



# Social Studies

## Competencies and Activities

### Grade 4

The information and activities in this lesson will help students understand the history and geography of Western North Carolina and the importance of transportation to remote mountain areas.

While the lesson emphasizes social studies competencies related to North Carolina geography and history, students will also develop language skills through creative writing, poetry, and factual narrative.

**Competency Goal 1/Objective 1.01:** Locate, in absolute and relative terms, major landforms, bodies of water and natural resources in North Carolina.

*Tweetsie Site:* Map of original East Tennessee & Western North Carolina Railroad and current map of Watauga County

*Activity:* Track the area traveled by the East Tennessee & Western North Carolina Railroad in the 1920s. Locate Watauga County on the North Carolina map, show the location of Tweetsie. Which landforms in both areas influenced the train route? (Teacher note: river, valleys, mountains, and small towns)

**Competency Goal 1/Objective 1.04:** Evaluate ways the people of North Carolina used, modified, and adapted to the physical environment, past and present.

(Teacher note: Train tracks followed the contour of the mountains and necessitated the building of tunnels and trestles to accommodate the high elevations and steep grades. The tracks were then built close to the river, which at times was problematic—tracks were washed-out during rainy seasons, and there were mud and rockslides, which created problems for passage of the trains.)

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**Competency Goal 3/Objective 3.04:** Compare and contrast ways in which people, goods, and ideas moved in the past to how they move today.

(Teacher note: Review opening resource materials, specifically section titled “Tweetsie: the ‘Onliest’ Train.” The information and activities in this lesson will help students understand the history and geography of Western North Carolina and the importance of transportation to remote mountain areas. While the lesson emphasizes Social Studies competencies related to North Carolina geography and history, students will also develop language skills through creative writing, poetry, and factual narrative.)

*Tweetsie Site:* Tweetsie (or classroom activities before or after Tweetsie visit)

*Activity:* Display the 1938 photograph East Tennessee and Western North Carolina Engine #11 located in the opening resource materials section. Point out the variety of cargo Tweetsie transported across the mountains. Ask the following questions:

- What do you think is happening in the picture?
- How does the picture indicate the importance of Tweetsie to mountain communities?
- How is this train different from the train you see at Tweetsie Railroad today?

*Activity:* Using the topographic map in the resource materials section, have students plot a route for Tweetsie from Johnson City to Boone based entirely on existing land forms. Do not consider today's towns or highways. Have students consider the following:

- Tweetsie has to pull heavy loads. She needs to avoid steep mountains whenever possible. Even if she can climb a steep route, she has to worry about coming down the other side too fast. Tunnels were used to go through some hills and mountains. Tunnels are very expensive, difficult, and dangerous to build. Areas beside rivers and streams are more level than mountain ranges. However, mountain areas often have heavy rains and flooding. Also, whenever Tweetsie crosses a stream (creek or river), she must have a bridge or trestle. Bridges and trestles must support tremendous weight (grain and cargo), so they are expensive and difficult to build.
- Your map will not indicate rocks and rock formations, though mountains are formed from movement of rock. However, the men who built Tweetsie’s original tracks had to consider how to blast through rock and which rocks would support the weight of the train without sliding downhill.
- Tweetsie originally carried iron ore and timber. She also carried many passengers and cargo items from town to town. Therefore, you must plan your route to go through towns and settlements. You must also be sure to go to Roan Mountain, the site of the Forge Mining Company, and Cranberry, the site of the Foundry.
- When students have completed their routes (individually or in groups), have them compare their work to the actual route. Map on page 44-45 of *Tweetsie Country*. (See Resource Section)
- Next compare each student’s work and the actual route map with a highway map showing modern routes across the mountains.

*Activity:* Have each student carefully read the Carrie Smith letter found in the Resource Section. This is a fictional letter intended to give students indications of the remoteness of the mountain area, and the importance of Tweetsie to the people along its route.

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Have students write a response to Carrie based on their experience riding Tweetsie in the 21st century. They should emphasize the difference in transportation and communication today, compared to the time Tweetsie served this mountain area.

*Activity:* Have students write a poem about Tweetsie, yesterday and today.

*Activity:* Remind students that transportation and transportation workers have contributed to the development of our state and nation. Students may be more familiar with the railroad in the settlement and development of the Western United States than they are with railroads in North Carolina.

Divide the class into the following groups to consider transportation options during various historical periods as compared to today.

**GROUP 1:** The year is 1890. You have just opened a new cotton mill in the Burlington, North Carolina, area. Your problem is that you have to get raw cotton (in bales that weigh 1000 pounds) from Eastern North Carolina to your factory. You also have to ship the cloth you make to the port at Wilmington. Describe in detail how you will accomplish these tasks.

**GROUP 2:** The year is 1960. You have opened a new furniture manufacturing business in High Point, North Carolina. You have to import large quantities of lumber from South America, and obtain other lumber from mills in Western North Carolina. The South American lumber comes by ship to the State Port at Morehead City, North Carolina. You also have to ship your finished products to dealers throughout America and overseas. Describe how you will accomplish these tasks.

**GROUP 3:** It is the current year. You have opened an electronics business in Raleigh, North Carolina. You manufacture very technical equipment for hospitals. At times, you have to be sure a piece of equipment is delivered anywhere in the country within 24 hours. Other times, you ship enough equipment to outfit a complete, new hospital. The heaviest equipment you make weighs only 100 pounds. Describe how you will use available transportation for your business.

*Activity:* List all modes of transportation available in your community. Begin with ways you may travel as an individual, then consider your family's travel within the community. Finally, consider how you may travel across the nation and around the world.

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# Social Studies Competencies and Activities

**Competency Goal 6/Objective 6.01:** Explain the relationship between unlimited wants and limited resources.

(Teacher note: The East Tennessee & Western North Carolina Railroad was needed to transport iron ore, logs, lumber and passengers. There were not many ways in which these goods could be transported across such a mountainous terrain, so the railroad was important to transport of limited resources.)

**Competency Goal 7/Objective 7.02:** Analyze the effect of technology on North Carolina's citizens, past and present.

(Teacher note: The use of trains in North Carolina and throughout the world was important to the economy. Goods were transported from one area to another with relative ease. Transportation of goods and people were critical until the late 1930s when automobiles became more popular and attainable.)

## *Vocabulary:*

East Tennessee & Western  
North Carolina Railroad

Tweetsie

landforms

natural landforms

valley

contour

elevation

trestle

tunnels

unlimited wants

limited resources

terrain