

Grade Level: 5

Title: Global Markets (Nov. - Jan.)

Purpose:

The purpose of this lesson is to develop an understanding of how a market economy works and how the product is marketed.

Subject Area(s) Addressed:

Social Studies, ELA

Common Core/Essential Standards:

Social Studies

5.E.1.1 Summarize the role of international trade between the United States and other countries through Reconstruction.

ELA

5.G.1.3 Exemplify how technological advances (communication, transportation and agriculture) have allowed people to overcome geographic limitations.

5.RIT.4. Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.

5.RIT.7. Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.

Vocabulary:

economy
evaluate
exports

global
impact
imports

international
national
production

Materials Needed:

U.S. map
World map
Internet access
journals

Teaching Strategy:

Part 1:

Strawberry season in North Carolina is from April to June. Ask students how we have strawberries in the grocery store in September or February? Allow them to answer. Some students may know that strawberries come from other parts of the United States. If not, ask them about other fruits like oranges or lemons. Ask them if they have ever seen those types of trees growing in North Carolina. Make

reference to Florida oranges to give students an idea that strawberries could grow in other states.

Next, give students a United States map and have them label states where strawberries are grown. Use the following website to determine where strawberries are grown in the U.S.

<http://usda01.library.cornell.edu/usda/current/NoncFruiNu/NoncFruiNu-01-25-2013.pdf> (this resource lists the 10 top-producing states). Have the students shade the states in red. Next, create a chart showing the top 5 strawberry producing states. Note that how production is measured (acreage, pounds produced, or value of the crop) affects the ranking of states after #1 California & #2 Florida). Include the amount of strawberries produced and research when the berry harvest occurs. For example, the NC berry harvest is April until June. NC currently ranks #3 or #4 in the US (depending how production is measured) and produces approximately 20 million pounds of strawberries. See websites in "Resources."

Part 2:

Now, introduce the concepts of *imports* and *exports*. Why do we import and export? Have students research the following questions and record their findings in their journals: From what states does NC import strawberries? To what states does NC export strawberries? Are the strawberry imports "fresh?" How long can they last from the time of harvest until the time of purchase in the grocery store? Have students record this information in their journals.

Next, introduce the idea of *international* imports and exports. Give students a world map. Use the website:

http://wherefoodcomesfrom.com/Article.aspx?ArticleID=9100#.Ujdw-p3D_IV.

Have them create their own key for the map and show countries that grow strawberries, countries that import strawberries, and countries that export strawberries. They should be aware of those countries that will fit into more than one category. Based on the information learned, have students evaluate how the US fits into the global market in strawberry production. Students will create a display (digital or tangible) showing what they have learned about imports and exports of strawberries, nationally and internationally.

Extension Activity:

Compare the impact of the strawberry industry to other berries produced in the United States.

Background Information:

California and Florida dominate U.S. strawberry production, but North Carolina's is ranked as 3rd or 4th (depending whether measured by poundage produced or value of the crop), vying with Oregon for these positions. California and Florida produce almost all of the strawberries seen in supermarkets nationwide and export to other states, with Florida producing in winter months and California the rest of the year— California's long North/South orientation gives it many harvest seasons. Indeed, this dominance makes it hard for growers in other states who may want to sell wholesale to supermarkets to break into the distribution channels for their short harvest season. Oregon and Washington state produce almost entirely for processing (their berries are used in jam, yogurt, juice, ice cream, etc.). A significant part of California production is also used for processing. Almost all NC strawberries are used in-state, and NC is the largest producer among the states producing primarily for local and direct market. In recent years, strawberry production in Mexico has grown dramatically, creating competition for Florida growers. There is an interesting article about this at <http://strawberry.ifas.ufl.edu/BVT0913has.pdf> (page 5).

It is interesting to note that while the U.S. imports few strawberries, except recently an increasing amount from Mexico, most of the strawberry *plants* that are grown in NC, Florida, and other parts of the Southeast are imported from Canada, due to the cooler weather in Canada during the summer when these plants are growing. Plant diseases are more likely to develop in hot, humid areas. Also, Canada's cooler temperatures and shorter days prepare the plants for transplanting and encourage them to start flower initiation in the fall—this lets Florida growers harvest during the winter, and helps Southeastern growers get a good harvest early the next spring.

Additional Resources:

- <http://www.stuffaboutstates.com/agriculture/crops/strawberries.htm>
- http://www.agmrc.org/commodities_products/fruits/strawberries/commodity-strawberry-profile/
- <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1381>
- http://www.fas.usda.gov/htp/Hort_Circular/2006/03-06/03-27-06%20Strawberry%20article.pdf (info through 2005)
- <http://usda01.library.cornell.edu/usda/current/NoncFruNu/NoncFruNu-01-25-2013.pdf>
- <http://www.ncstrawberry.com/docs/StrawberryIndustry.htm>
- <http://www.ncagr.gov/stats/2012AgStat/index.htm> NC Ag statistics

Production season (and more) in leading states:

- California: www.californiastrawberries.com/about_strawberries
- Florida: <http://flastrawberry.com/> (home page gives season, Dec-April)
- North Carolina: www.ncstrawberry.com/docs/StrawberryIndustry.htm
- Oregon: <http://www.oregon-strawberries.org/index.html> (summer harvest; most berries go to processing)

- Washington: no state commission website; little information about industry online. Very similar to Oregon, however.
- Pennsylvania: www.pafarm.com/pdf/Commodity/Strawberries.pdf
- New York: www.agriculture.ny.gov/HarvestCalendarTextOnly.html

World production:

- <http://wherefoodcomesfrom.com/Article.aspx?ArticleID=9100#.UIGc0NLzq7Z>
- <http://top5ofanything.com/index.php?h=35769269>. This site addresses the fact that China, also a large producer, is missing from the UN Food and Agriculture Organization (FAO) lists referenced in previous website.
- <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1381>

Assessment:

Part 1:

Journal entry
Completed U.S. map
Chart

Part 2:

Journal entry
Completed world map

North Carolina Strawberry Association – www.ncstrawberry.com

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