

Do we live in a food desert?



Supporting Questions

1. What would it be like to live in a food desert?
2. What are some effects of living in a food desert?
3. How can food deserts be improved?

Do we live in a food desert?

<p>Standards and Content</p>	<p>Social Studies 3.I.Q.1 Ask compelling questions about the interactions of diverse groups of people. 3.I.Q.2 Develop supporting questions that help answer compelling questions about the interactions of diverse groups of people. 3.E.ST.1 Describe examples of economic interdependence. 3.E.MA.2 Investigate how the cost of things changes over time. 3.E.MI.2 Describe the relationship between supply and demand. 3.G.HE.1 Explain how the culture of places and regions influence how people modify and adapt to their environments. 3.G.GR.1 Explain how physical and cultural characteristics of world regions affect people, using a variety of maps, photos and other geographic representations.</p> <p>Health 3.8.1 State personal beliefs that may improve the health of self and others. 3.8.2 Identify factual information needed to advocate to improve the personal health and wellness of others.</p>
<p>Staging the Compelling Question</p>	<p>Ask students to imagine that they are in a desert. Ask them what it might be like. Have them turn and talk and then call on some students to respond. Using Google cardboards and Google expeditions, take students on a field trip to a desert.</p> <p>Tell them the term “Food Desert” and have them talk to their partner about what that term might mean. Call on some students to respond.</p> <p>Show food desert video.</p>

Supporting Question 1
<p>What would it be like to live in a food desert?</p>
Formative Performance Task
<p>Create a speech or video about what it means to live in a food desert.</p>
Featured Sources
<p>Source A: Video: What is a food desert Source B: Article: What are food deserts (simplified for 3rd grade) Source C: Characteristics of food deserts Graph on p. 9 Source D: USDA Map Source E: Google Earth map of our area</p>

Supporting Question 2
<p>What are some effects of living in a food desert?</p>
Formative Performance Task
<p>Create an informative product showing some effects of living in a food desert (slideshow, brochure, graphic poster, prezzi, etc.)</p>
Featured Sources
<p>Source A: Section of article on impact on health (simplified for 3rd grade) Source B: Section of article on effects (simplified for 3rd grade) Source C: Graphs from article with some 3rd grade explanation Source D: Image 1 from this article (flowchart)</p>

Supporting Question 3
<p>How can food deserts be improved?</p>
Formative Performance Task
<p>After reading about some ideas for solutions to food deserts, brainstorm ideas that third graders could actually do to help. Go through the design thinking process to prototype your best idea.</p>
Featured Sources
<p>Source A: Improving Food in the Neighborhood article (simplified for 3rd grade) Source B: Examples from the article of solutions Source C: Video of hydroponic lettuce</p>

<p>Summative Performance Task</p>	<p>ARGUMENT: Do we live in a food desert? Construct an argument (e.g., detailed outline, poster, essay, video, speech) that evaluates whether or not we live in a food desert. Be sure to explain your claim and defend it with evidence. Include information from sources you have cited in your research.</p>
	<p>EXTENSION. Develop a plan for a way you could improve life for people living in a food desert.</p>
<p>Taking Informed Action</p>	<p>UNDERSTAND what food deserts are and their effects. ASSESS the effects of food deserts. ACT to develop a plan to alleviate the effects of food deserts.</p>

**Featured sources are suggested and links are provided. It may be that these links are broken and we apologize in advance for the inconvenience.*

Overview

Inquiry Description

This inquiry leads students through an investigation of food deserts, determining if they live in one, and designing solutions to the problem of food deserts.

Note: This inquiry is expected to take six or seven 50-minute class periods. The inquiry time frame could expand if teachers think their students need additional instructional experiences (e.g., supporting questions, formative performance tasks, featured sources, writing). Teachers are encouraged to adapt the inquiry to meet the needs and interests of their students. This inquiry lends itself to analysis, problem solving, and design thinking while assisting students in reading the variety of sources.

Structure of the Inquiry

In addressing the compelling question, students will answer the three supporting questions:

What would it be like to live in a food desert? Answering this question will help students build a definition of food deserts and understand the nutrition requirements of humans and how those requirements are met in a variety of environments. It will also give them evidence they can use to determine if they are living in a food desert.

What are some effects of living in a food desert? Answering this question will allow students to determine if living in a food desert is a bad thing and to determine what the effects are. It will also give them evidence they can use to determine if they are living in a food desert.

How can food deserts be improved? Answering this question will give students the opportunity to research and invent ideas that would be beneficial to those living in a food desert or concerned about food deserts. It will also give them further evidence for their claim and information they can use to act as they develop solutions.

Staging the Compelling Question

In staging the compelling question, students will be asked to imagine that they are in a desert. A google expedition will be shown to help them build background knowledge. They will be asked to describe what it might be like. Likely answers are that it would be uncomfortable and they wouldn't have things they needed, like food and water.

Students will be asked to define the term "Food Desert" in their own words before being shown the [food desert video](#).

Then students will be given the task of determining the answer to the compelling question, "Do we live in a food desert?" They will be asked to come up with some things they might need to know in order to answer that question. This list will be massaged into the three compelling questions with their help (perhaps there will be other questions that will be addressed as well or in place of those questions.)

What would it be like to live in a food desert?

The first supporting question—What would it be like to live in a food desert?

The formative task is to create a speech or video about what it is like to live in a food desert. Using what they learned from the sources, students will develop their speech or video to answer the question, “What would it be like to live in a food desert?” They are expected to explain what a food desert is and to explain what that means in terms of where they are located, what people have to do to access food, and what the populations are like who live in food deserts. They are also expected to give evidence from the sources they examined and to cite those sources on a 3rd grade level (tell the source they got the information from.)

Teachers may implement this task with the following procedures

Students will work in small groups. The formative task will be explained and then each group will be given a note catcher and a source. First they should write the title of their source on the note catcher. Then they should watch, read, or study the source together as a group and write any information they find that will help them with their formative task.

Products will be presented to the class. Then the class will look at google maps of our area and find their homes and the grocery stores in our area to see if we meet the definition of food deserts. We can also look at neighboring communities (schools) to see if they meet those definitions. We will also have discussions about things like the cost of different foods in different markets (e.g. walmart, quick mart, IGA).

An extension might be to have students find the cost of certain healthy and unhealthy foods the next time they are in the grocery store and compare them. This would be a great way to get families involved. They might also interview family members or neighbors about their thoughts on food in our area, especially older family members or family members with young children.

The scaffolds and other materials that may be used to support students as they work with the sources:

Intentional student groupings will allow for a strong reader in each group. Group roles will be assigned so that everyone is contributing to the group. Tier 2 and 3 vocabulary in the articles will be defined beforehand in language lessons.

The following sources were selected to allow students to gather information to answer the question and complete the formative task.

Source A:

[Video: What is a food desert](#)

Source B:

[Article: What are food deserts \(simplified for 3rd grade\)](#)

Source C:

[Characteristics of food deserts Graph on p. 9](#)

Source D:

[USDA Map](#)



What are some effects of living in a food desert?

The second supporting question– What are some effects of living in a food desert?

The formative task is Create an informative product showing some effects of living in a food desert (slideshow, brochure, graphic poster, prezi, etc.)

Teachers may implement this task with the following procedures:

Discuss the meaning of “effects” with students. Have them make some predictions about the types of effects a food desert might cause.

Each of the sources will be placed around the classroom. Small student groups will move around the classroom to read and study each source for information to answer the supporting question. They will gather information on a note catcher along with the source of the information.

After they have gathered information, have them think about some questions they still have about other effects food deserts might have. Work as a class to find more info to answer those questions, or assign those questions to small groups to find information to answer.

Students will compare effects that are present in our area with those described for food deserts. This will help them to use other information to determine if we are indeed in a food desert even though we might have grocery stores nearby.

The scaffolds and other materials that may be used to support students as they work with sources...

The articles will be tested for lexile level and modified as needed to be readable for 3rd graders and any difficult vocabulary will be taught to students prior to reading. Student groups will include strong readers and each student in the group will be given a role. Note catchers will include a place for the name of the source to help with citation.

The following sources were selected to allow students to find information to answer the question and complete the task.

- **Source A** [Section of article on impact on health](#) (simplified for 3rd grade)
- **Source B** [Section of article on effects](#) (simplified for 3rd grade)
- **Source C** [Graphs from article](#) with some 3rd grade explanation
- **Source D** [Image 1 from this article \(flowchart\)](#)
- **Source E** Statistics from our area related to health, average wages, cost of living, smoking, obesity, etc.

How can food deserts be improved?

The third supporting question—How can food deserts be improved?

The formative task is: After reading about some ideas for solutions to food deserts, brainstorm ideas that third graders could actually do to help. Go through the design thinking process to prototype your best idea.

Teachers may implement this task with the following procedures:

Allow students to read the first article, simplified for 3rd graders. Share aloud some of the solutions in source B, and have students watch source C together. Discuss and analyze the solutions as a class: what are some pros and cons of each solution? Who would be able to enact those solutions?

Review the design thinking process with students and have them ideate solutions that they could enact. Then have them go through the process to prototype and test their ideas.

The scaffolds and other materials may be used to support students as they work with sources

The first article will be modified to a 3rd grade level. Students will be grouped in homogeneous reading groups to get the scaffolds they need to build understanding of the article. The other sources will be read or told aloud to students and each will be discussed with the whole group.

The following sources were selected to help students begin thinking about solutions.

Source A:

[Improving Food in the Neighborhood article](#) (simplified for 3rd grade)

Source B:

[Examples from the article of solutions](#)

Source C:

[Video of hydroponic lettuce](#)

Do we live in a food desert? Construct an argument (e.g., detailed outline, poster, essay, video, speech) that evaluates whether or not we live in a food desert. Be sure to explain your claim and defend it with evidence. Include information from sources you have cited in your research.

At this point in the inquiry, students have examined the definition, effects of, and solutions for food deserts.

Students should be expected to demonstrate the breadth of their understanding and their abilities to use evidence from multiple sources to support their claims. In this task, students will use what they have learned to answer yes, no, or maybe and defend their choice.

Students' arguments will likely vary, but could include any of the following:

Yes, we do live in a food desert because many of the people that go to our school live 20+ miles from a grocery store that sells healthy foods, cannot afford to buy healthy food even though they live closer to a grocery store that sells it, or both of those things. Or, yes because we have many of the effects of a food desert even though we have grocery stores nearby. They may give several possible reasons for this backed with evidence such as: perhaps our stores don't sell high quality food, low quality food tastes better, advertising for unhealthy food, unhealthy food is cheaper, etc.

No, we don't live in a food desert because most people in our area live within 20 miles of a grocery store and they can afford to buy healthy food if they make the choice to do so. They should give evidence for this from resources we have used.

Maybe. Many people in our area either live further than 20 miles from a grocery store, don't have reliable transportation to get to the grocery store, or can't afford healthy food. They should give evidence for this from resources we have used.

To support students in their writing they will follow the claim, evidence, reasoning template. They will have access to vocabulary lists developed during the lessons. They will peer review and edit their work.

To extend their arguments, students who are able will be asked to provide the other perspective and explain why they think it is erroneous.

Students have the opportunity to Take Informed Action by determining an action they can take to alleviate food deserts and taking that action through the steps of the design thinking process. Then they will determine how and to whom they will present their solutions.

Budget Sheet

Activity	Materials needed	Budget
Staging the compelling question: Google expedition	Google cardboards (35) @ 1.00 each	35.00
1st and 3rd supporting questions and taking action	Smartphone video kit @46.00 each	138.00
2nd supporting question	Colored paper (1 ream)	19.00
All activities	Chart paper (post it sticky easel pads 4 pack)	66.90
All activities	Chart markers (Set of 8) @ 6.20 x 10	62.00
Total		320.90