Strawberries
...in a box!

A lesson plan for fourth graders
**Purpose**
The purpose of this lesson is to inform students about growing, planting and harvesting strawberries in NC by using research and project development.

**Subject Area Addressed**
English/Language Arts

**Common Core/Essential Standards**

**WRITING:**
- CC: Research to Build and Present Knowledge 7. Conduct short research projects that build knowledge through investigation of different aspects of a topic.

**SPEAKING AND LISTENING:**
- CC: Presentation of knowledge and Ideas 4. Report on a topic or text 5. Add audio/visual displays to presentations when appropriate to enhance the development of main ideas or themes.

**Vocabulary**
- flat
- harvesting
- pint
- quart

**Materials Provided**
“North Carolina’s ‘BERRY’ best...Strawberries!” and “Imagination Station–Create a Strawberry Farm Cereal Box Report”

**Materials Needed**
- **WEBSITE:** http://www.virtualfarmwalk.org/shockwave.html
- **ART SUPPLIES:** empty cereal boxes, white paper, index cards, crayons/markers, sales papers/ad with strawberry prices
Preparation
Collect and cover empty cereal boxes with white bulletin board paper.

Instructions
1. Take a survey of how many students have visited a farm. Discuss things that can be seen on a farm. Visit a farm in your area or take a virtual field trip to a farm. A Google search will provide the names of several sites with virtual tours. Be sure to review the entire site before sharing with the class. Have students work in small groups to share what they liked and disliked about the farm. Is it what they expected a farm to be?

2. Have students read “North Carolina’s “BERRY” best…Strawberries!” twice. On index cards, students write 5 facts from the article. For example: When customers visit a strawberry farm how do they purchase the berries? (Are they sold in pints, quarts, flats, pick-your-own, etc?)

3. Using “Imagination Station—Create a Strawberry Farm Cereal Box Report,” students will design individual (or group) cereal boxes. Review directions.

4. When cereal boxes are complete students give an oral presentation introducing their strawberry farms.

Extension Activity
Create and produce a commercial advertising your strawberry farm. Include friends to be a part of your video.

BACKGROUND INFORMATION
Have students visit http://www.ncstrawberry.org/growers.cfm or www.PickYourOwn.org to locate a farm in or near his/her county.

ASSESSMENT
Completed Project and Oral Presentation

ASSESSMENT KEY
Rubric
What are strawberries?

- Strawberries are the most popular fruit in the world.
- While there are more than 600 varieties of strawberries that differ in flavor, size, and texture, they all have the same characteristic heart shape, red flesh with yellow seeds piercing the surface, small, regal, leafy green caps, and stems that adorn their crowns.

Seeds

- Strawberries are known for their bright red color.
- According to the North Carolina Strawberry Association, the average strawberry has 150–200 seeds on its surface.
- Strawberries are the only fruit that have seeds on the outside.

Good For You!

- Strawberries are a sweet and natural snack. They are a great source of vitamin C, a nutrient that will keep kids healthy. Just 100 g contain a day’s supply of vitamin C.
- One serving of strawberries has more vitamin C than a whole orange. Strawberries are also a good source of potassium, which is also found in bananas.

Strawberry Facts

- Strawberry season in North Carolina usually begins in April and lasts through mid-June, about 4–6 weeks.
- There are three main varieties of berries grown in North Carolina. They are Camarosa, Chandler, and Sweet Charlie.
- Strawberries like a temperate climate, where it’s not too hot or not too cold. In the spring, bees will spread pollen from flower to flower.
- It takes about 30–45 days from flowering until the fruit are ready to be harvested. Strawberries are hand-picked because each fruit ripens at a different time. These delicate fruits are also easily bruised.

Nutrition Facts

<table>
<thead>
<tr>
<th>Serving Size</th>
<th>1 cup whole strawberries (144g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount Per Serving</td>
<td></td>
</tr>
<tr>
<td>Calories</td>
<td>46</td>
</tr>
<tr>
<td>% Daily Value*</td>
<td></td>
</tr>
<tr>
<td>Total Fat</td>
<td>0g</td>
</tr>
<tr>
<td>Saturated Fat</td>
<td>0g</td>
</tr>
<tr>
<td>Trans Fat</td>
<td>0g</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>0g</td>
</tr>
<tr>
<td>Sodium</td>
<td>1mg</td>
</tr>
<tr>
<td>Total Carbohydrate</td>
<td>11g</td>
</tr>
<tr>
<td>Dietary Fiber</td>
<td>3g</td>
</tr>
<tr>
<td>Sugars</td>
<td>7g</td>
</tr>
<tr>
<td>Protein</td>
<td>1g</td>
</tr>
</tbody>
</table>

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.
Imagination Station

STRAWBERRY FARM CEREAL BOX REPORT

After reading the article “North Carolina’s BERRY best...Strawberries,” cover and design a cereal box for your informative report on strawberries/strawberry farms.

INSTRUCTIONS

1. The front panel should include your name, the name of your strawberry farm and the name of your county. The picture should be related to strawberries.

2. The right panel should include activities on your farm (ex. hay ride), produce grown on your farm, and prices for activities and produce.

3. The left panel should include at least 3 facts you gathered from the strawberry article. Choose facts that will appeal to consumers.

4. The back panel should include a colorful, fun game, riddle, picture, puzzle, etc. that incorporates special features of your farm. It should TEACH about strawberries.

5. Inside the box, place a drawing or picture of your favorite strawberry snack.

6. Have fun creating your cereal box. Use crayons, markers, colored paper, stickers, cotton balls, or anything you can find. Please be neat and colorful. You may use three-dimensional items! Please review the grading rubric!

YOUR REPORT IS DUE: ________________________________

Be prepared to share your finished product with the class and explain all the sides.
<table>
<thead>
<tr>
<th>Component</th>
<th>4: Exceeds</th>
<th>3: Meets</th>
<th>2: Partially Meets</th>
<th>1: Does Not Meet</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRONT OF BOX: Title of farm Location of farm</td>
<td>Title of farm and picture is closely related to strawberries and country location.</td>
<td>Title of farm and picture is related to a strawberry and country location.</td>
<td>Title of farm and picture is not related to strawberries and somewhat indicates country location.</td>
<td>Does not include title or picture and does not indicate country location.</td>
</tr>
<tr>
<td>BACK OF BOX: Game, picture, riddle, etc.</td>
<td>The game and/or puzzle is detailed and connected to the strawberry farm.</td>
<td>The game and/or puzzle is somewhat detailed and connected to the strawberry farm.</td>
<td>The game and/or puzzle lack detail but show some connection to the strawberry farm.</td>
<td>The game and/or puzzle are not detailed and not clearly connected to the strawberry farm.</td>
</tr>
<tr>
<td>LEFT SIDE OF BOX: Did You Know</td>
<td>There are more than 3 facts and/or benefits of strawberries.</td>
<td>There 3 facts and/or benefits of strawberries.</td>
<td>There 1–2 facts and/or benefits of strawberries.</td>
<td>The information does not relate to the strawberry article.</td>
</tr>
<tr>
<td>RIGHT SIDE OF BOX:</td>
<td>List of detailed activities, produce, and price list of produce. The strawberry farm is described in great detail.</td>
<td>List of detailed activities, produce, and price list of some items. The information includes some details about the strawberry farm.</td>
<td>List of activities, produce. They are minimally described. Very little information available for prices.</td>
<td>The list of activities does not include pricing and/or produce/act. not listed.</td>
</tr>
<tr>
<td>NEATNESS/COMPLETENESS</td>
<td>The cereal box is completely and attractively covered with paper. All items are written or drawn neatly. The box looks appealing enough to visit the farm!</td>
<td>The cereal box is covered with paper. Most items are written or drawn neatly. The box looks attractive.</td>
<td>The cereal box is mostly covered with paper. Some items are written or drawn sloppily.</td>
<td>The cereal box is partly covered with paper. Most writing and drawings are sloppy and hard to read.</td>
</tr>
</tbody>
</table>