

North Carolina Geography

Overview

Students will explore the different regions of North Carolina and how the topography of the region affected economic, social, and political development by completing one of the project options attached, including a 3-D map of North Carolina, a puzzle of North Carolina, or a travel brochure for one region of North Carolina.

Grade

8

North Carolina Essential Standards for 8th Grade Social Studies

- 8.H.1.1 - Construct charts, graphs, and historical narratives to explain particular events or issues.
- 8.G.1.1 Explain how location and place have presented opportunities and challenges for the movement of people, goods, and ideas in North Carolina and the United States.
- 8.G.1.2 Understand the human and physical characteristics of regions in North Carolina and the United States (e.g. physical features, culture, political organization and ethnic make-up).
- 8.G.1.3 Explain how human and environmental interaction affected quality of life and settlement patterns in North Carolina and the United States (e.g. environmental disasters, infrastructure development, coastal restoration and alternative sources of energy).

Essential Questions

- Compare and contrast the various regions of North Carolina.
- How did North Carolina's coastline affect settlement?
- How did the lack of navigable rivers impact settlement in North Carolina?
- How did the lack of fertile soil and resources impact settlement in the region?
- How have North Carolinians modified, used, and adapted to the physical environment?

Materials

- North Carolina textbook and resources
- Whatcha' Know Warm-Up and Answer Key, attached
- Getting to Know North Carolina's Geography, worksheet and answer key attached
- Creating a 3-D Map of North Carolina, assignment attached
 - Modeling mixture (recipe attached)
 - Squares of plywood, paint, and other art supplies for map creation
 - Outline of NC, attached (offers a visual for students as they recreate the shape using plywood (for the 3-D maps)
- Construction paper or poster board (if puzzle project is assigned)
- Geographical Regions of North Carolina & sample rubric, assignment attached

Duration

- One 60 minute class period
- Additional class and/or homework time will be needed for creation of the 3-D map or puzzle; teachers should use their discretion regarding the amount of time provided

Teacher Preparation

Teachers who choose to have classes complete the 3-D map should acquire the necessary supplies in advance (plywood, paints, and modeling mixture ingredients). Sending a letter home to solicit donations several weeks before beginning the project is recommended. Teachers may want to request a school volunteer to join class on the day the maps are mixed and molded.

Procedure

Warm Up: Whatcha' Know?

1. As a warm-up and to determine some of what students already know about North Carolina's geography, hand out the attached "Whatcha' Know?" worksheet. Tell students that they are to circulate around the classroom and find other students who can give them the correct answers. Explain that they must find a different student answer each question. Also remind students of classroom expectations such as respect, safety, participation, etc. as they get ready to circulate. You may want to offer a prize to the first student who gets all of the correct answers while following directions.
2. Once several students have finished, instruct them to return to their seats and go over the correct answers (see attached key). Tell students that in this lesson, they will be getting to know more about the geography of the state in which they live.

Getting to Know the Geography of North Carolina

3. Next, place students into pairs or small groups. Distribute the attached "Getting to Know the Geography of North Carolina" worksheet to each student. Students should use their textbook, previous class notes, the Internet, or any other source the teacher makes available to find the correct information pertaining to North Carolina's regions. Options for completing this assignment include:
 - Have each partner or group complete all of the information; go over correct answers as a class to ensure accuracy
 - Assign particular partners/groups one particular region or one particular piece of information; have them present their findings to the remainder of class

Creating 3-D Maps or Puzzles

4. Next, tell students that they will be applying what they have learned about North Carolina's geography in a creative way. Place students into small groups, and hand out the attached 3-D map assignment. Go through the assignment with students, letting them know the appropriate dates to fill in. Ensure students know to dress appropriately or bring an apron on days when molding or painting will occur. As the maps take approximately one week to dry before they can be painted, continue with your unit plan in the interim.
5. **Alternative:** Teachers who do not have the time or resources to devote to a 3-D map can instruct students to create puzzles on the state of North Carolina. On cardboard, poster board, or construction paper, students can add the same information and creativity to a map on paper that they then cut into puzzle pieces. (Teachers may want to laminate the puzzles for sturdiness.) Since 4th grade teaches North Carolina history as well, students can be told they are completing this as a community service activity. Teachers can send the puzzles to local elementary schools of the students' choice to assist the younger students in learning about North Carolina's land regions.
6. As a culminating discussion or writing assignment, ask students to reflect on:
 - Now that you have a better understanding of the geography of North Carolina, what opportunities and challenges do you think existed for the movement of people, goods, and ideas throughout the state?
 - In what way has North Carolina's geography impacted (and influenced) the state's economy throughout history?

- How do you think the geography of North Carolina affected quality of life and settlement patterns throughout history?
- What do you think is unique about North Carolina's geography compared to the rest of the United States?

Name: _____

Whatcha' Know?



Find five different students in this class
WHO CAN TELL YOU...

1...the state that borders North Carolina on the north

What did they tell you? _____ Who told you: _____

2...what North Carolina ranks among the 50 states in size

What did they tell you? _____ Who told you: _____

3...what North Carolina's three main land regions are

What did they tell you? _____

Who told you: _____

4...what the two divisions of North Carolina's Coastal Plain are called

What did they tell you? _____

Who told you: _____

5...the total land area of North Carolina

What did they tell you? _____ Who told you: _____

6...the state that borders North Carolina on the west

What did they tell you? _____ Who told you: _____



Name: _____

Whatcha' Know?



Find five different students in this class
WHO CAN TELL YOU...

1...the state that borders North Carolina on the north

What did they tell you? _____ Who told you: _____

2...what North Carolina ranks among the 50 states in size

What did they tell you? _____ Who told you: _____

3...what North Carolina's three main land regions are

What did they tell you? _____

Who told you: _____

4...what the two divisions of North Carolina's Coastal Plain are called

What did they tell you? _____

Who told you: _____

5...the total land area of North Carolina

What did they tell you? _____ Who told you: _____

6...the state that borders North Carolina on the west

What did they tell you? _____ Who told you: _____

Whatcha' Know ANSWER KEY

- 1...the state that borders North Carolina on the north: **Virginia**
 - 2...what North Carolina ranks among the 50 states in size: **28th**
 - 3...what North Carolina's three main land regions are: **Coastal Plain, Piedmont, Mountains**
 - 4...what the two divisions of North Carolina's Coastal Plain are called: **inner coastal plain and outer coastal plain called the Tidewater; the eastern limit of the Coastal Plain is marked by the Outer Banks**
 - 5...the total land area of North Carolina: **approximately 48,411 square miles**
 - 6...the state that borders North Carolina on the west: **Tennessee**
-

Modeling Mixture

Ingredients

- 2 cups salt
- 1 cup flour
- 1 cup water

Mix ingredients until smooth and pliable.

Procedure

- On the plywood, draw the outline of the map to be modeled. Apply a thin layer of the modeling mixture (no more than $\frac{1}{4}$ inch thick) to the entire surface of the map area. Depress the clay in areas of rivers, lakes, etc. Add additional layers of clay to form the added height for mountain ranges, hills, highlands.
- Allow the map to dry thoroughly. It takes at least a week, and longer if some areas are particularly thick. Let it dry at room temperature.
- Paint the map surface as desired with tempera paints or water colors. It is more practical not to paint on labels, but rather to write the labels on paper and tape the paper labels to the map.
- Strings may be attached to the map and run to objects displayed on a table below to match cities or geographical areas to samples of their natural resources, major manufactured products, etc.

Getting to Know the Geography of North Carolina

	Coastal Plain		Piedmont	Mountains
	Tidewater	Inner Coastal Plain		
Location				
Significant Features				
Lakes				
Rivers				
Cities				
Universities				
Soil				
Historic Sites				
Economy				

**Getting to Know the Geography of North Carolina
Answer Key**

	Coastal Plain		Piedmont	Mountains
	Tidewater	Inner Coastal Plain		
Location	Extends 20-30 mi. inland from Atlantic Ocean	Stretches from Tidewater to the Fall Line	Between the Fall Line and the Blue Ridge Mtns.	Between the Piedmont and Tennessee
Significant Features	Barrier islands, sounds, three capes, seashores, swamps, ponds and streams	Sandhills area for golf courses	Rolling hills, hardwood forests, mineral deposits, swiftly flowing streams	Smoky Mts., Mt. Mitchell, Black Mt. Blue Ridge Mts., Appalachian Mts.
Lakes	Lake Mattamuskeett, Lake Waccamaw, Phelps Lake (3 largest natural lakes) All of North Carolina's natural lakes are in this region.		Lake Gaston, Lake Norman	Fontana Lake, Hiwassee Lake,
Rivers	Neuse River, New River, Cape Fear, Tar River, Roanoke River		Yadkin-Pee Dee River, Catawba River	Hiwassee River, Little Tennessee, French Broad
Cities	Elizabeth City, Edenton, New Bern, Wilmington	Fayetteville, Goldsboro, Rocky Mount, Greenville	Charlotte, Raleigh, Greensboro, Winston-Salem	Asheville, Boone, Cherokee,
Universities	Elizabeth City State, UNC-Wilmington	East Carolina University, UNC-Pembroke	Duke University, NC State, UNC-Chapel Hill,	Western Carolina University, Appalachian State University, UNC-Asheville
Soil	Sandy beach areas, swamps, poorly drained areas, salt marshes	Sandy	Rich Red Clay	Rocky with mineral deposits
Historic Sites	Tryon Palace, Fort Macon, Battleship <i>North Carolina</i>	Town Creek Indian Mound	Salem, Guilford Courthouse Battlefield, Museums in Raleigh	Biltmore Estate, Cherokee Indian Reservation,
Economy	Commercial fishing, tourism, recreation, phosphate deposits	Agriculture, manufacturing, lumber, tobacco products, textiles, chemicals, paper	Manufacturing, livestock, agriculture	Tourism, mining, industrial, agriculture, lumber, recreation, Christmas tree farms

Group Members: _____

Creating a 3-D Map of North Carolina

You and your group will be responsible for creating a 3-D map of North Carolina. Your map must include/illustrate the following:

- 3 regions of NC (Coastal Plains, Piedmont, Mountains)
- 3 capes of NC coast (Cape Fear, Cape Hatteras, Cape Lookout)
- 5 sounds of NC (Albemarle, Bogue, Core, Currituck, Pamlico)
- 6 lakes (Gaston, Phelps, Mattamussett, Waccamaw, Norman, Fontana)
- 7 rivers (Cape Fear, Catawba, Little Tennessee, Neuse, Roanoke, Tar-Pamlico, Yadkin-Pee Dee)
- 2 mountain ranges (Great Smokey's, Blue Ridge)
- 7 or 8 cities (Asheville, Charlotte, Fayetteville, Morehead City, Raleigh, Wilmington, Winston-Salem and the students' city if not listed already)
- Map title
- Map key
- Creativity

Your group is free to add additional features and information onto the map as well.

Time Line:

Date	Activity
_____	Begin researching information on the geography of North Carolina. Examine various maps, and begin to determine where the above landforms and cities are located within our state. Also, as you research, pay attention to any interesting North Carolina places that you might wish to add to your map.
_____	Prepare a rough draft of the 3-D map you will be creating by sketching out what you will be including on the attached outline of North Carolina. Be as detailed as possible. Also, begin to brainstorm colors you wish to use when painting your map, as well as other details you will add for creativity.
_____	On the plywood given to you by your teacher, you will find an outline of North Carolina in pencil. Your teacher will provide modeling mixture that you will spread out on the outline, no more than ¼ inch thick. Once your group has spread the mixture, you will begin depressing the clay to form the rivers, lakes, etc. that you are required to show on your map. Additional clay will be available for adding to your map and creating mountain ranges, hills, highlands, etc. You can also use objects of your choice to mark into the clay. Your map will require one week to dry. During this time, continue discussing with your group the various ways you will paint your map and the details you will add to make it clear, creative, and informative.
_____	You will have two class days to paint, label, and add any additional details to your map.
_____	Maps will be displayed in the _____ (library, classroom, lobby, etc.) for students and community members to enjoy, so make them great!

What questions do you have about this assignment?

Geographical Regions of North Carolina

“Visit HERE!”

Congratulations! You have recently been hired to work for NC’s Travel and Tourism Department. Your job is to persuade people to visit one of our great state’s three major geographical regions. To do this, your boss has instructed you to create a pamphlet on a particular region of North Carolina.

Your region is: _____.

First, research the history of our state’s geographical impact on both settlers and the early economy. What did colonial North Carolina’s land have to offer settlers? In what ways did settlers build a life here? In what ways did settlers use the land to grow the colony’s economy? Include a brief history section in your pamphlet. Then, research your assigned region of North Carolina as it is operating today and use the information you learn to complete your pamphlet.

Once you’ve gathered all of your information, you’ll want to design your pamphlet to be as artistic and eye-catching as possible. Your pamphlet will be published and placed in NC’s Welcome Centers, Rest Areas, and other places of interest throughout our great state, so make it a good one!

Information to include in your pamphlet:

1. History of the settlement of NC, including:
 - Information about why people settled here
 - How the settlers used the land here
 - Impact of the geography on the economy
2. Map of the state, with the region you have researched highlighted
3. Current statistics of the region, such as population, age and income, economic growth, major imports and exports within the region, etc.
4. Climate, soil, crops and other resources of the region
5. Major cities within the region
6. Rivers and other water sources within the region
7. Historic Sites and other attractions within the region
8. Major jobs and industries within the region
9. Economic Outlook of the region
10. Cultural diversity of the region

Feel free to use your creativity and include any other facts or interesting information that you think is important!

Sample Rubric for grading brochures:

_____ **Information from research** (70 Points)
(7 points per topic above)

_____ **Level of persuasion** (10 Points)
(makes me interested in the region/want to visit)

_____ **Artistic merit** (20 Points)
(includes visuals such as pictures, is creative, is laid out neatly and is visually appealing, etc.)

North Carolina

