

# Science









## Unit 1

### *Food*

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

## ***Sample Lesson Plans***

## Sample Lesson Plan Icons

	Teacher Alert (Watch Out!)
	Language Action Point
	FYI About Students
	Interdisciplinary
	Differentiate – Extend
	Differentiate – Amplify
	Formative Assessment
	Technology

## Food

### Lesson 11: Kinesthetic Experience: Making Observations of Food

*This is the first lesson in Set 3, which provides a hands-on experience to launch the week's content. The purpose of this lesson is to explore, describe, and sort foods using our sense of sight. This lesson also contains many Tier 1 vocabulary words (descriptive adjectives) that are useful for describing the characteristics of foods that we can see or touch. They will practice using this vocabulary to identify and describe familiar and unfamiliar foods. Students will also understand the importance of making observations in science, which is how we learn more about the world around us, including food.*

<b>ESSENTIAL QUESTION(S)</b>	What is food and why is it important? How do we study food in Science?
<b>GUIDING QUESTION</b>	How do we observe and get information about foods? What can we learn about food using sight and touch?

<b>DAILY QUESTION</b>	How do we collect information about food using sight and touch?
<b>CONTENT TARGETS</b>	I can make observations about food using my senses of sight and touch. I can classify foods into groups based on shared characteristics.
<b>LANGUAGE TARGETS</b>	I can describe physical characteristics of food (in oral and written language). I can classify food by what I see and touch.  <b>Describe:</b> This _____ is _____ (color, big, small, round, long, irregular, rough, smooth, hard, soft, sticky).  <b>Classify:</b> All of the foods in this group are _____ (big, small, round, etc.). All of these foods are in the _____ (color, size, shape, texture) group.
<b>VOCABULARY</b>	<b>abstract academic concepts:</b> senses, observations/observe, characteristics* (properties)  <b>body parts:</b> eyes, skin, hands  <b>observations using sight:</b> sight, vision, visible*, color, red, yellow, orange, green, blue, purple, pink, black, white, brown, gray, multi-colored, size, small, tiny, big, shape, round, oval, square, rectangle, triangle, long, wide, irregular  <b>observations using touch:</b> touch, feel, texture, rough, smooth, hard, soft, sticky, dry, bumpy, pointy/sharp  <b>other:</b> information, knowledge, classify

<b>MATERIALS</b>	3-5 foods from each food group^ (from Set 2, Lesson 6) Food Cards (provided in Set 2, Lesson 6) Observation Organizers Exit Ticket
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*^Not provided in lesson materials.*

## GENERAL NOTES

In this lesson, students explore and observe samples of breakfast foods (common and from students' cultures) using their Exploration Kits (see the Teacher's Guide for more information on these). The emphasis is on using the senses of sight and touch to make observations about foods, in the same way scientists and people who study science make observations to get information about our world.



Sorting is a critical skill that is embedded in all Bridges content classes. Students work all year across classes to group examples and justify their groups.

Students will use the **Observation Organizer** to record their observations of the foods. They will sort these foods according to shared characteristics, and finally, classify foods into food groups.



Sorting requires classifying, an abstract thinking skill that is new for many LL SIFE. It requires moving from specific examples to general categories, and identify patterns. This is foundational to critical thinking.

## OPENING

### WARM-UP:

- Review that foods in each group have similar **characteristics**, or things in common. Some properties we can see and **touch**, others we cannot. These visible and tangible properties help us identify what kind of food it is and what group it belongs to.
- Begin by showing students two foods from the sampling of **3-5 foods** you brought in, and asking them to identify the foods and notice what is similar. For example, a lemon and a banana are both fruits. They both belong to the fruit group. Elicit other **observations** from students.
  - Listen for: *That is a lemon/banana; they are healthy/good for you; they are in the fruits food group; they have vitamins; etc.*



You have not yet taught the language of detailed observation (color, size, shape, texture) because the goal in this Warm-Up is for students to make observations using any language. Encourage students to write observations in English or home language. Ask questions to elicit more responses if they are struggling.

### CONNECT:

- From the sampling of **3-5 foods** you brought in, choose another food, but this time one that students are unfamiliar with. Ask: "What is it?" (Students should be unlikely to know what it is.) Ask: "What do you notice?" Pass the food around for students to look at closely and **touch**.



It is important to elicit observations about an object or food, even though it may be unfamiliar to students. People who study science (scientists) gather knowledge about the world—about familiar and unfamiliar things—through observations.



Gesture to your eyes to support making visual observations, and to your hands, to support tangible observations. Use additional language around **sight** and **touch**. For example: "Sight is about seeing, using our eyes to see. We use our hands to touch/feel."

- Explain that today students will learn new words and strategies to make more detailed **observations** about foods using their **senses** of **sight** and **touch**. They will use their **observations** to build detailed descriptions of the **characteristics** of familiar and unfamiliar foods.
- Draw attention to targets.

## WORK TIME

### PREPARE:

- Distribute Exploration Kits and the **3-5 foods from each food group** to each group of students. Students interact with the foods using tools from their Exploration Kits and discuss what they know about them and practice **classifying** them into food groups.
- Record student **observations** on board (This can be student sentences, words concept map, notes—however you think students will begin to grasp new vocabulary best).



Require students to orally describe the foods before writing sentences.

### INTERACT:

#### *Class Share Out*

- **Model** exploring a food. Choose another one that may be unfamiliar to students. Say: “Watch me as I explore this \_\_\_\_\_. Hmm, when I look at this I see ...” Continue with thinking aloud.
- **Model** recording **information** in the **Observation Organizer**. Say: “Now complete one section of the **Observation Organizer** with a drawing and observations.”
- **Think-pair-share**: In partners, students choose one food from their samples and describe what they see. Students write **observations** on the chart in the **Observation Organizer**. Ask each partner to share their **observations** about their food.
- Write observations on a chart on the board, strategically. Students will share in random order, but you will need to group their responses based on the categories you want them to notice. Do not name these yet, simply organize their responses into columns (e.g., all adjectives of **color** in one column, **size** in another, **shape** in another). Make sure to show students the foods that match the **observations** being shared and point to those **properties** that were described. For example, say: “This apple is **red**,” and point to the apple while repeating the word **red**.”



Circulate and monitor while students are observing and sorting foods to determine if students are able to sort food samples into groups based on similarities and are able to identify these properties.



In teaching, we often work with either *closed sorts* (where teacher provides category) and *open sorts* (where students have to group items, then name category). *Open sorts* are more cognitively demanding.

- Have students repeat their **observations** using language frames.
- Distribute the **Food Cards** to each group. (These cards will be used throughout the unit as reference texts for students.)

- Draw student attention to each column on your chart. Read down and use the **what do you notice?** protocol.
- Elicit similarities/patterns from students involving various physical properties, including **color, size, texture, and shape**.
- When there is a lot of **information** on the chart, ask students what they notice about each group and give each group a name (e.g., **color**).
- Say: “In science, we call these **properties**. **Color** is a **property**, **size** is a **property**.”



Whenever possible, anticipate student responses and organize them into categories that you have not yet named. Then use the **what do you notice?** protocol to elicit the category name from the examples. Generalizing from specific examples to a larger category is a critical academic thinking skill we want to weave into lessons as often as possible.

### Group Observations

- Release students to groups and finish recording observations of the remaining **food samples** using the **Observation Organizer**.
- Fill in language frames:
  - *This \_\_\_\_\_ is \_\_\_\_\_ (color, big, small, round, long, irregular, rough, smooth, hard, soft, sticky).*

### Group Sorting and Classifying

- **Model** sorting the food samples into groups using similar properties, including thinking aloud while you are **observing** foods. For example: “I have a banana. A banana is **yellow**. I have a lemon. It is **yellow**, too. This squash is also **yellow**. I’ll put these into one group.”
- Release students to do the same with their food samples. Students fill in language frames to justify their classification in their Science Journals.
  - *All of the foods in this group are \_\_\_\_\_ (yellow, round, sticky, small). They are the same \_\_\_\_\_ (color, shape, texture, size).*
  - *All of these foods are in the \_\_\_\_\_ (fruit and vegetable) groups.*
- Students share how they sorted their foods and the property they used, and what food group they classified the foods as, if applicable. Not all foods in the same group may be from the same food group, and this is OK.



Do not limit observations to these three sentence frames. Students should be encouraged to make additional visual observations using language they have. This way the frames are a support, but we are not limiting student language use to these only.



Build abstract concepts before naming them. Teach **color, size, shape, etc.**, and examples within each, then attach the label “Property.” Continue to use the concept word in teaching, “Which property ...?”

### EXTEND:

- Ask students if there are any other ways to sort or **classify** foods. Give groups five minutes to group foods a different way, then to share out why they grouped them this way.

## CLOSING

### REVIEW TARGETS:

- Draw student attention to targets.

- Invite students to show with the **thumb-o-meter** whether they met the lesson targets.
- Offer specific praise and suggestions to improve.

**ASSESS:**

- Have students complete the **Exit Ticket**.
- Remind students to use the **Observation Organizer, Food Cards**, and Science Journals as a resource.



Record the types of observations (both categories and adjectives) that are commonly used with the sense of sight and touch that was discussed in class. This becomes part of a Word Wall and should be made visible to students as they continue in Unit 1. (See example: <https://washamscience.edublogs.org/files/2015/11/Properties-poster-r35eft.jpg>)



## Food

### Lesson 12: Oral Language Building: Observing Foods Using Our Senses of Sight and Touch

The purpose of this lesson is to play games to practice making observations using sight and touch (color, size, shape, texture) and using oral language to describe them. Games allow students to practice the large amount of Tier 1 vocabulary introduced in yesterday's lesson, while continuing to develop science observation skills.

<b>ESSENTIAL QUESTION(S)</b>	What is food and why is it important? How do we study food in Science?
<b>GUIDING QUESTION</b>	How do we observe and get information about foods? What can we learn about food using sight and touch?

<b>DAILY QUESTION</b>	How can we guess foods by listening to others' observations?
<b>CONTENT TARGETS</b>	I can describe the properties of foods using my senses of sight and touch. I can classify foods by their properties.
<b>LANGUAGE TARGETS</b>	I can classify foods by asking and answering questions about their properties. <b>Classify:</b> <i>Is it _____? Yes, it is _____. No, it is not _____.</i>
<b>VOCABULARY<sup>1</sup></b>	<b>observations using sight:</b> light, dark  <b>observations using touch:</b> fuzzy  <b>other:</b> guess, game
<b>MATERIALS</b>	A box of food samples <sup>^</sup> (these can be actual foods, plastic food, or images of foods that students can sort) Word Wall <sup>^</sup> (created during class in Set 3, Lesson 11) Brown lunch bags <sup>^</sup> Food Observation Bingo Card Food Observation Bingo Word Bank

<sup>^</sup>Not provided in lesson materials.

<sup>1</sup> The purpose of this lesson is to reinforce the learning of the vocabulary from the day before, describing color, size, shape, and texture of food. New vocabulary for this day will vary depending on food samples/photos used in the activity and student responses.

## GENERAL NOTES

In this lesson, students will continue practicing their oral observations of foods. They will use the many descriptive adjectives (learned today and in Lesson 11) in multiple oral contexts. They will make observations and sort foods based on these observations; discuss their reasons for their classifications; listen to descriptive adjectives in a bingo game; and ask and answer questions using vocabulary words during another game, 5 Questions.

## OPENING

### WARM-UP:

- Distribute the **food samples** and direct student groups to sort samples based on observed properties.
- Reference the **Word Wall** when students give explanations. Connect their sorting to the vocabulary learned in the previous lesson.
- Challenge students to sort as many ways as they can. Students might sort by color, shape, etc.
- Ask students to explain how they sorted **food samples**, using the categories and adjectives learned from the day before.



Ask students if they can sort foods using different properties than the ones practiced in yesterday's lesson.

### CONNECT:

- Elicit from students what they did yesterday. Highlight the words **observe**, **sort**, and **properties** in your recap.
- Explain that today students will continue to practice making oral observations through listening and speaking activities.
- Let students know that they will play a few **games** that require them to speak accurately and listen carefully.
- Draw attention to targets.



Students love bingo! This game is a simple and fun way to support receptive skills: listening and reading while reviewing content. See bingo protocol for more variations of the game.

## WORK TIME

### PREPARE:

#### *Food Observations Bingo*

- Tell students that the goal of the first **game** you will play today—*Food Observations Bingo*—is simply to practice vocabulary from yesterday's lesson.
- **Model** one or two rounds of bingo using your own bingo card: Read a vocabulary word aloud from the **Food Observation Bingo Word Bank**, then circle that word on your bingo card.
- Distribute **Food Observation Bingo Cards** to each student. (*Note: There are three versions of these cards. Make sure that the different versions are distributed evenly among your students.*)
- **Read aloud** the vocabulary from the **Food Observation Bingo Word Bank**.



Some students will be familiar with bingo and some will not. Position students as experts. Ask them explain the game to others at their table. Then, review as a class.

- Students circle the word they hear. Make sure to give them enough time to find each word and then circle it.



Make sure to always model the activity before distributing the materials. Students will get too distracted if they already have the materials in hand while you model.

## INTERACT:

### Teacher Model: Asking Yes/No Questions

- Explain that understanding what we hear and being able to say what we want are critical for communicating in every language. Point out that today's second **game** is to practice listening and speaking, using observations we made yesterday.
- **Model** how to identify foods based on observation, using *yes/no* questions and the vocabulary from the **Word Wall** and the completed **Food Observation Bingo Cards**.
  - Pick a **food sample** from the box and ask and answer some *yes/no* questions that would help to identify it: *Is it round? No, it is not round. Yes, it is round.*
- Invite a student to ask another *yes/no* question about the chosen food.
- Stress that students can look at the **Word Wall** and the **Food Observation Bingo Cards** for help for words to fill in these language frames.
- The class then responds with an accurate *yes/no* response.



Do not spend time on grammar details when teaching *yes/no* question formation. Simply ask students, "What do you notice?" Elicit your voice rising with questions/falling with statements. Explain that we use "Is it ...?" with questions.

### Teacher Model: 5 Questions

- Introduce the second **game**: 5 Questions.
- Pick one student to act as a volunteer, and have him/her choose one **food sample** from the box.
- Ask the volunteer to observe the **food sample** carefully. Stress to the whole class that they must observe the properties of the food using their senses of sight and touch, and that these observations will influence the answers to the questions from their classmates.
- Ask *yes/no* questions to identify the food (e.g., Is it yellow? Is it round? It is tiny?). Encourage the student volunteer to respond using complete sentences (e.g., No, it isn't yellow). Explain that in the "real" **game**, the other students will ask one question each.
- After asking five questions, identify the food if you are able. Ask: "Is it a ...?" Ask this question a few times, until you get the answer right or are out of answers.
- The student volunteer will reveal the food after a few tries. Elicit: "It's a ..."
- Clear up any confusions or questions before you begin the **game**.

### Play 5 Questions

- Separate class into groups of 3-4 students.
- Explain that all students will take turns to identify one food from the box.
- Have all students each take one **food sample** from the box, keeping it hidden from the other students in their group. (You may want to provide cloth bags or

envelopes—depending on whether your **food samples** are plastic foods or printed images—so that students can easily keep their chosen **food sample** out of sight.)

- Select one student from each group to go first. Inform class that the person who is answering the questions should keep track of how many questions are being asked.
- Remind class that the student who chose the food must answer each question in a complete sentence (not only *yes/no*):
  - *Is it \_\_\_\_\_ (yellow, red, round, fuzzy, soft, etc.)?*
  - *No, it is not \_\_\_\_\_.*
  - *Yes, it is \_\_\_\_\_.*
- Remind class that they may use the vocabulary from the **Word Wall** or **Food Observation Bingo Cards** to help them.



Circulate and monitor during the game to assess students' ability to formulate and respond to questions, using the descriptive vocabulary.



Keep vocabulary words alive by reminding students that you are actively observing how they use them. Say: "I am observing your work and getting information on how you are practicing language."

- Each student takes turns until all have had a chance at answering questions.



Allow students to use other descriptive adjectives that may not be on the word wall maps or on the bingo cards, but are relevant to the food samples used in class or the class discussion. If they do, challenge them to describe or define them to their group, and write them down so that these words may be added to the word walls at the end of class.

## CLOSING

### REVIEW TARGETS:

- Draw student attention to targets.
- Invite students to show with the **thumb-o-meter** whether they met the lesson targets.
- Offer specific praise and suggestions to improve.

### ASSESS:

- Ask each student to ask a question about its properties using the language frame:
  - *Is it \_\_\_\_\_?*
- Answer each question for the students following the language frames:
  - *No, it is not \_\_\_\_\_.*
  - *Yes, it is \_\_\_\_\_.*
- Make sure each student has a chance to ask a question.
- Have students **guess** what food it is at the end, once everyone has had a turn to ask a question.
- Ask students to give examples how they might use these question frames when describing other things, not food.
- Explain to students that they can ask questions using the same frames when referring to anything, not just food (e.g., *I lost my coat. Is it pink? Is it soft? Is it big?*). Remind students to use the **Word Wall** and **Food Observation Bingo Card** as resources.

## Food

### Lesson 13: Reading Text: Understanding Our Senses

The purpose of this lesson is to use text to understand how our senses help us gather information about the world around us. Students will read for general understanding of our senses (**read-retell**).

<b>ESSENTIAL QUESTION(S)</b>	What is food and why is it important? How do we study food in science?
<b>GUIDING QUESTION</b>	How do we collect information about food?

<b>DAILY QUESTION</b>	How do our senses work?
<b>CONTENT TARGETS</b>	I can identify the function of sense organs. I can explain why our senses are important.
<b>LANGUAGE TARGETS</b>	I can match my observations to the correct body part and sense.  <b>Match:</b> 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 _____.
<b>VOCABULARY</b>	<i>(Note: Use same vocabulary from previous lesson. Add new vocabulary as needed.)</i>  <b>body parts:</b> ears, nose, tongue, taste buds, brain  <b>observations using sight:</b> more/more than, less/less than  <b>observations using smell:</b> smell  <b>observations using taste:</b> taste  <b>observations using hearing:</b> hear  <b>other:</b> send, air
<b>MATERIALS</b>	<i>Understanding Our Senses: Teacher Presentation Version</i> <i>Understanding Our Senses: Student Version</i> How Our Senses Work Organizer Dry erase boards^ Dry erase markers^

^Not provided in lesson materials.



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## GENERAL NOTES

In this lesson, students integrate words and images to gain a general understand of how the senses work from the text *Understanding our Senses*.

**Read-retell** RI.1 targets (reading for key details, asking and answering text dependent questions, and citing evidence in text), which will help students practice interpreting content and language already introduced through experiential and oral language activities.

Check with the ELA teacher to find out how students have worked with **read-retell** by the time you get to this lesson. Students experience with this protocol will determine how much you will need to support students in this lesson.

## OPENING

### WARM-UP:

- **Think-pair-share:** Think of a time when you woke up in the middle of the night to do something (e.g., go to the bathroom, get a snack, get a drink of water). It is dark and you cannot see. How do you get from one place to another? Explain what you do to know where you are and where you are going.
- Make clear that our senses work together, and when one sense cannot do its work of giving us information, other senses do **more** of the work.



Students are sharing about times when they were unable to use their sense of sight, and explaining how they were able to figure out where they were and where they were going. Encourage them to think about other ways we and other people know about the world around us if we cannot see.



Consider showing a short video clip of a blind person reading Braille. Invite students to **see-think-wonder** about this person. Support students to understand that when we have lost one sense, our other senses compensate or do more of the work.

### CONNECT:

- Elicit from students what we have learned this week about the senses. Elicit information about sight and touch, reviewing vocabulary as needed.
- Explain that today students will read an informational text about their senses to better understand how they work and to give us information about the world.
- Draw attention to targets.

## WORK TIME

### PREPARE:

#### *Preview Reading*

- State the purpose for reading: to find out how the senses work and how they give us information about the world.

- Give students a few minutes to preview the text: **Understanding Our Senses: Student Version.**
- **Think-pair-share:** Use the text and images to make predictions about what the text will be about.
  - Listen for: *I think I will learn ...*
- Record student predictions.

## INTERACT:

### Read-Retell 1

- Follow the **read-retell** protocol for the following chunk of text.
- Pages 2-4: Guide students to understand that we use our senses to gather information about the world around us and that our senses include sight, hearing, **smell**, **taste**, and touch.



In Unit 1, read text aloud to students, who should then retell, ideally with a home-language partner. The goal is comprehension, so students should not be reading aloud to the class or a partner. The exception is if students have already listened and retold and you want them to practice fluency reading. Stress that comprehension, understanding what you read, is the most important thing. Learning to say the words is important too, but often when you concentrate on pronouncing words, you cannot try to understand what you are reading at the same time.

### Making Observations in the Text

- Pages 5-14: Guide students through the prompts in the text as they practice making observations with each of their five senses.
- Do the first “Making Observations” (p. 6) together as a class so students see what is expected from them on these pages. Students can do continue to “Make Observations” (pp. 8, 10, 12, 14) together in a **think-pair-share** or as a whole class, depending on the scaffolding needed.
- Students should fill in their observations in the **Understanding Our Senses: Student Version.**

### Read-Retell 2

- Follow the **read-retell** protocol for the following chunk of text.
- Pages 15-16: Guide students to understand that we can use **more than** one sense at a time, and that our senses help us survive by avoiding danger or by being aware of our surroundings.

### Share Out

- **Think-pair-share:** What are the five senses? Explain how each sense works.
- Share out: Prompt students to look in the text by asking, “How do you know?”
- Students record responses in the **How Our Senses Work Organizer.**
  - *I use my \_\_\_\_\_ to \_\_\_\_\_. (I use my eyes to see). My \_\_\_\_\_ sends information to my \_\_\_\_\_.*



## EXTEND:

- **Think-pair-share** options:
  - Which sense do you think is the most important? Why?
  - Give an example of how each sense can help you survive (e.g., *Sight helps us survive because you need to see ...*).
  - What is your strongest sense? Why? What is your weakest sense? Why?
  - What happens when people lose one of their senses?



Extend activities often require students to think more deeply about the content. Because this is the heaviest cognitive load, lighten the language load by encouraging students to respond in home language first. You can then stretch their English once they have shared.

## CLOSING

### REVIEW TARGETS:

- Draw student attention to targets.
- Invite students to show with the **thumb-o-meter** whether they met the lesson targets.
- Offer specific praise and suggestions to improve.

### ASSESS:

#### *Dry Erase Board Huddle*

- Perform a **dry erase board huddle**. Each group is assigned a sense. Have them illustrate how it works (from **How Our Senses Work Organizer**) on the **dry erase board** and then share with class. Drawings may include eyes for “sight,” **ears** for “hearing,” etc.
- Remind students to use the **How Our Senses Work Organizer** and the **Understanding Our Senses** text as resources.



Assess if students are able to identify the body part used to make observations from each sense and explain how our senses work using evidence from the text.

## Food

### Lesson 14: Writing: Observing a School Cafeteria

The purpose of this lesson is for students to practice making observations in the school cafeteria using all five of their senses. Students will record observations then return to class to write about them in more detail.

<b>ESSENTIAL QUESTION(S)</b>	What is food and why is it important? How do we study food in science?
<b>GUIDING QUESTION</b>	How do we collect information about food?

<b>DAILY QUESTION</b>	How can I use my senses to make observations in the school cafeteria?
<b>CONTENT TARGETS</b>	I can make observations using my five senses in the school cafeteria.
<b>LANGUAGE TARGETS</b>	<p>I can describe my observations using details.</p> <p><b>Describe:</b> I hear _____. It is/They are _____.</p> <p>I smell _____. It is/They are _____.</p> <p>I see _____. It is/They are _____.</p> <p>I touch _____. It is/They are _____.</p> <p>I taste _____. It is/They are _____.</p> <p>This _____ is _____ (color, big, small, round, long, irregular, rough, smooth, hard, soft, sticky).</p>
<b>VOCABULARY</b>	<p><i>(Note: Use same vocabulary from previous lesson. Add new vocabulary as needed. New vocabulary may vary.<sup>1</sup>)</i></p> <p><b>observations of a school cafeteria:</b> cafeteria, table, 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, cooks, cashiers, voice(s), laughter/laughing, screams, waving, crowd/crowded, lines, frying food</p> <p><b>observations using touch:</b> greasy, oily, moist</p> <p><b>observations using smell:</b> unpleasant, pleasant, citrusy, minty, sweet, pungent, strong</p> <p><b>observations using hearing:</b> loud, quiet* (soft), sound, crunchy</p>

<sup>1</sup> Vocabulary may vary according to student observations from cafeteria.



<b>MATERIALS</b>	School Cafeteria Observations Chart
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*^Not provided in lesson material.*

## GENERAL NOTES

In this lesson, students will take a trip to the school cafeteria, where they will be asked to record observations using their five senses. They will spend the first half of the lesson either listing or describing these observations, using vocabulary from previous lessons and the text from this lesson set. The second half of the lesson will take place back in the classroom, where students will describe their observations using language frames provided.

Note to teachers: Be mindful of the time of your class period. If your class is less than 60 minutes, consider using two class periods.

## OPENING

### WARM-UP:

- Use a visual prompt to review the senses with students (e.g., a dog licking a person).
- Ask students what senses this person is using (e.g., touch: fur of dog, tongue of dog; sight: dog, tongue; hearing: breathing of dog, possible barking of dog; smell: dog, breath of dog; [possible] taste: saliva of dog).
- Explain that often times we use many senses at once, even if we are not aware we are doing so.



If you do not have the means to visit the school cafeteria, think of another creative way to get students to make observations where there is a lot happening. For example, this can be from a video of a school cafeteria. Have them visualize being there, or have students bring foods into class and eat together.

### CONNECT:

- Explain that today students will visit the school **cafeteria** to practice making observations using all their senses, as read about in the text in the previous lesson. Therefore, they will be using their body parts (eyes, ears, tongue, nose, and hands) to make these observations.
- Introduce the activity for the day: “Today we will be going to the school **cafeteria** to make observations. We will be using **all** of our senses and **recording** our observations.”
- Draw attention to targets.

## WORK TIME

### PREPARE:

- Hand out and go over the **School Cafeteria Observations Chart**. (The first part of the chart will be completed in the cafeteria and can include images and text).
- **Model** how students will make and record observations.
- Distribute clipboards to each student.



You may want to allow students to separate and find their own place to record observations. It would be interesting to hear how observations differ depending on where you are recording your observations (e.g., closer to garbage cans, closer to kitchen).

## INTERACT:

### *Making Observations*

- Walk to cafeteria with **School Cafeteria Observations Chart** and pencil.
- Have students find a place to make their observations.
- Allow students anywhere from 5 to 15 minutes to record observations using their **School Cafeteria Observations Chart**.

### *Describing Observations*

- **Model** filling in language frame using an observation from the **cafeteria**. Write example on board:
  - *I hear students laughing. They are loud.*
- Students complete the remainder of the **School Cafeteria Observations Chart (Part 2)** using the examples as a guide.
- Have students meet in home language groups to share their observations from the **cafeteria**.
- Class discussion: The following are some sample discussion prompts, but feel free to change as needed.
  - What was something **SAW** in the **cafeteria**?
  - What was something thing you **HEARD** in the **cafeteria**?
  - What was something you **SMELLED** in the **cafeteria**?
  - What was something you **TOUCHED** in the **cafeteria**?
  - What was something you **TASTED** in the **cafeteria**?



After students share their observations, consider asking follow-up questions like *What was the loudest thing you heard? Grossest thing you smelled?*



Students may not taste anything, but they should be able to describe what food they see or smell tastes like. They can add this to their “Taste” observations.

## EXTEND:

- Challenge students to answer the following questions:
  - Why do we need to make observations about a place?
    - Listen for: *to learn more about it; to be aware of our surroundings*
  - Why were some of our observations different?
    - Listen for: *We saw different things; we stood in different places; we have different limits to our senses (some people see/hear differently than others); some things were blocked (e.g., I couldn't see the cooking area)*
  - Why is it important to communicate our observations?

- Listen for: *to share knowledge; to get a clearer picture or understanding of the thing being observed*

## CLOSING

### REVIEW TARGETS:

- Draw student attention to targets.
- Invite students to indicate the most important idea or learning of the day.
- Offer specific praise and suggestions to improve.

### ASSESS:

- Circulate and monitor while students are making observations in school cafeteria and while groups are working to create sentences about their observations.



Assess if students are able to record observations from each of their five senses.

## Food

### Lesson 15: Reviewing/Assessing Skills: Mid-Unit Assessment

The purpose of this lesson is to assess the content and skills learned thus far in Unit 1. Students will be asked to record class data, represent it in a bar graph, and identify major food groups from data.

<b>ESSENTIAL QUESTION(S)</b>	What is food and why is it important? How do we study food in science?
<b>GUIDING QUESTION</b>	How do we collect information about food?

<b>DAILY QUESTION</b>	<i>How can I describe the favorite breakfast foods of our class in a table, graph, and sentences?</i>
<b>CONTENT TARGETS</b>	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.
<b>LANGUAGE TARGETS</b>	I can analyze and compare data from a bar graph. I can summarize data from a bar graph.  <b>Analyze/Compare:</b> <i>More students made observations using _____ than _____. Fewer students made observations using _____ than _____.</i>  <b>Summarize:</b> <i>Our class eats more _____ than _____. Our class eats fewer _____ than _____. Our class eats the same amount of _____ and _____.</i>
<b>VOCABULARY</b>	<i>(Note: Use same vocabulary from previous lesson. Add new vocabulary as needed.)</i>  <b>breakfast foods:</b> omelet, cream cheese, (maple) syrup  <b>observations using sight:</b> few/fewer, many, quantity* (amount)
<b>MATERIALS</b>	Favorite Breakfast Meal Survey Favorite Breakfast Meal Data Table and Graph School Cafeteria <b>Observations</b> Chart (completed in Set 3, Lesson 14)

^Not provided in lesson materials.

## GENERAL NOTES

To do prior to this lesson: Using a **School Cafeteria Observation Chart** from one student from the previous lesson, construct a bar graph representing the total number of observations made by each sense (e.g., Sight [5], **Hearing** [4], Smell [2], Taste [1], Touch [2]). Students will use this sample bar graph in the Warm-Up.

It is important that students construct and summarize their graphs individually, so their skills and knowledge can be assessed.

## OPENING

### WARM-UP:

- Distribute the sample bar graph made from observations found in the completed **School Cafeteria Observations Chart** from previous lesson (see General Notes section above).
- Divide students into home-language partners to discuss what they see in the graph.



It is important that students describe each piece of data, before they notice patterns and trends.

### CONNECT:

- Review how information can be represented numerically (data table) and visually (bar graph).
- Explain that today students will collect data about the class's favorite breakfast meals and represent this data numerically, visually, and in writing.
- Draw attention to targets.

## WORK TIME

### PREPARE:

- Return to the bar graph that students were just discussing. Have students point out which sense was observed the most, and which sense was used the least. **Model** how to use this information to fill in the language frames:
  - *More students made observations using \_\_\_\_\_ than \_\_\_\_\_.*
  - *Fewer students made observations using \_\_\_\_\_ than \_\_\_\_\_.*

### INTERACT:

#### *Conduct Survey*

- Distribute **Favorite Breakfast Meal Survey** to each student.



- **Model** how to do the survey with a student.
- Direct students to complete the survey.
- Write labels on board (e.g. “Eggs, Toast, Bacon”; “Pancakes, Butter, **Syrup**”; “Eggs, Vegetables, Cheese”; “Cereal, Milk”; “Bagel, **Cream Cheese**”; “Fruit, Smoothie”).
- Ask each student for their favorite meal from the survey and mark it (draw a line) under each meal that is their favorite.

### *Data Table and Bar Graph*

- Distribute **Favorite Breakfast Meal Data Table and Graph** to each student.
- Explain that each student will need to do the following:
  - Record the number of students who prefer each type of breakfast meal in the data table from the tally on the board; and
  - Draw a bar graph that represents this data found in the data table using the template provided.
- Allow ample time for students to do this individually.

### *Summarizing Bar Graph*

- Have students summarize the information from the bar graph using the language frames:
  - *Our class eats more \_\_\_\_\_ than \_\_\_\_\_.*
  - *Our class eats fewer \_\_\_\_\_ than \_\_\_\_\_.*
  - *Our class eat the same amount of \_\_\_\_\_ and \_\_\_\_\_.*
- Instruct students to complete the language frames in Part 4 of the **Favorite Breakfast Meal Data Table and Graph**.

### *Identifying Food Groups*

- Instruct students to identify the food groups represented by the foods in the class’s favorite meal.
- Tell students to enter this information into the table found in Part 5 of the **Favorite Breakfast Meal Data Table and Graph**.

### **EXTEND:**

- **Think-pair-share:** How does the bar graph help us understand information? Why do you think people have different preferences for meals?
  - Listen for: *Bar graphs show amounts visually; I can read a bar graph quickly; cultural influences; food availability; difference of taste buds; allergies*

## **CLOSING**

### **REVIEW TARGETS:**

- Draw student attention to targets.
- Ask students if they have any questions or are having any difficulties with constructing and interpreting bar graphs.

- Offer specific praise and suggestions to improve.

**ASSESS:**

- Using the **exit ticket** protocol, have students rate themselves on a scale of 1 (not confident) to 5 (confident) with constructing their bar graphs, and rate themselves on a scale of 1 (not confident) to 5 (confident) with interpreting their bar graphs.



Review student assessments and note areas of strength and weakness in tables and graph for each student. Consider projecting a strong student example in tomorrow's lesson and reteaching and giving more practice for the gaps.