

Where does our food come from?

Energy Literacy Essential Principle 3: Biological processes depend on energy flow through the Earth system.

C3 Framework for Social Studies Focus Indicators

- D1:** Identify facts and concepts associated with a supporting question. (D1.3.K-2)
- D2:** Use maps, graphs, photographs, and other representations to describe places and the relationships and interactions that shape them. (D2.Geo.2.K-2)
- D3:** Gather relevant information from one or two sources while using the origin and structure to guide the selection. (D3.1.K-2)
- D4:** Construct explanations using correct sequence and relevant information. (D4.2.K-2)

Grade Level: 9-12. **Time Required:** 3-4 class periods.

Connection to Energy Literacy

Humans are part of Earth's ecosystems and influence energy flow through these systems (Energy Literacy 3.6). In this activity, students consider the different places where food comes from and how the food they eat is transported to them from a source location.

Activity Outline

- Ask students what gives them the energy to be able to move and be physically active. The answer is Food! Now ask them where their food comes from. Students will provide a range of responses from the refrigerator to soil. Some students may suggest supermarkets or restaurants. Explain to them that these end distributors get their food from other primary sources such as farms, ranches, or oceans.
- You may consider engaging students by showing the video *Back to the Start* by Willie Nelson. This is an advertisement for Chipotle restaurants but shows agriculture processes over time.
- Assign groups of students to one of the three main food producing categories: farms, ranches, and oceans. Distribute images related to each category. Ask students to examine the images and describe their observations. Guide students with the following questions:

What does each image show?

Where is the location of what is shown?

What kind of food is being produced?

- Have groups share their findings. Ask them whether they think the locations shown in the images are nearby or far away from where they are located.
- Tell students that they will now focus on food that comes from American farms. Provide them the following scenario:

A friend goes to get lunch at her favorite pizza place. She is ready to order a slice of pizza when the man at the counter tells her that they have no pizza because they ran out of tomato sauce! She doesn't believe this to be possible, so she decides to investigate where tomatoes come from. She goes online and learns that tomatoes only grow in warm weather. She discovers that many tomatoes come from California.

- Show students a map of the United States. Identify your location and where tomatoes originate from (California). Explain that many agricultural areas (farms) are far from urban areas (towns and cities) because they require space to grow food crops. This means that food must be transported from these locations to urban areas, which uses energy.
- With your students, determine the distance that the tomatoes must travel from their source location in California to your neighborhood pizza place. Ask them to count the number of states that the tomatoes would have to travel through, if they were to be transported by truck. If you have a physical or relief map, you can discuss with students the impact of rivers, lakes, or mountains on the transport of the tomatoes.
- Distribute a "Where does our food come from?" map sheet to individual students or to groups of students. Ask them to complete the map for a food item they may have eaten recently. If they are unable to identify a food then assign them an item.
- Have students draw a picture or tell or write a story about how their favorite food comes to them from its primary source (farm, ranch, or ocean). Alternatively, you may want to ask students to draw a picture or tell or write a story about a school garden and what they would want to grow there.