

CSS Georgia 8th Grade STEM Lesson Plan

Theresa Luciano

Objective

Students will demonstrate knowledge of the history of the CSS Georgia by creating three products that are either Visual, Kinesthetic, and/or Auditory from the choice board menu provided.

Standards

Social Studies

SS8H6 The student will analyze the impact of the Civil War and Reconstruction on Georgia

b. State the importance of key events of the Civil War; include Antietam, the Emancipation Proclamation, Gettysburg, Chickamauga, the Union Blockade of Georgia's coast, Sherman's Atlanta Campaign, Sherman's March to the Sea, and Andersonville.

SS8G1 The student will describe Georgia with regard to physical features and location.

c. Locate and evaluate the importance of key physical features on the development of Georgia; include the Fall Line, Okefenokee Swamp, Appalachian Mountains, Chattahoochee and Savannah River, and barrier islands.

English Language Arts

ELAGSE8W2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

ELAGSE8W4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

Mathematics

MGSE8.G.9 Apply the formulas for the volume of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.

Science

S8P3 Students will investigate the relationship between force, mass, and the motion of objects.

b. Demonstrate the effect of balanced and unbalanced forces on an object in terms of gravity, inertia, and friction.

c. Demonstrate the effect of simple machines on work.

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Materials Needed by Students

Depending on student selection, activity supplies will vary

- Poster board
- 8x11 Copy paper
- Computer access
- Internet access
- Scrapbooking materials
- Coat hangers
- String
- Recording device (camera, phone, tablet)

Time Frame

1-2 weeks / Ten – 55 minute blocks / Five – 90 minutes blocks

Students are given the menu as the unit is started. The teacher will go over all of the options for that content and have students select their three activities in a row or a column on the menu. As the teacher presents lessons throughout the week, he/she should refer back to the board choices associated with that content.

Name _____ Date _____

List the numbers of three activities you plan to complete.
 Your selections must form a tic-tac-toe (across, down, or diagonal).

My Selection Numbers: #1 - _____ #2 - _____ #3 - _____

Project Due Date: _____

<p style="text-align: center;">1</p> <p>Create an Aurasma of a Confederate soldier talking about life in Savannah GA during that time period and working on the iron clad CSS Georgia. Video should be 1-2 minutes in length. Soldier should look like a Confederate soldier.</p>	<p style="text-align: center;">2</p> <p>Create a Propaganda Poster for the Ladies Gunboat Society fundraising for the iron clad CSS Georgia. Provide at least 3 reasons why the iron clad is needed. Size of a standard poster board; contains both words and pictures; colorful and neatly done; Name should be written on the back</p>	<p style="text-align: center;">3</p> <p>Create a Stand Alone PowerPoint about the 170 Dahlgren and 6-4" Brooke projectiles recovered from the CSS Georgia. Must have at least 10 informational slides including what the projectiles are, why were they on the CSS GA, calculate the volume of the two types of projectiles and the total volume that was on the CSS GA & about the recovery of them. No more than 10 words per page; slides must have color; no more than one graphic per page</p>
<p style="text-align: center;">4</p> <p>Design and build a small scale working device using simple machines to bring raise the CSS Georgia from the Savannah River. Provide calculations of amount of force necessary to raise the iron clad.</p>	<p style="text-align: center;">5</p> <p>Create a video game using Construct 2 software with the goal of recovering artifacts from the bottom of the Savannah River from the CSS Georgia. Research the types of artifacts that have been actually recovered to create your game. Must have at least 20 different artifacts.</p>	<p style="text-align: center;">6</p> <p>Create a Tourist Brochure to visit Savannah must include information for at least 5 sights/places to visit/events (one being the CSS Georgia) Must be a 8.5" x 11" paper in three-fold format; front fold has title and picture; must have both pictures and written text; can be created on computer; cite sources</p>
<p style="text-align: center;">7</p> <p>Create a CSS Georgia WebQuest Must quest through at least five high quality Web sites; Sites should be linked in a Word or Google document; At least three questions for each Web site</p>	<p style="text-align: center;">8</p> <p>Create a Sea Chanty (Song/Rap) that soldiers would sing while working on the CSS Georgia. Words must make sense; Can be presented to class or recorded; Written words must be turned in on due date; Should be at least 2 minutes in length.</p>	<p style="text-align: center;">9</p> <p>Design and build your own Iron Clad using SketchUp software. Design can then be 3D printed or create a physical model. Must submit model and the following information: Your Iron Clad's name; Compare your Iron Clad to the actual CSS Georgia's physical measurements and amount of weaponry onboard.</p>