

Geography/Economics - What's Your Food Print? Grades 9-10



Overview:

This lesson will challenge students to examine their personal consumption and how far food must travel to feed them. They will then use that data to inform others about alternatives.

(Time Needed: 2-3 class periods with option to do additional work outside of class.)

Geography Standards:

- SSWG6 Examine the spatial distribution of major economic systems and analyze the role geography plays in economic development.
 - b. Explain the relationship between levels of development and economic activity in terms of primary, secondary, and tertiary activities (e.g., resource extraction, manufacturing, and services).
 - d. Describe and explain causes and consequences of the worldwide trend towards urbanization in terms of development (e.g., changing employment patterns, urban sprawl, squatter settlements, and gentrification).
- SSWG5 Analyze human interactions with the world's environments.
 - a. Describe how and why agricultural techniques and technology have changed over time (e.g., irrigation, crop rotation, green revolution, and GMO's).



Written by Brooke Lewis-Slamkova

 **GEORGIA ORGANICS**

High School

GA Standards

 2-3 periods

farmtoschool.georgiaorganics.org

#SpinachToWinIt

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Economics Standards:

- SSEF2 Give examples of how rational decision-making entails comparing the marginal benefits and the marginal costs of an action.
 - a. Explain that rational decisions occur when the marginal benefits of an action equal or exceed the marginal costs.
- SSEMI1 Describe how households and businesses are interdependent and interact through flows of goods, services, resources, and money.
 - a. Explain, using a circular flow diagram, the real flow of goods and services, resources, and money through the product market and the resource (factor) market.
- SSEMI2 Explain how the law of demand, the law of supply, and prices work to determine production and distribution in a market economy.
 - b. Describe various determinants (shifters) of supply and demand and illustrate on a graph, they can change equilibrium price and quantity.
- SSEMI3 Explain the organization and role of business and analyze the four types of market structures in the U.S. economy.
 - c. Identify the basic characteristics of monopoly, oligopoly, monopolistic competition, and pure (perfect) competition with regards to number of sellers, barriers to entry, price control, and product differentiation

Objectives:

- Students will identify their personal consumption of foods.
- Students will understand the impact on the environment different food choices make.
- Students will evaluate the best ways to lessen the impact on our environment.
- Students will interview local farmers and find local farmer's markets to find alternatives to long travelled foods.
- Students will create a brochure that will share ideas to lower your food miles and how to improve your local environmental issues.

Materials:

- Student Quiz - <https://foodprint.org/quiz/>
- Article on Food Miles - <https://attra.ncat.org/htmlpub/food-miles-background-and-marketing/>
- Rubric below

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Outline:

- Engage: Students will estimate where they would fall on the Food Print Spectrum and then take the quiz to see where they really are. They will also brainstorm reasons why people would not have access to fresh foods. They will research local places to find fresh food in their county or community.
- Explore: Students will explore various options to reduce their carbon footprint.
- Explain: Teacher will explain the key concepts of local food production and the benefits of various options, such as farmer's markets, finding local farms, reducing packaging, etc.
- Extend: Students will create a brochure that can be used to explain how making small changes in buying habits can benefit farmers, consumers, and the environment to be shared with family members and faculty.

Lesson Plan:

- Engage: Students will take the Food Print quiz to determine how environmentally friendly their current habits are. They will also brainstorm reasons why people would not have access to fresh foods. They will research local places to find fresh food in their county or community.
- Explore: Let the students explore the best ways to lessen the impact on our environment through personal research. They should create a map of places to purchase local foods to include in their brochure. They should also note areas in need of local produce and brainstorm ways to mitigate that disparity.
- Explain: Teacher will explain the key concepts for local food production and the benefits to the farmer and consumers.
- Extend: Students will create a brochure that explains different food choices that would lessen the environmental impact of their own food choices.
- Evaluate: Students will evaluate the success of their project based on how many or if any changes people, including parents and teachers, make after getting their brochure information..

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Brochure Grading Rubric

Student Name: _____ Date: _____ Period: _____

CATEGORY	5	4	3	2	1
Attractiveness & Organization	The brochure has exceptionally attractive formatting and well-organized information.	The brochure has attractive formatting and well-organized information.	The brochure has some formatting and organized of information.	The brochure's has limited formatting and organization of information.	The brochure has no formatting and organization of material.
Content - Accuracy/ Quantity	Use of facts and the quantity of information is exceptional.	Use of facts and quantity of information is very good.	Use of facts and quantity of information is good but not consistent.	Use of facts and quantity of information is present but limited.	Use of facts and quantity of information is limited.
Writing - Organization	Brochure has exceptional organization	Brochure has very good organization.	Brochure has good organization.	Brochure has limited organization	Brochure has no organization
Writing - Grammar	There are no grammatical mistakes in the brochure.	There very few grammatical mistakes in the brochure.	There are some grammatical mistakes in the brochure.	There are several grammatical mistakes in the brochure.	Grammatical mistakes are so numerous that the readability of the brochure is impaired.
Graphics/ Pictures	Graphics go well with the text and there is a good mix of text and graphics.	Graphics go well with the text, but there are so many that they distract from the text.	Graphics go well with the text, but there are too few and the brochure seems "text-heavy".	Graphics do not go with the accompanying text or appear to be randomly chosen.	Graphics not present in the brochure.
Sources	Careful and accurate records are kept to document the source of all of the facts and graphics in the brochure.	Careful and accurate records are kept to document the source of most of the facts and graphics in the brochure.	Careful and accurate records are kept to document the source of some of the facts and graphics in the brochure.	Sources are not documented accurately or are not kept on many facts and graphics.	Sources are not documented accurately or are not kept on any facts and graphics.

Topics to consider:

- Local sources for produce
- The benefits of seasonal produce shopping
- Local farmers and what they grow
- Benefits of a farmer's market in the area
- Other advantages for buying local produce
- Reduction of packaging waste