

**Grade Level: 1**

**Title: Strawberries for All! (of North Carolina and the World) (anytime)**

**Purpose:**

Students will recognize earth materials and landforms best suited for planting crops

**Subject Area(s) Addressed:**

Science, Language Arts, Social Studies

**Common Core/Essential Standards:**

**Social Studies:**

1.G.11 Use geographic tools to identify characteristics of various landforms and bodies of water.

1.G.1.3 Understand the basic elements of geographic representations using maps (cardinal directions and map symbols).

**Science:**

1.E.2.1 Summarize the physical properties of Earth materials, including rocks, minerals, soils and water that make them useful in different ways.

1.E.2.2 Compare the properties of soil samples from different places relating their capacity to retain water, nourish and support the growth of certain plants.

1.L.1 Ecosystems: Understand characteristics of various environments and behaviors of humans that enable plants and animals to survive.

1.L.1.2 Give examples of how the needs of different plants and animals can be met by their environments in North Carolina or different places throughout the world.

**Literacy:**

W.1.7 Participate in shared research and writing projects (e.g., explore a number of “how-to” books on a given topic and use them to write a sequence of instructions).

SL.1.1 Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.

SL.1.1a Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).

SL.1.1b Build on others’ talk in conversations by responding to the comments of others through multiple exchanges.

SL.1.1c Ask questions to clear up any confusion about the topics and texts under discussion.

SL.1.2 Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

SL.1.4 Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.

### **Vocabulary:**

beach	research
body of water	rocks
landforms	sand
map	soil
mountains	symbol

### **Materials Needed:**

Strawberry garden or strawberry plants in pots  
Map of locations of strawberry growers in North Carolina (see [www.globalshrinking.com/client/ncstrawberry/map/](http://www.globalshrinking.com/client/ncstrawberry/map/))  
Map of North Carolina (find online if you don't have one)  
Pictures of strawberry farmers in a variety of locations (a Google image search for "strawberry farmer" will bring up great pictures from all over the world)

### **Teaching Strategy:**

Having already planted their garden/pots, in this lesson the students will explore beyond their garden and into the state, country and world beyond.

Have students bring in photos of themselves in different parts of North Carolina, the United States, North America, and/or the world.

Using a Google map of North Carolina and pictures they brought to class, have students share where they have visited or lived. Mark the spots where they have traveled. Discuss what landforms are in those locations and if they would be appropriate to grow strawberries. Do a Google search or use NC Strawberry Association Website ([ncstrawberry.com](http://ncstrawberry.com)) to see if that area does have strawberry farmers. Put a sticker or symbol on the map every time you find a strawberry farm.

Show local farm pictures and pictures from your own garden/pots. What do you see in the pictures that allow the strawberries to grow? (soil, sunshine, water, space) Besides our garden/pots, where else do you think someone could grow strawberries? Make a list of places. Where in NC, the United States, North America, or the World, do you think strawberries *wouldn't* grow? Why?

## **Extension Activity:**

Discuss with parents/grandparents/ guardians landforms they have observed in places they have visited.

## **Background Information:**

Strawberries are grown all over the world, in every continent except Antarctica, in many climates and by many different production systems. They don't grow very well in hot weather, so in hot climates (like in Florida), they are often grown as a winter crop. In some areas, raising them in greenhouses or tunnels gives a longer season or a higher yield.

For many years, the United States was the world's largest producer, but China has recently claimed to surpass the U.S. in strawberries. Spain, Turkey, Mexico, and Egypt are also major producers, each producing an amount equaling about 20-25% of the U.S. crop.

In the United States, more than 80% of the crop comes from California, mostly in coastal areas between San Francisco and Los Angeles (see [www.californiastrawberries.com/about\\_strawberries](http://www.californiastrawberries.com/about_strawberries) or [www.calstrawberry.com/commission/varieties.asp](http://www.calstrawberry.com/commission/varieties.asp).) Florida is the next largest producer with about 11% of the U.S. strawberry crop, with production concentrated near Tampa in the Plant City area. Florida strawberries are a winter crop, planted in the fall and harvested December-March/April. Both these states sell strawberries all over the country. (Some Mexican strawberries are also imported during the winter). North Carolina is the third largest producer in the U.S., though its crop is less than 2% of the national total. Most of the North Carolina crop is marketed right here in the state, directly to consumers or to local stores and supermarkets. Oregon grows about as many berries as North Carolina does, but most of the Oregon berries are processed into jam, yogurt, ice cream, juice, etc. Every other state has some production, mostly for local markets and consumers.

The map at [www.globalshrinking.com/client/ncstrawberry/map/](http://www.globalshrinking.com/client/ncstrawberry/map/) shows where NC Strawberry Association member farms are – including in many other states. (Not all NC farms are included, as not all are members.). If you zoom in to a farm in satellite view/street view, you can sometimes see the actual strawberry fields.

North Carolina strawberries can sometimes be found in the stores December – March (we have one larger producer who grows them in high tunnels), but our season is generally mid-April-June. If you buy strawberries in the store, look at the label to see where they come from.

## **Assessment:**

Observation of participation

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

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