

**Grade Level: 4**

**Title: What's with the Market (March – May)**

**Purpose:**

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

**Subject Area(s) Addressed:**

Social Studies, Math

**Common Core/Essential Standards:**

**Math:**

4.NBT.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm.

4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

**Social Studies:**

4.E.1.1 Understand the basic concepts of a market economy: supply, demand, scarcity, productivity, and entrepreneurship.

**Vocabulary:**

bartering	law of supply and	personal taste
competition	demand	price
cost of human	marketplace	profit
demand	market price	resources
economic choice	medium of exchange	scarcity
economics	money	supply
equilibrium price	opportunity cost	trading
	partnership	

**Materials Needed:**

chart paper  
Internet access  
spreadsheet software such as Microsoft Excel (PC) or Documents 2 (iPad)  
journals

poster board  
markers  
materials for a product container

## Teaching Strategy:

### Part 1:

To introduce students to Economics, watch the following video on Discovery Education:

<http://app.discoveryeducation.com/search?Ntt=supply+and+demand&N=18341>

Follow the Teacher's Guide to make sure students understand the vocabulary and the concept of a market economy. Students in this video created their own lemonade business. Inform students that they will be creating their own strawberry business plan. Then, watch the video a second time instructing students to pay attention to the details of how the girls established their business. Students can also use the following website to read more about Economics:

<http://www.socialstudiesforkids.com/subjects/economics.htm>.

### Part 2:

Students will plan their own fictitious strawberry business. This could be raising strawberries as a farm, operating a roadside market, or businesses that create/market strawberry-related products (cake, jam, ice cream, etc.). Ask students will they specialize in one product/crop or will they have several strawberry related products (or they might both farm and create products to sell). Have students work in cooperative groups to answer the following questions about their business. (*Questions taken from <http://www.entre-ed.org/teach/busplan.htm>.)*

1. How can you describe the business?...in only one paragraph, please
2. What is your product, or service?
3. Who will buy it?
4. Where should you locate the business?
5. How can you attract customers?
6. What is your competition?
7. How much should you charge for the products or service?
8. What advice do you need and who can provide it?

The teacher should meet with each group as they are planning their businesses.

### Part 3:

After students have their business plan completed, they will need to market their products. Explain that the word market has several definitions. In the video, marketplace and market price were discussed. Clarify to students that "marketing" means how the product is advertised, packaged, and presented to the consumer. Have students create a poster and a product container that markets their product. The poster should include a price for the product. You may want to have students look at magazine ads to assist them in planning their

posters. Once completed, have the posters and product containers displayed in an area of the school where all students can vote on which marketing campaign was best. Let the votes symbolize purchases for each product.

**Part 4:**

Using the votes from Part 3, have the students graph the results using a digital program (i.e. Microsoft Excel, Documents 2 for iPad). Explain to students that markets or stores, such as Wal-mart or Food Lion use this type of data collection and graphing to help them determine which products they will sell in their stores. Explain that the greater number of sells means a higher demand for the product. Using graph information, rank the products in order from greatest demand to least demand. As a class, discuss what aspects of the "winning" product made it successful.

**Part 5:**

Explain to students that every purchase made contributes to the local, state, national, and world economy. Strawberries are not a huge part of NC's economy; however, every dollar and job generated by the strawberry industry counts. Using the NC Department of Agriculture's "Cash Receipts from Farm Marketings by Commodity" <http://www.ncagr.gov/stats/economic/IncomePercent.pdf> or equivalent), students will add the values for multiple years to learn how much strawberry production has contributed to the NC economy. Note: Students can add the last 5 years or the last 10 years. Have students record this data in their journals. (USDA data for various states may be found at <http://usda.mannlib.cornell.edu/MannUsda/viewTaxonomy.do?taxonomyID=32>)

**Part 6:**

What are labor costs? In this part of the lesson, students will explore the concept of wages. Explain to students that a worker's wages also contribute to the economy when they spend their money.\*From "In Strawberry Fields" from <http://www.clover.okstate.edu/fourh/aitc/lessons/upper/strawber.pdf>, use "Hourly Wages Worksheet" and "Piece Work Worksheet." These two worksheets include multiplication, addition, and algebra to develop an understanding of income.

**Extension Activity:**

Compare the impact of the strawberry industry to other commodities produced in North Carolina.

**Background Information:**

Strawberry growers selling their berries have many choices in how they market their berries. They can sell directly to the public by pick-your-own or they can pick the berries and sell directly to the public on the farm, at a roadside stand, at a farmers market, or via subscription (also called "community supported agriculture" or "CSA" where the farmer contracts with consumer families to provide a certain amount of produce each week for a set fee, paid at the start of the season). They can also wholesale their berries to roadside stands, retail

markets, restaurants, schools, wholesale distributors, supermarket chains, etc., and they can also sell to processors, although there are not many processors for berries in our region.

Growers often combine several market outlets. If they sell to consumers, they may offer additional products at the farm (flowers, ice cream, etc.), which increases sales and helps bring people in. They may buy some of these but also may choose to add value to their own strawberries by turning them into products like jam, smoothies, pies, strawberry bread, or ice cream. These can be made by the farm itself or contracted out to others, perhaps even a neighbor who makes great pies. Two companies that have a business doing this are Hillside Orchard Farms ([http://retail.hillsideorchard.com/Wholesale\\_Information\\_2.html](http://retail.hillsideorchard.com/Wholesale_Information_2.html)) and D'Vine Foods (<http://dvinefoods.com/services.html>).

See “Detailed Flow Maps of Strawberry Marketing” in the “Resources” folder for schematic diagrams of strawberry marketing options.

#### Definitions of **market**:

The following definitions are taken from those at [www.dictionary.com](http://www.dictionary.com).

##### **noun**

- an open place or a covered building where buyers and sellers convene for the sale of goods; a marketplace: *a farmers' market*.
- a store for the sale of food: *a meat market*.
- demand for a commodity: *an unprecedented market for leather*.

##### **verb (intransitive; used without object)**

- to buy or sell in a market; deal.
- to buy food and provisions for the home.

##### **verb (transitive; used with object)**

- to carry or send to market for disposal: *to market strawberries every week*.
- to dispose of in a market; sell.

#### Definition of **marketing** (noun)

- the total of activities involved in the transfer of goods from the producer or seller to the consumer or buyer, including advertising, shipping, storing, and selling.

Websites to help with research:

<http://extension.psu.edu/business/ag-alternatives/horticulture/strawberry-production>

(note that some aspects of production methods are not relevant for our region)

[www.agmrc.org/commodities\\_products/fruits/strawberries/commodity-strawberries/](http://www.agmrc.org/commodities_products/fruits/strawberries/commodity-strawberries/) See especially the crop budgets and case studies

[www.entre-ed.org/teach/busplan.htm](http://www.entre-ed.org/teach/busplan.htm)

[www.ncstrawberry.com/docs/2008StrawberryBudget.pdf](http://www.ncstrawberry.com/docs/2008StrawberryBudget.pdf) This is a production budget. Pages 6-7 of this crop budget give marketing information. Note how much difference a few cents difference in pricing can mean to profitability.

[http://ncsu.edu/foodscience/extension\\_program/entrepreneurs.html](http://ncsu.edu/foodscience/extension_program/entrepreneurs.html) Getting started in a food business

<http://www.aces.edu/pubs/docs/H/HE-0753/HE-0753.pdf> Starting a Food Processing business

<http://agmarketing.extension.psu.edu/Processing/PDFs/ValAddKeySuccss.pdf> Keys to Success in Value-Added Agriculture (pdf version)

<https://attra.ncat.org/attra-pub/viewhtml.php?id=271> Keys to Success in Value-Added Agriculture (web version)

<https://attra.ncat.org/marketing.html#direct> All kinds of marketing publications (free downloads, usually) from the National Sustainable Agriculture Information Service

## **Assessment:**

**Part 1:** Teacher choice

**Part 2:** Business plan

**Part 3:** Poster and product container

**Part 4:** Spreadsheet and graph

**Part 5:** Journal entry

**Part 6:** Hourly Wages Worksheet

**North Carolina Strawberry Association – [www.ncstrawberry.com](http://www.ncstrawberry.com)**

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