakfast. <i>I eat this breakfast on _____ (holidays, weekends, other).</i></p>		
Summary		Materials
<ul style="list-style-type: none"> • Students participate in a gallery walk, showcasing the drawings of their special occasion breakfast (from Lesson 2 and Lesson 4). • Half of the class presents and shares their special occasion breakfasts from their drawings to the other half of the class. They share the types of foods they eat and one sentence about when they eat it. • As students go around the room, they help translate the different foods they see on drawings into their home language. Each home language group gets a different colored Post-it, which will be turned into word wall. • Encourage students to ask their classmates questions about their breakfast (e.g., How do you make your special breakfast? When do you eat it?) • Facilitate a discussion asking students to share what they learned from the gallery walk. Elicit from students why breakfast is an important meal, reviewing terms introduced in Lesson 1 (e.g., survival, healthy, helps me learn). Create a Learning Log of what student learned during this set. 		<p>Colored Post-its[^] (one color for each home language)</p> <p>Learning Log[^]</p>

[^]Not provided in lesson materials.

Teacher Notes:

SET 2: CONTENT

GUIDING QUESTION	
<p>How do I classify foods into food groups?</p> <p>We make decisions about food we eat every day. Foods can be categorized into bigger groups called food groups (grains, fruits, vegetables, proteins, dairy, and other), which are connected to where the food comes from. People eat different foods across the world, but all from the same food groups. A healthy meal will have a balance of these different food groups.</p>	
OVERVIEW	
DESCRIPTION	In Set 2, students will learn distinguishing properties of the main food groups and the types of foods that belong in each group. Students will also classify foods from their breakfast into groups, and represent this data in the form of a data table and a bar graph. <i>(Note: Be prepared to explain the Performance Task to students during this set. You will show them the Performance Task Model Drawing, Narrative, and Label and Graph in Lesson 9.)</i>
RATIONALE	This set provides students with an introduction of the nutritional importance of eating foods from a variety of food groups, and an opportunity to build new vocabulary and knowledge using their personal breakfast items identified in the week before.
GOALS	At the end of this week, students will be able to identify the major food groups, describe major characteristics of these groups, classify foods into these groups, record the servings of each group in their breakfast in a data table, and represent this data in the form of a bar graph.
TEXTS & OTHER INPUT	
Non-Print: Images/Video	Central: Whole-Class Text
<p>Video: <i>The 5 Fabulous Food Groups</i> https://www.youtube.com/watch?v=L9ymkJK2QC U)</p>	<p><i>The Facts About Food Groups</i> (provided in materials)</p>

SET 2: LANGUAGE

VOCABULARY	
Abstract Academic Concepts	Academic & Basic Terms
<p>food groups</p> <p>balance</p>	<p>nutritional benefits of food groups: energy, carbohydrate, muscle, bones, calcium, health/healthy, nutrient, nutrition, vitamins, sugar, portion, metabolism, teeth, digestion, growth, repair</p> <p>food groups: grains, vegetables, fruit, dairy, protein, other, fish, eggs, milk, cheese, sweet, stems, leaves, roots, serving(s), servings per day</p> <p>data table and bar graph: column, row, label/labeling, value, axis, represent, category, bar graph, visual, data table, interpret, results, more/more than, less/less than, equal, same amount</p>

FUNCTIONS	FORMS & FRAMES
Identify	<p>Identify foods and food groups.</p> <ul style="list-style-type: none"> • This is a _____. • That is a _____. • These are all _____. • Those are all _____. • All of these foods are _____. • All of them have _____. • They all come from _____.
Classify	<p>Classify foods into food groups.</p> <ul style="list-style-type: none"> • A(n) _____ is an example of a _____. • For breakfast, I eat _____ foods from the fruit group. • For breakfast, I eat _____ foods from the vegetable group. • For breakfast, I eat _____ foods from the protein group. • For breakfast, I eat _____ foods from the grain group. • For breakfast, I eat _____ foods from the dairy group. • For breakfast, I eat _____ foods from the other groups.
Explain	<p>Explain why food is important.</p> <ul style="list-style-type: none"> • Foods from the _____ group are important for _____.
Analyze/Compare	<p>Analyze/Compare information from a bar graph/visual data representation.</p> <ul style="list-style-type: none"> • Our class eats more _____ than _____. • Our class eats fewer _____ than _____. • Our class eats the same amount of _____ and _____.

SET 2: LESSON SUMMARIES

6	Kinesthetic Experience: Properties of Food Groups	
<p>Daily Question: <i>What are the properties of different food groups?</i></p> <p>Content Target: I can identify foods and properties of food groups.</p> <p>Language Target: I can identify similarities among foods. I can identify the food group that a food belongs to.</p> <p><i>All of these foods are _____. All of them have _____. They all come from _____.</i></p> <p><i>This is a _____. That is a _____.</i></p> <p><i>These are all _____. Those are all _____.</i></p>		
Summary	Materials	
<ul style="list-style-type: none"> • Set up one station per food group in the classroom. There should be a variety of 3-5 foods from each food group at each station. Each station has accompanying Food Cards for reference. • Students visit stations around the room to feel, explore, and interact with the types of foods in each main food group, using the Food Cards to identify the foods at each station. • In their Science Journals, students list or draw what is similar among all foods at each station. • Record observations and types of food from each station in a Food Group Chart, introducing the concept of food groups, and where food from each food group comes from (distinguishing characteristics) (e.g., fruits come from plants, have seeds; vegetables come from plants, do not have seeds; grains come from plants, are hard seeds we cook and eat; meat comes from animals, including fish and eggs; dairy comes from animal milk; and others, like sweets and oils). • Provide students with the names of the five food groups. Have them match each station to the appropriate food group based on the information from their chart. • Formative Assessment: Point to-show me: Give each group a new food item. Students identify the food group it belongs to. 	<p>3-5 foods from each food group^</p> <p>Food Cards</p> <p>Food Group Chart^</p>	

^Not provided in lesson materials.

Teacher Notes:

SET 2: LESSON SUMMARIES

7	Oral Language Building: Classifying Food Groups	
<p>Daily Question: <i>How do we classify food according to groups?</i></p> <p>Content Target: I can classify foods into food groups.</p> <p>Language Target: I can identify foods. I can classify them into food groups.</p> <p><i>This is a _____.</i></p> <p><i>That is a _____.</i></p> <p><i>These are all _____.</i></p> <p><i>Those are all _____.</i></p> <p><i>A(n) _____ is an example of a _____.</i></p>		
Summary	Materials	
<ul style="list-style-type: none"> Students share observations from station day before. Chart responses in a class chart, under each group category: grains, dairy, protein, fruits, vegetables, other. Students watch The 5 Fabulous Food Groups. Discuss more properties of each food group from video. Write responses in chart. Make sure to hit on the concept of nutrition and nutrients during the discussion, making sure that students are beginning to understand that we get nutrients from the food we eat. Play a game to identify correct food group: Show students the images in the Common Breakfast Foods Glossary from Lesson 1. Have students identify the food group that they belong to. Circulate and monitor as students are playing the game to correctly identify food groups. 	<p><i>The 5 Fabulous Food Groups</i>[^] (https://www.youtube.com/watch?v=L9ymkJK2QCU)</p> <p>Common Breakfast Foods Glossary (provided in Set 1, Lesson 1)</p>	

[^]Not provided in lesson materials.

Teacher Notes:

SET 2: LESSON SUMMARIES

8	Reading Text: Food Groups and Introduction to Nutrition	
<p>Daily Question: <i>Why is it important to eat from different food groups?</i></p> <p>Content Target: I can explain the nutritional importance of eating foods from a variety of food groups.</p> <p>Language Target: I can explain the importance of eating foods from each food group.</p> <p>Foods from the _____ group are important for _____.</p>		
Summary	Materials	
<ul style="list-style-type: none"> • Read aloud <i>The Facts About Food Groups</i> while students follow along. • Introduce vocabulary from text, which students input into the glossaries in their Science Journals. • Students explain importance of eating foods from each food group on their The Food Group Challenge Worksheet. • Have a "dry erase board huddle" on the importance of food groups. 	<p><i>The Facts About Food Groups</i></p> <p>The Food Group Challenge Worksheet</p>	

[^]Not provided in lesson materials.

Teacher Notes:

SET 2: LESSON SUMMARIES

9	Writing: Classifying Breakfast Foods into Food Groups	
<p>Daily Question: <i>What food groups do I have in my breakfast?</i></p> <p>Content Target: I can classify and record the foods I eat for breakfast into food groups.</p> <p>Language Target: I can classify my breakfast foods into food groups.</p> <p><i>For breakfast, I eat _____ foods from the fruit group.</i></p> <p><i>For breakfast, I eat _____ foods from the vegetable group.</i></p> <p><i>For breakfast, I eat _____ foods from the protein group.</i></p> <p><i>For breakfast, I eat _____ foods from the grain group.</i></p> <p><i>For breakfast, I eat _____ foods from the dairy group.</i></p> <p><i>For breakfast, I eat _____ foods from the other groups.</i></p>		
Summary	Materials	
<ul style="list-style-type: none"> • Students write in their Science Journals what they ate for breakfast, and classify their breakfast foods into good groups. • Students count the number of items in each food group category individually. • Picture-label-write: Students enter data into the Daily Breakfast Food Data Table, filling in student name and the amount of each food group eaten by each student. Students total the data and summarize it from their table in written sentences, filling in language frames. • Introduce the Performance Task to be completed at the end of the Unit, showing students the Model Drawing, Narrative, and Label and Graph. Inform students that they will be using the draft drawings of their special occasion breakfast from Set 1 to complete the Performance Task in Set 6. • End with a discussion that includes the following: <ul style="list-style-type: none"> ○ Do you eat all five food groups for breakfast? ○ What are some ways you can include all five food groups in your breakfast? ○ Why is it important to eat from all food groups? 	<p>Daily Breakfast Food Data Table</p>	

[^]Not provided in lesson materials.

Teacher Notes:

SET 2: LESSON SUMMARIES

10	Reviewing/Assessing Skills: Quantifying and Representing Food Group Class Data	
<p>Daily Question: <i>How do we represent our class data on food groups?</i></p> <p>Content Target: I can represent data from my data table in a form of a bar graph.</p> <p>Language Target: I can summarize information from a bar graph.</p> <p>Our class eats more _____ than _____.</p> <p>Our class eats fewer _____ than _____.</p> <p>Our class eats the same amount of _____ and _____.</p>		
Summary	Materials	
<p><i>(Note: Before class, create a simple Exit Ticket for students to complete at the end of this lesson. Type up the following sentence starters with lines for students to write: I should eat more _____. The class should eat more _____. It is important to eat from all food groups because _____.)</i></p> <ul style="list-style-type: none"> Using the data logged in the Daily Breakfast Food Data Table from day before, students construct a bar graph on their Daily Breakfast Food Bar Graph, visually representing class data on food groups. Model how to record data as a bar graph for the first group, then have students do the next ones on their own, using the colored pencils to color in the bars. Students fill in the sentences on the bottom of the Daily Breakfast Food Bar Graph using information from bar graph. Have students complete the Exit Ticket you prepared before class to draw conclusions about what we should eat more of and why. 	<p>Colored pencils[^]</p> <p>Daily Breakfast Food Data Table (provided in Set 2, Lesson 9)</p> <p>Daily Breakfast Food Bar Graph</p> <p>>><u>Formative Assessment</u>: Exit Ticket[^]</p>	

[^]Not provided in lesson materials.

Teacher Notes:

SET 3: CONTENT

GUIDING QUESTION	
<p><u>How do we observe and get information about foods? What can we learn about food using sight and touch?</u></p> <p>We use our bodies' senses (sight, touch, taste, hear, smell) to observe the world around us. These observations help us sort foods according to shared properties. Sometimes we use more than one sense when making observations to get more details.</p>	
OVERVIEW	
DESCRIPTION	<p>In Set 3, students will make observations using their senses (with an emphasis on sight and touch) about the foods commonly eaten for breakfast. Using their Exploration Kits (see Teachers Guide for more information on these), students will learn how our senses work and their importance for interacting in the world and with our food. <i>(Note: At the end of this set, students will take a Mid-Unit Assessment, in which they collect data on the types of foods the class eats for breakfast; represent this data in a bar graph; identify the food groups it represents; and include descriptions and observations of these groups.)</i></p>
RATIONALE	<p>Students practice making observations, a critical skill for learning about the world in science, especially food. Our senses allow us to know critical information about the food we eat. Students learn how our body parts work together to allow our senses to function.</p>
GOALS	<p>At the end of this set, students will make observations about breakfast foods using their senses, learn how senses work and their importance, and practice representing and interpreting data in a bar graph.</p>
TEXTS & OTHER INPUT	
<p><u>Central: Whole-Class Text</u></p>	
<p><i>Understanding Our Senses</i> (provided in materials)</p>	

SET 3: LANGUAGE

VOCABULARY	
Abstract Academic Concepts	Academic & Basic Terms ²
<p>sense</p> <p>observations/ observe</p> <p>characteristics* (properties)</p>	<p>body parts: eyes, ears, nose, tongue, mouth, taste buds, skin, hands, brain</p> <p>observations using sight: sight, vision, visible*, color, red, yellow, orange, green, blue, purple, pink, brown, multi-colored, white, black, gray, light, dark, shape, long, wide, round, square, oval, triangle, rectangle, irregular, size, big, small, tiny, quantity* (amount), many, few/fewer, more/more than, less/less than</p> <p>observations using touch: touch, feel, texture, rough, hard, smooth, bumpy, soft, fuzzy, pointy/sharp, sticky, dry, greasy, oily, moist</p> <p>observations using taste: taste, sweet, bitter, salty, sour, umami, bland</p> <p>observations using hearing: hear, loud, quiet* (soft), sound, crunchy</p> <p>observations using smell: smell, sweet, pungent, strong, unpleasant, pleasant, citrusy, minty</p> <p>observations of a school cafeteria: cafeteria, tables, chairs, floor, counter, kitchen, windows, walls, lights, cash register, garbage, refrigerators, ovens, stoves, sinks, trays, plates, forks, knives, spoons, napkins, condiments, spills, cups, students, teachers, cafeteria workers, cook, cashier, voice(s), laughter/laughing, screams, waving, crowd/crowded, lines, frying foods</p> <p>breakfast foods: omelet, cream cheese, (maple) syrup</p> <p>other: send, information, knowledge*, air, classify</p>

² May vary depending on food samples provided, observation experience of school cafeteria, and personal student experiences.

SET 3: LANGUAGE (cont'd.)

FUNCTIONS	FORMS & FRAMES
<p>Analyze/Compare</p>	<p>Analyze/Compare the data from a bar graph.</p> <ul style="list-style-type: none"> • My class eats more _____ than _____. • More students like to eat _____ than _____. • Fewer students like to eat _____ than _____.
<p>Describe</p>	<p>Describe characteristics of something using the senses.</p> <ul style="list-style-type: none"> • This _____ is _____ (color, big, small, round, long, irregular, rough, smooth, hard, soft, sticky). • I hear _____. It is /They are _____. • I smell _____. It is/They are _____. • I see _____. It is/They are _____. • I touch _____. It is/They are _____. • I taste _____. It is/They are _____.
<p>Classify</p>	<p>Classify different foods into food groups.</p> <ul style="list-style-type: none"> • All of the foods in this group are _____ (big, small, round, etc.). • All of these foods are in the _____ group (color, size, shape, texture). <p>Ask and answer questions.</p> <ul style="list-style-type: none"> • Is it _____? • Yes, it is _____. • No, it is not _____.
<p>Match</p>	<p>Match body parts to senses.</p> <ul style="list-style-type: none"> • I use my _____ to see. I see _____. • I use my _____ to touch. I feel _____. • I use my _____ to smell. I smell _____. • I use my _____ to taste. I taste _____. • I use my _____ to hear. I hear _____.

SET 3: LESSON SUMMARIES

11	Kinesthetic Experience: Making Observations of Food	
<p>Daily Question: <i>How do we collect information about food using sight and touch?</i></p> <p>Content Target: I can make observations about food using my senses of sight and touch. I can classify foods into groups based on shared characteristics.</p> <p>Language Target: I can describe physical characteristics of food (in oral and written language). I can classify food by what I see and touch.</p> <p><i>This _____ is _____ (color, big, small, round, long, irregular, rough, smooth, hard, soft, sticky).</i></p> <p><i>All of the foods in this group are _____ (big, small, round, etc.).</i></p> <p><i>All of these foods are in the _____ group (color, size, shape, texture).</i></p>		
Summary		Materials
See sample lesson plan.		See sample lesson plan.

Teacher Notes:

SET 3: LESSON SUMMARIES

12	Oral Language Building: Observing Foods Using Our Senses of Sight and Touch	
<p>Daily Question: <i>How can we guess foods by listening to others' observations?</i></p> <p>Content Target: I can describe the properties of foods using my senses of sight and touch. I can classify foods by their properties.</p> <p>Language Target: I can classify foods by asking and answering questions about their properties.</p> <p><i>Is it _____?</i></p> <p><i>Yes, it is _____.</i></p> <p><i>No, it is not _____.</i></p>		
	Summary	Materials
	See sample lesson plan.	See sample lesson plan.

Teacher Notes:

SET 3: LESSON SUMMARIES

13	Reading Text: Understanding Our Senses	
<p>Daily Question: <i>How do our senses work?</i></p> <p>Content Target: I can identify the function of sense organs. I can explain why our senses are important.</p> <p>Language Target: I can match my observations to the correct body part and sense.</p> <p><i>I use my _____ to see. I see _____.</i></p> <p><i>I use my _____ to touch. I feel _____.</i></p> <p><i>I use my _____ to smell. I smell _____.</i></p> <p><i>I use my _____ to taste. I taste _____.</i></p> <p><i>I use my _____ to hear. I hear _____.</i></p>		
Summary		Materials
See sample lesson plan.		See sample lesson plan.

Teacher Notes:

SET 3: LESSON SUMMARIES

14	Writing: Observing a School Cafeteria	
<p>Daily Question: <i>How can I use my senses to make observations in the school cafeteria?</i></p> <p>Content Target: I can make observations using my five senses in the school cafeteria.</p> <p>Language Target: I can describe my observations using details.</p> <p><i>I hear _____ . It is /They are _____ .</i></p> <p><i>I smell _____ . It is/They are _____ .</i></p> <p><i>I see _____ . It is/They are _____ .</i></p> <p><i>I touch _____ . It is/They are _____ .</i></p> <p><i>I taste _____ . It is/They are _____ .</i></p> <p><i>This _____ is _____ (color, big, small, round, long, irregular, rough, smooth, hard, soft, sticky).</i></p>		
Summary	Materials	
See sample lesson plan.	See sample lesson plan.	

Teacher Notes:

SET 3: LESSON SUMMARIES

15	Reviewing/Assessing Skills: Mid-Unit Assessment	
<p>Daily Question: <i>How can I represent information the same information in a table, graph, and sentences?</i></p> <p>Content Target: I can construct a data table and bar graph using data from the poll of favorite breakfast meals of class. I can summarize this data. I can classify foods into food groups.</p> <p>Language Target: I can analyze and compare data from a bar graph.</p> <p><i>More students like to eat _____ than _____.</i></p> <p><i>Fewer students like to eat _____ than _____.</i></p> <p><i>My class likes to eat more _____ than _____.</i></p>		
Summary		Materials
See sample lesson plan.		See sample lesson plan.

Teacher Notes:

SET 4: CONTENT

GUIDING QUESTION	
<p><u>How do we observe and get information about foods? What can we learn about food using taste and smell?</u></p> <p>When we eat, we use our senses of taste and smell. Taste buds on our tongue help us identify foods. Smells work with taste to help us identify flavors of foods. Smells also connect to memories and emotions. They can remind us of stories and experiences of eating from our culture.</p>	
OVERVIEW	
DESCRIPTION	In Set 4, students will learn how to make observations of food using our senses of taste and smell. Students will learn how these senses work together to create flavors and how they connect to our cultural experiences with food.
RATIONALE	These lessons highlight the importance of multiple senses to know more detailed information about the world around us, including our food, and how these senses connect to our cultural experiences with food. Foods from different cultures have similar food items, but they differ in taste, smells, and flavors due to different ingredients and ways they are prepared.
GOALS	At the end of this set, students will be able to make inferences about foods using their observations of taste and smell. They will learn how and why senses work together, and why smells and tastes remind them of memories and experiences unique to their culture.
TEXTS & OTHER INPUT	
<p><u>Central: Whole-Class Text</u></p>	
<p><i>Facts About Flavors</i> (provided in materials)</p>	

SET 4: LANGUAGE

VOCABULARY	
Abstract Academic Concepts	Academic & Basic Terms
inference	<p>more words to describe observations using taste and smell (not including those from Set 3): section, flavor, ingredients</p> <p>other: like, dislike, connection/connect, remind/reminder</p>

FUNCTIONS	FORMS & FRAMES
Connect	<p>Connect a taste or smell to a food experience from my culture.</p> <ul style="list-style-type: none"> • This food smells _____. • This food tastes _____. • It reminds me of _____. • It makes me feel _____.
Classify	<p>Classify foods by taste and smell.</p> <ul style="list-style-type: none"> • These are all _____. • Those are all _____. • All of these foods are _____. • All of them taste _____.
Describe	<p>Describe foods' tastes and smells.</p> <ul style="list-style-type: none"> • _____ taste/tastes _____ (sweet, bitter, salty, sour). • _____ smell/smells _____ (pungent, strong, citrusy).
Explain	<p>Explain my opinion.</p> <ul style="list-style-type: none"> • I like the flavor of _____ because it smells _____. • I don't like the flavor of _____ because it does not smell _____.

SET 4: LESSON SUMMARIES

16	Kinesthetic Experience: Exploring Foods with Our Sense of Taste	
<p>Daily Question: <i>How do we describe food using our sense of taste?</i></p> <p>Content Target: I can describe foods using my sense of taste.</p> <p>Language Target: I can describe the tastes of food.</p> <p>_____ <i>taste/tastes</i> _____ (<i>sweet, bitter, salty, sour</i>).</p>		
Summary	Materials	
<ul style="list-style-type: none"> • Ask students: “How do you know how foods taste? Why do some people’s tastes differ?” The term taste bud may come up in the discussion. If not, try to elicit this concept from students and introduce this term. • Show students an image of taste buds on tongue. • Prepare the supplies for Taste Activity: In pairs, students explore certain foods by tasting it with their taste buds. • Then, students taste additional food samples in small containers to determine which taste category they fall under. • Students can use Food Adjectives Glossary to identify observations of taste if they need to. • Formative Assessment: Point to-show me: Ask pairs to point to areas of tongue that identify certain tastes. 	<p>Image of taste buds on tongue[^]</p> <p>Supplies for Taste Activity[^]: samples of different foods/solutions, cups of water, popsicle sticks http://www.nutrition411.com/content/taste-lesson-plan</p> <p>Additional food samples in small containers[^] (e.g., sugar, mint candy, honey, lemon wedge, pickle, plain yogurt, salted potato chip, parmesan cheese, unsweetened baker’s chocolate, decaf coffee, grapefruit rind)</p> <p>Food Adjectives Glossary</p>	

[^]Not provided in lesson materials.

Teacher Notes:

SET 4: LESSON SUMMARIES

17	Oral Language Building: Describing Foods Using Our Senses of Smell and Taste	
<p>Daily Question: <i>How do our senses of taste & smell work together?</i></p> <p>Content Target: I can describe foods using my sense of smell and taste.</p> <p>Language Target: I can describe the tastes of foods. I can classify foods by taste.</p> <p>_____ taste/tastes _____ (sweet, bitter, salty, sour).</p> <p>These are all _____.</p> <p>Those are all _____.</p> <p>All of these foods are _____.</p> <p>All of them taste _____.</p>		
Summary	Materials	
<ul style="list-style-type: none"> • Set out the samples of other foods to taste so students can perform a “taste test.” • Have students categorize the samples into taste categories (sweet, salty, bitter, sour) according to their observations. • Students then close their eyes or use blindfolds and plug their nose to see if they can identify the taste of different jelly beans in another taste test (see http://www.scientificamerican.com/article/bring-science-home-jelly-bean-taste-smell). • Ask students how plugging their nose changed their ability to taste. Point out that smell works with taste to help us identify the flavors of food. • Explain that our senses often work together to help us get a clearer understanding of our world, and in this case, our food. • Formative Assessment: Dry erase board huddle: groups identify the taste categories of the food samples. 	<p>Samples of other foods to taste^ (for ideas, see http://www.education.com/science-fair/article/taste-sweet-sour-salty-bitter/)</p> <p>Blindfolds^ (optional)</p> <p>Jelly Beans or other candies^</p>	

^Not provided in lesson materials.

Teacher Notes:

SET 4: LESSON SUMMARIES

18	Reading Text: Facts About Flavors	
<p>Daily Question: <i>What gives a food its flavor?</i></p> <p>Content Target: I can illustrate how our senses work together to identify the flavor of a food.</p> <p>Language Target: I can explain why I like or dislike certain flavors.</p> <p><i>I like the flavor of _____ because it smells _____.</i></p> <p><i>I don't like the flavor of _____ because it does not smell _____.</i></p>		
Summary		Materials
<ul style="list-style-type: none"> • Read aloud: <i>Facts About Flavors</i>. Review how the senses of smell and taste work together to identify the flavor of foods. • Students read text aloud. • Students define ways to describe smells. • Students draw arrows on a diagram of a mouth and nose to illustrate (using arrows) how taste and smell work together to create a flavor. They label “mouth” and “nose.” • Review the diagram with the class. • Have students identify a flavor they like and dislike and explain why using their sense of smell. • Formative Assessment: Have students complete today's language frames in their Science Journals. 		<p><i>Facts About Flavors</i></p> <p>Diagram of a mouth and nose[^] (see: http://www.catholic.org/news/health/story.php?id=60173)</p>

[^]Not provided in lesson materials.

Teacher Notes:

SET 4: LESSON SUMMARIES

19	Writing: Smell and Memory	
<p>Daily Question: <i>How do we describe the smell of different ingredients?</i></p> <p>Content Target: I can identify smells and connect them to a memory.</p> <p>Language Target: I can describe smells. I can connect a smell to a memory.</p> <p>_____ smell/smells _____ (<i>pungent, strong, citrusy</i>).</p> <p><i>This food smells</i> _____.</p> <p><i>It reminds me of</i> _____.</p> <p><i>It makes me feel</i> _____.</p>		
Summary	Materials	
<ul style="list-style-type: none"> • Bring in some samples of foods with different smells. Place each food in a small opaque container with holes punched in the top for the scent to escape. (Students should not be able to see what the foods are.) Place canisters that share the same smell category in stations around the room. Possible ideas for stations include: herbs, spices, fruits/citrus, floral, onion/garlic/scallions. • Students visit each station and describe the smells they encounter at each station. • Students complete Observation and Inference Chart, recording their observations of smell at each station, and inferring what the food is that they are smelling. Circulate and monitor while students are filling their observations and inferences. • Students think-pair-share a story or memory that is brought about by one of these smells. • Inform students that in the next class they need to bring in a food or a picture of a food from their culture. (Stress that they should bring in food items that will not rot and smell bad.) Suggested food items might be fruits, vegetables, spices, tea, coffee. 	<p>Samples of foods with different smells[^] (e.g., vinegar, cinnamon, cilantro, lemon, onion, coffee, peppermint, vanilla, lavender)</p> <p>>><u>Formative Assessment</u>: Observation and Inference Chart</p>	

[^]Not provided in lesson materials.

Teacher Notes:

SET 4: LESSON SUMMARIES

20	Reviewing/Assessing Skills: Sharing Stories About Food	
<p>Daily Question: <i>How does food help us understand our cultural traditions?</i></p> <p>Content Target: I can describe the connection between a smell and taste of a cultural food/meal.</p> <p>Language Target: I can describe smells. I can connect a smell to a food experience from my culture.</p> <p>_____ smell/smells _____ (<i>pungent, strong, citrusy</i>).</p> <p><i>This food smells</i> _____.</p> <p><i>It reminds me of</i> _____.</p> <p><i>It makes me feel</i> _____.</p>		
Summary	Materials	
<ul style="list-style-type: none"> • Students bring in a food (or a picture of a food) whose smell and taste remind them of an aspect of a food experience—a meal, kitchen, or food preparation process—from their culture. • <u>Formative Assessment:</u> Students share description of smell and taste with group, then share a memory or story influenced by this smell from their culture and how it makes them feel. 		

Teacher Notes:

SET 5: CONTENT

GUIDING QUESTION	
<u>How do we use tools to help us get more detailed observations of our food?</u>	
<p>Our senses are limited. In order to know more details about the world around us, we use tools to help enhance our senses. Such tools include hand lenses to magnify our sense of sight and scales to measure mass of foods. We can represent this data in tables and graphs, and can analyze it to know the nutrition of foods. This is important for staying healthy and it helps us choose healthier foods to eat.</p>	
OVERVIEW	
DESCRIPTION	<p>In Set 5, students will learn how tools serve a purpose of enhancing our senses in order to make more accurate observations. Tools that enhance our sense of sight include magnification tools, such as hand lenses and microscopes. Other tools help us measure quantities, such as scales. Students will learn how to measure amounts of food using a scale, and how to read and interpret nutrition labels in order to make healthier eating choices.</p>
RATIONALE	<p>The importance of these lessons is to introduce students to the fact that human senses are flawed and that the use of tools and technology can help us in learning about our world around us. Students most likely have experience using some sort of tools, either from past experiences in their culture or cooking food. These tools provide accurate information about an object with much more detail than if the senses were used in isolation.</p>
GOALS	<p>At the end of this lesson set, students will be able to use a magnifying tool (e.g., hand lens) and scales to make more detailed observations about foods and serving sizes. Students will be able to read nutrition labels of common breakfast foods and infer which are healthier based on the information in the labels.</p>

TEXTS & OTHER INPUT	
Central: Whole-Class Text	
<i>Figuring Out Food Labels</i> (provided in materials)	

SET 5: LANGUAGE

VOCABULARY	
Abstract Academic Concepts	Academic & Basic Terms
<p>tools</p> <p>nutrition</p>	<p>measurement: accurate, measure/measurement, gram (g), scale, magnify/magnification, hand lens/lenses, microscope, magnifying glass</p> <p>nutrition label: nutrition label, nutrients, serving(s)/serving size, calories, percent/percentage, daily value, fat, sodium, cholesterol, fiber, vitamin, protein, calcium, iron, sugar</p> <p>nutrition health: health/healthy, unhealthy, heart disease, obesity, cancer, high blood pressure, bones, bowels, risk, limited</p> <p>other: detail</p>

FUNCTIONS	FORMS & FRAMES
<p>Compare</p>	<p>Compare the details of observations.</p> <ul style="list-style-type: none"> • With my eyes, I see _____. • With a (hand lens, magnifying glass, microscope), I see _____. <p>Compare different foods according to mass.</p> <ul style="list-style-type: none"> • This _____ is _____ grams. • It has _____ (higher, lower) mass than the _____. • Its mass is _____ (greater than, less than) the _____ (citrus fruit type). <p>Compare the nutrition of breakfast beverages.</p> <ul style="list-style-type: none"> • _____ has _____ grams of _____. • _____ has _____ grams of _____. • _____ is healthier because it has (more/less) _____.
<p>Explain</p>	<p>Explain the importance of certain ingredients.</p> <ul style="list-style-type: none"> • _____, _____, and _____ should be limited. • Eating a lot of _____ (fat, salt) can increase risk of _____ (heart disease, obesity, cancer). • _____, _____, and _____ should not be limited. _____ should not be limited. • Eating a lot of _____ (fruits, vegetables) can decrease risk of _____ (heart disease, obesity, cancer).

Justify	Justify my breakfast choice. <ul style="list-style-type: none">• (Cereal choice) _____ with (milk choice) _____ is healthy because _____.
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SET 5: LESSON SUMMARIES

21

Kinesthetic Experience: Enhancing Our Sense of Sight Using Tools

Daily Question: *How does magnification help us see food in more detail?*

Content Target: I can make and compare observations of an object with and without the use of a magnification tool.

Language Target: I can compare the details of observations with and without the use of a magnification tool.

With my eyes, I see _____. With a (hand lens, magnifying glass, microscope), I see _____.

Summary	Materials
<ul style="list-style-type: none"> • Tell a story of going to the doctor when sick. What does the doctor do? He/she measures your temperature, uses a stethoscope to listen to your heartbeat. Why? It's not enough for doctors to use their hands to touch, or eyes to see, or ears to hear. They need tools to understand more accurately what is happening inside your body. • Same Fruit Study: Distribute the pieces of fruit. Students draw and describe the fruit using their senses, concentrating on sight in their Science Journals. • Catch and release: Share observations of fruit and write them on board. Ask: "Would you be able to identify your fruit if we put them in one bowl?" Elicit: We need to use tools in science and in everyday life because our senses, including sight, are limited. • Ask for examples of tools we use to enhance our sense of sight (e.g., glasses, magnifying glass, microscope, binoculars, telescope). It may be helpful to compare the concept of magnification to zooming in with a camera: you see less of an object, but the part you do see is more detailed. • Students draw and describe same fruit with a magnification tool and identify the role of these tools in their Science Journals. • Formative Assessment: Point to-show me: Students show the differences between observations made with and without a magnification tool. 	<p>One piece of fruit for each student[^] (e.g., clementine) (<i>Note: All fruits should be the same. They should be as close to uniform in appearance as possible.</i>)</p> <p>Magnification tools[^] (e.g., microscope, magnifying lens) (see http://www.hometrainingtools.com/magnifier-double-lens-5x-10x)</p>

[^]Not provided in lesson materials.

Teacher Notes:

SET 5: LESSON SUMMARIES

22	Oral Language Building: Measuring Mass of Food	
<p>Daily Question: <i>How do scales help us make more detailed observations of food?</i></p> <p>Content Target: I can measure the mass of foods and order them according to mass.</p> <p>Language Target: I can compare different foods according to mass.</p> <p><i>This _____ is _____ grams. It has _____ (higher, lower) mass than the _____. Its mass is _____ (greater than, less than) the _____ (citrus fruit type).</i></p>		
Summary	Materials	
<ul style="list-style-type: none"> • Show students some samples of whole citrus fruits. Ask: “Can you arrange these from largest to smallest? How?” • Then, ask if they can order three clementines from yesterday’s activity from largest to smallest? Why or why not? (These fruits were all the same size.) • Explain that today they will be using scales to measure mass. By knowing exactly how many grams each student’s clementine is, they can identify their fruit out of the fruit bowl. • Also point out the importance of labeling the values with the correct units of measurement. Explain that if there is no unit next to the value, someone may interpret it as something else (e.g., cm, lbs, km) instead of grams. • Model how we use an electronic scale to measure mass. Introduce grams and the concept of a uniformed unit of measurement. Review the importance for accuracy. Point out the need to zero out the scale before measuring an item. • Working in groups, students practice measuring mass of the citrus fruits and order them according to mass. • Formative Assessment: Circulate and monitor to ensure that every student: gets a chance to measure a food item on the scale; zeroes out the scale before starting; records the correct mass in grams and includes the abbreviation of grams (g) next to their number; and can compare the mass of two objects. • Students share the object they measured in pairs using the language frames provided. 	<p>Samples of whole citrus fruits (clementines, oranges, grapefruits)[^] (<i>Note: fruits should have visible difference in size.</i>)</p> <p>Electronic scale (metric)[^] (see examples: http://www.amazon.com/DecoBros-Multifunction-Capacity-Stainless-Platform/dp/B00MN0NI90/ref=lp_289787_1_14?s=kitchen&ie=UTF8&qid=1456949357&sr=1-14, http://www.amazon.com/Etekciti-Digital-Kitchen-Stainless-Resolution/dp/B00QFCG5ZQ/ref=lp_289787_1_22?s=kitchen&ie=UTF8&qid=1456949357&sr=1-22)</p>	

[^]Not provided in lesson materials.

Teacher Notes:

SET 5: LESSON SUMMARIES

23	Reading: The Importance of Measuring Foods for Nutrition	
<p>Daily Question: <i>How are measurements used on nutrition labels?</i></p> <p>Content Target: I can read the measurements on nutrition labels of foods. I can understand their importance.</p> <p>Language Target: I can explain the importance of ingredients.</p> <p><i>Ingredients of foods that should be limited are _____, _____, and _____.</i></p> <p><i>Eating a lot of these ingredients can increase risk of _____.</i></p> <p><i>Ingredients of foods that should not be limited are _____, _____, and _____.</i></p> <p><i>Eating a lot of these ingredients can decrease risk of _____.</i></p>		
Summary	Materials	
<ul style="list-style-type: none"> • Class reads Figuring Out Food Labels about importance of measuring and interpreting the nutritional values of foods. • Review that scales are tools that help us accurately measure the mass of food and serving sizes. Explain that this information helps us make healthy choices about our food, which can prevent food-related diseases and weight gain. • Use the text to help you explain nutrition labels of foods in detail to the class. Discuss the information that the labels contain, including recommended servings size and amounts of components in the food (both in grams and in percentages). <ul style="list-style-type: none"> ○ You may want to introduce the concept of percent/percentages in order to explain that the Daily Value is the percent of the suggested healthy amount of that item that should be consumed. • Have students create a T-chart in their Science Journals of ingredients of food that should be limited, and those that should not be limited. • Formative Assessment: Dry erase board huddle: Ask students to name one item on nutrition labels that should be limited, and one item that should not be limited. Use the language frames to discuss why or why not. 	<p><i>Figuring Out Food Labels</i></p>	

^Not provided in lesson materials.

Teacher Notes:

SET 5: LESSON SUMMARIES

24	Writing: How Do I Interpret Nutrition Labels of Foods?	
<p>Daily Question: <i>How do I interpret nutrition labels of breakfast beverages?</i></p> <p>Content Target: I can interpret and compare nutrition labels of various breakfast beverages to determine which is healthier to drink.</p> <p>Language Target: I can compare the nutrition of beverages.</p> <p>_____ has _____ grams of _____. _____ has _____ grams of _____. _____ is healthier because it has (more/less) _____.</p>		
Summary	Materials	
<p><i>(Note: You will have to do a little bit of research on which beverages include both millimeters and grams. This is important because we have introduced grams with scales. However, there is possibility for extension here if you want to also introduce volume and graduated cylinders.)</i></p> <ul style="list-style-type: none"> • Lead a catch and release using the Nutrition Label Scavenger Hunt Slides with one breakfast beverage. • Students follow along with a Copy of the Nutrition Label. • Students read and interpret nutrition labels of breakfast beverages and compare using the Nutrition Label Comparison Worksheet. • Students complete a scavenger hunt of measurements found on nutrition labels. They compare nutritional values of two similar beverages to decide which is a healthier drink option and why, and then complete the language targets in their Science Journals. • Extension: Calculate grams and daily value of items on nutritional label (e.g., fat, protein, vitamins) for a double serving of beverage. • Formative Assessment: Using the exit ticket protocol, have students complete the language frames in their Science Journals. Collect the Science Journals at the end of class. 		
	<p>Nutrition Label Scavenger Hunt Slides</p> <p>Copy of Nutrition Label for Scavenger Hunt (one for each student)</p> <p>Nutrition labels of breakfast beverages[^]</p> <p>Nutrition Label Comparison Worksheet</p> <p>Calculator[^] (for extension activity only)</p>	

[^]Not provided in lesson materials.

Teacher Notes:

SET 5: LESSON SUMMARIES

25	Reviewing/Assessing Skills: Evaluating Nutrition Labels of Foods	
<p>Daily Question: <i>How do I evaluate the nutrition of foods to choose a healthier option?</i></p> <p>Content Target: I can compare and evaluate the nutrition of a serving size of different breakfast cereals and milks to determine the healthier combination to eat for breakfast.</p> <p>Language Target: I can justify my breakfast choice.</p> <p>(Cereal choice) _____ with (milk choice) _____ is healthier because _____.</p>		
Summary	Materials	
<ul style="list-style-type: none"> • Students measure the recommended serving size of three different breakfast cereals using a scale and clear plastic bowls/cups. <ul style="list-style-type: none"> ◦ Draw attention to the size of a recommended serving size. Ask students if they actually eat only this amount during one serving, or if they tend to eat more than this. Then ask: "How does this change the nutritional values of the food you consume?" Challenge students to think about and answer this question. Elicit that changing the serving size changes the amounts of calories, fat, protein, sugars, sodium, etc. in each serving, which has an impact on nutrition and health. • Students read and interpret the nutritional labels of each cereal and to compare their nutritional facts. • Students read and compare nutritional facts of three types of milk to use with cereal (e.g., skim, whole, 2%, soy milk). • Students determine the healthiest combination of cereal and milk that they should eat for breakfast. Use the language frames to justify their reason why. (Encourage students use guidelines from text and knowledge about food groups from Set 2 to justify their answers.) • <u>Extension:</u> Students graph the sugar content found in a serving size of each cereal in the form of a bar graph using the Daily Breakfast Food Bar Graph. • <u>Formative Assessment:</u> Dry erase board huddle: Ask groups for their healthiest breakfast choice. Students write answers on board and share their reasoning. 	<p>Three different breakfast cereals with nutrition labels^</p> <p>Scales^</p> <p>Clear plastic bowls/cups^</p> <p>Three types of milk^</p> <p>Daily Breakfast Food Bar Graph (provided in Set 2, Lesson 9)</p>	

^Not provided in lesson materials.

Teacher Notes:

SET 6: CONTENT

GUIDING QUESTION	
<p><u>How do I describe my breakfast experience in my home?</u></p> <p>Food connects us to our culture and memories. Observing and sharing about our foods builds community in our class. People eat different foods across the world, but all from the same food groups</p>	
OVERVIEW	
DESCRIPTION	<p>During Set 6, students will discuss their own special occasion breakfast, identify the foods and food groups typically eaten, describe how and with whom this meal is eaten, and explain how this meal makes them feel. Each day's activity is part of the Performance Task that will eventually go into the class's book, <i>What the Class Eats for Breakfast</i>, and will be shared and presented in a gallery walk during Lesson 30. <i>(Note: Students will use what they have learned and experienced in the class to re-answer the essential questions of the unit in a Final Assessment in Lesson 31. These responses will be compared to their Beginning Assessment to evaluate growth.)</i></p>
RATIONALE	<p>Students will build on prior knowledge and skills learned in this unit, and apply them to a new context that is authentic and connects personally to the student—a special breakfast from their own culture. <i>(Note: Review the Performance Task Description and Rubric, Model Label and Graph, Model Narrative, Model Drawing, Student Checklist, and Student Rubric in advance of Set 6.)</i></p>
GOALS	<p>By the end of the set, students will be able to draw and label their special occasion breakfast; identify food groups of foods from their breakfast; graph the number of food groups represented in their breakfast; describe their breakfast using observations made from the senses and nutrition labels; describe how their breakfast is eaten; and explain its importance to themselves and to their culture.</p>

SET 6: LANGUAGE

VOCABULARY	
Abstract Academic Concepts	Academic & Basic Terms
	<p>how I feel when I'm eating breakfast: happy, full, satisfied*, welcomed, sad, hungry</p> <p>places where we eat breakfast: table, kitchen, dining room, outside</p> <p>how we eat breakfast: together, alone, with family, with friends, when I wake up</p> <p>who makes breakfast: mother, father, sister, brother, grandmother, grandfather, aunt, uncle, cousins</p> <p>more words about measurement: centimeter*, length*, width*</p> <p>culture: culture*, importance*, significance*, religion*, tradition*</p>

FUNCTIONS	FORMS & FRAMES
Identify	<p>Identify the foods I eat for my special occasion breakfast.</p> <ul style="list-style-type: none"> • I eat _____, _____, and _____ for breakfast. • I drink _____ for breakfast.
Describe	<p>Describe characteristics of my breakfast foods.</p> <ul style="list-style-type: none"> • The _____ (strawberries) is/are _____, _____, and _____ (red, juicy, sweet). <p>Describe how and when I eat this breakfast.</p> <ul style="list-style-type: none"> • I eat _____ on _____ (holidays, weekends, other). • I drink _____ on _____ (holidays, weekends, other). • I eat this breakfast with _____. • I eat this breakfast when _____. • _____ make(s) this breakfast. • I eat breakfast in _____.
Explain	<p>Explain the importance of this special occasion breakfast.</p> <ul style="list-style-type: none"> • Breakfast is important to me because _____. • Breakfast is important to my family because _____. • Breakfast is important to my culture because _____.

	<p>Explain how my breakfast experience makes me feel.</p> <ul style="list-style-type: none"> Eating this breakfast makes me feel _____ because _____.
<p>Summarize</p>	<p>Summarize data represented in the bar graph.</p> <ul style="list-style-type: none"> I eat more _____ than _____. I eat fewer/less _____ than _____.
<p>Ask and answer questions</p>	<p>Ask and answer questions about Unit 1.</p> <ul style="list-style-type: none"> Food is important because _____. We learn about food by using our _____. Another question I have about food is _____?

SET 6: LESSON SUMMARIES

26	Kinesthetic Experience: Introduction to Performance Task	
<p>Daily Question: <i>How do I identify and model the foods I eat for my special occasion breakfast?</i></p> <p>Content Target: I can draw a model of my special occasion breakfast. I can label the foods in it.</p> <p>Language Target: I can identify the foods I eat for my special occasion breakfast.</p> <p><i>I eat _____, _____, and _____ for breakfast.</i></p> <p><i>I drink _____ for breakfast.</i></p>		
Summary		Materials
<p><i>Note: Make sure to have one copy of the Performance Task Student Checklist and the Performance Task Student Rubric for each student.</i></p> <ul style="list-style-type: none"> Remind students of the work they did describing their special breakfasts in Set 1. (Students should still have the drafts they made in Set 1, Lesson 2.) Explain the Performance Task to students. Show them the models of the Narrative, Label and Graph, and Drawing. Distribute and go over the Performance Task Student Checklist and the Performance Task Student Rubric with students. Using the drawing paper, colored pencils, and rulers, students draw and label the foods and drinks used in their special occasion breakfast again. (This should be a new drawing, based on their draft version from Set 1.) Make sure that they leave some space in one corner where they will add their data tables (in the next lesson). Using the language frames, students write sentences onto paper that will be submitted as their part of the Performance Task. 		<p>Drawing paper[^]</p> <p>Colored pencils[^]</p> <p>Rulers[^]</p>

[^]Not provided in lesson materials.

Teacher Notes:

SET 6: LESSON SUMMARIES

<div style="display: flex; align-items: center; padding: 5px;"> <div style="background-color: black; color: white; padding: 5px 10px; font-weight: bold; font-size: 1.2em; margin-right: 10px;">27</div> <div style="padding: 5px 10px;">Oral Language Building: Performance Task: Breakfast Food Groups</div> </div>	
<p>Daily Question: <i>How do I classify the foods in my breakfast according to food groups?</i></p> <p>Content Target: I can classify and label the foods and ingredients used in my breakfast into food groups. I can record this in a data table and as a bar graph.</p> <p>Language Target: I can summarize data represented in the bar graph.</p> <p><i>I eat more _____ than _____. I eat fewer _____ than _____.</i></p>	
Summary	Materials
<ul style="list-style-type: none"> Students classify the main foods and drinks from their special occasion breakfast into food groups. Students label these food groups on their special occasion breakfast drawings from Lesson 26. Formative Assessment: Students create a data table (using the Daily Breakfast Food Data Table) of the food groups and the number of food items from the breakfast that fall in each food group category. Have them draw the data table directly onto their drawings. They then use this data and rulers to create a bar graph (on a separate piece of paper) as a visual representation of these values. (See the Performance Task Model Drawing and Model Label and Graph as an example.) Using the language frames, students write one summary sentence, interpreting the data from their bar graph. Make sure they are writing on the same page where they wrote their sentences yesterday. Emphasize that their sentences today are a continuation of the sentences they wrote yesterday. Remind students to bring in a nutrition label from one food in their special occasion breakfast for the next class. 	<p>>>Formative Assessment: Daily Breakfast Food Data Table (provided in Set 2, Lesson 9), paper[^], rulers[^]</p>

[^]Not provided in lesson materials.

Teacher Notes:

SET 6: LESSON SUMMARIES

28	Reading Text: Performance Task: Physical Descriptions of Food	
<p>Daily Question: <i>How do I describe in the greatest detail the characteristics of this breakfast from my culture?</i></p> <p>Content Target: I can describe my breakfast foods in great detail using my senses. I can describe the nutrition on one breakfast food. I can identify amounts that are low, normal, and high according to recommendations.</p> <p>Language Target: I can describe the characteristics of my breakfast foods. <i>The _____ (strawberries) is/are _____, _____, and _____ (red, juicy, sweet).</i></p>		
Summary	Materials	
<ul style="list-style-type: none"> • Have students describe the characteristics (properties) of a food in their special occasion breakfast using 3-5 senses. Students write these sentences onto paper that will be submitted as their part of the Performance Task. Make sure they are writing on the same page where they wrote their sentences yesterday. • Have students paste the nutrition labels they brought in onto the same paper as their bar graphs. • Students circle nutritional values that are low, draw a square around nutritional values that are high, and leave blank nutritional values that are within recommendations. 	Paper^	

^Not provided in lesson materials.

Teacher Notes:

SET 6: LESSON SUMMARIES

29	Writing: Performance Task: Cultural Significance of Breakfast Foods	
<p>Daily Question: <i>Why is this meal important to me, my family, and my culture?</i></p> <p>Content Target: I can describe the cultural context of my breakfast meal. I can explain why it is important.</p> <p>Language Target: I can describe how and when I eat this breakfast meal. I can explain why it is important.</p> <p><i>I eat _____ on _____ (holidays, weekends, other). I drink _____ on _____ (holidays, weekends, other).</i></p> <p><i>I eat this breakfast with _____. I eat this breakfast when _____. _____ make(s) this breakfast.</i></p> <p><i>I eat breakfast in _____.</i></p> <p><i>Breakfast is important to me because _____. Breakfast is important to my family because _____. Breakfast is important to my culture because _____.</i></p>		
Summary	Materials	
<ul style="list-style-type: none"> Using the language frames, students explain how breakfast is eaten and explain its cultural importance. Students write these sentences on paper that will be submitted as their part of their performance based assessment. 	Paper^	

^Not provided in lesson materials.

Teacher Notes:

SET 6: LESSON SUMMARIES

30	Reviewing/Assessing Skills: Sharing Final Performance Task	
<p>Daily Question: <i>How do I share my breakfast experience with others? How does this help people have a better understanding of my culture?</i></p> <p>Content Target: I can communicate and share my breakfast experience orally and in text with others.</p> <p>Language Target: I can explain how my breakfast experience makes me feel.</p> <p><i>Eating this breakfast makes me feel _____ because _____.</i></p>		
Summary	Materials	
<p><i>(Note: In advance of this lesson, use the Performance Task Student Checklist and Performance Task Student Rubric to make sure that all students have completed all parts of the Performance Task.)</i></p> <ul style="list-style-type: none"> • Formative Assessment: Gallery walk: Students share out their special occasion breakfast with the whole class, presenting the drawings and narratives created in Lessons 26-29. These pages will become the first draft of their chapter in their class book, <i>What Does Our Class Eat for Breakfast?</i> • Optional: Create a student-friendly presentation rubric to accompany students' presentations, which classmates can give feedback on. 		

Teacher Notes:

SET 6: LESSON SUMMARIES

31	Reviewing/Assessing Skills: End of Unit Wrap-Up	
<p>Daily Question: <i>What did I learn from Unit 1?</i></p> <p>Content Target: I can communicate what I learned in Unit 1.</p> <p>Language Target: I can ask and answer questions about Unit 1.</p> <p><i>Food is important because _____.</i></p> <p><i>We learn about food by using our _____.</i></p> <p><i>Another question I have about food is _____?</i></p>		
Summary	Materials	
<ul style="list-style-type: none"> • Final Assessment: Answer the EQs. Students revisit the essential questions of Unit 1 and answer them in their Science Journals. • Lead a class discussion of students responses to essential questions. Questions to include are: <ul style="list-style-type: none"> ○ What did you learn about food from this unit? ○ What did we learn about our cultures through food? ○ How might this influence your breakfast choices? ○ Are there any further questions you would like answered about food? • Formative Assessment: Using the exit ticket protocol, students write a question they have about food and share it with the class. 		

Teacher Notes: