

NUTRITION VOYAGE

THE QUEST TO BE OUR BEST

TREK 2 Grade 7

Field Correspondents: Conducting a School Survey

Time Required:

Three 40-minute sessions

Sample timing:

First Session – **Investigate**

Second Session – **Challenge: Conduct a Survey**

Third Session – **Evaluate and Reflect**

Supplies:

Food Journals from Lesson 1 (*optional*), laptops (*optional*), poster-board or chart paper (*optional*); Student Printable: **Table Talk – School Survey**.

Standards:*

Students will...

Math

- Solve real-world and mathematical problems involving the four operations with rational numbers. (7.NS.3)
- Understand that statistics can be used to gain information about a population by examining a sample of the population. (7.SP.1)

English Language Arts

- Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation. (7.W.7)

*Sources: Science education standards: National Academy of Sciences, Math and English Language Arts education standards: Common Core.

Subject Focus: Math

Lesson Overview:

From music to fashion to what they select from the vending machine, middle schoolers are highly influenced by their peers. By studying dietary behaviors of those around them, students can gain an awareness of how classmates and trends affect their own eating habits, and spot improvements that could be made by friends and family.

In this lesson, students will begin by reviewing their own eating patterns. From this analysis, they will create hypotheses about the eating patterns of others in their school community, and develop a survey to identify food trends. By the end of the lesson, students will know the most and least popular foods at their school, understand relevant trends, and have recognized areas for change in their environment.

Learning Objectives:

Students will be able to...

- Hypothesize and predict based on personal experiences.
- Create, write, and conduct a survey investigating the eating preferences and habits of their peers.
- Communicate survey findings creatively, in visual/graphic ways.
- Identify relevant influences on food choices (e.g., family, school personnel, media, and technology).
- Collaborate with others to advocate for healthy eating at home, in school, or in the community.

Questions for This Trek

1. Why do I like the foods that I do?
2. How healthy is my community?
3. How healthy do my friends and I eat at school?
4. What healthy food and beverage options are my friends eating at school?

Instructional Steps

1 Investigate

1. Why do I like the foods that I do?

Ask students about their favorite foods. (If you've completed **Trek 1**, have students analyze their **Food Journals** for their most frequent choices.) Why do they like these foods? If they grew up in a different State or country, would they have different favorites? Why or why not?

2. How healthy is my community? What foods are the most and least popular?

Tell students that their next mission is to uncover how healthfully their community eats. First, ask and discuss what students think it means to be "healthy." How does making healthy choices (such as following the *Dietary Guidelines for Americans* at <http://www.choosemyplate.gov>) help kids to do better at the things they enjoy (for example: sports, dance, art)? Next, talk about healthful eating at your school. What foods do students think are the most and least popular among their peers?

2 Challenge: Conduct a Survey

3. Introduce the Student Printable: Table Talk – School Survey.

Ask students how they might go about finding out about food habits at school. For example, how can they find out how healthfully their friends eat at school? Or, what healthy options are available at school? (Prompt them with the idea of creating a survey.) Invite small groups to review **Table Talk – School Survey**. Have them become familiar with the questions, and add additional questions they'd like to explore/investigate.

4. Use the printable to create hypotheses.

Ask the groups to predict how *they* think the survey will turn out. Have them create hypotheses that the survey will answer. What do they think they will uncover? How might they rephrase certain questions to best suit their own school/community?

5. Undertake the Class Survey.

Have groups discuss goals for the survey—what can students do with the information to inspire change? Together, create a master survey using the best wording, and add on questions from each group. The survey may be conducted in person or distributed via email, blog, Web site, or by hand. If distributing surveys, let respondents know how, and by when, their surveys will be collected. For example, participants can email them, print them out, or fill them in by hand. Decide on a method beforehand that will make it most convenient for your class and survey participants.

Tips for Conducting Surveys

- **Avoid leading questions.** For example, "Don't you drink water every day at school?" leads people to say "yes." Instead, try "Do you drink water at school? How often?"
- **Use measurable questions.** It can be difficult to analyze questions that are too broad or open-ended. Yes or no questions, multiple choice, and those with a "defined" answer (such as a number) can be more easily categorized and compared.



 **Evaluate**

- Analyze.** Once surveys have been collected, compile and inventory the results. You may want to create a master list, using either a spreadsheet or document program, to make it easier to analyze the answers. Next, divide the questions and their results among groups. Have each group analyze the results of the question(s), and come up with a visual way to communicate and represent the information. Students may create graphs and charts, and display them in a poster, slideshow, on a blog or wiki, or even in a 3-D art installation using food packaging. Encourage students to be creative with their presentations!
- Share.** Have each group present its findings to the class. What overall trends do students notice? Are students' favorite foods generally healthy choices? Discuss how the availability of healthy foods might influence how often students eat those foods and how students' food preferences are formed over the years.

 **Reflect**

- Explore the idea of "influence." Ask:** How do your friends and family influence your food choices? What other factors influence you (for example: ads, marketing, and availability)? Invite students to write in their journals about the connections between the survey results and their own eating habits. How are their food choices similar to or different from other kids at your school? What influences do they see?
- Strategize.** As a class, discuss where students see room for improvement. What changes can the community make to enable students to feel and do their best (for example: eat more fruits, vegetables, and whole grains in accordance with the *Dietary Guidelines for Americans*)? What messages would students like to share with others? Brainstorm the different ways students can share messages with the community (for example: posters, blog entries, newsletters, videos, or presentations).

End of Trek**Extension Ideas**

- Have students turn their healthy messages into posters to display around school.
- Publish and discuss the survey results in the school paper.
- Repeat the survey after completing **Trek 3: Leading the Way** to see if any changes have resulted from students' efforts.
- Create a challenge to encourage other classes or grades to try a new healthy food they haven't tried before.
- Have students read newspaper articles or watch online videos about other communities that are introducing healthier food to their schools.





Table Talk: School Survey

Use the survey below to discover more about the eating habits at your school. How healthy do you and your friends eat at school? What healthy options are available? Alternatively, use the questions as inspiration to write your own survey. **Attention participants:** If you run out of space, use the back of this sheet.

	More than once a day	Once a day	2-3 times a week	Once a week	Less than once a week	
1. How often do you eat fruits at school? (Check one)						
2. How often do you eat vegetables at school?						
3. How often do you eat whole grains at school (whole-wheat bread, pasta, or tortillas; brown rice; oatmeal; popcorn)?						
4. How often do you eat food from...						
<i>The school vending machine</i>						
<i>The school cafeteria</i>						
<i>School fundraisers</i>						
<i>Other school sources (snack bar, kiosk)</i>						
5. What beverage do you drink most often at school?	<input type="checkbox"/> Milk	<input type="checkbox"/> Soda	<input type="checkbox"/> 100% Juice	<input type="checkbox"/> Water	<input type="checkbox"/> Other: _____	
6. What are your three favorite foods available at school? Why are they your favorites?						
7. What are your three least favorite foods available at school? Why are they your least favorites?						
8. Why do you choose the foods you do? Rank the reasons from most to least important: (1-5; 1 = most important, 5 = least important)	___ Packaging	___ Cost	___ Taste	___ Convenience	___ Health	___ Locally grown
9. What whole grains, fruits, vegetables, or other healthy foods do you wish were available at school?						
Insert other food-related questions:						
10.						
11.						
12.						

