A Look through Time

Grade Level
- 6-12

Timeframe
- 1-2 hours

Materials
- Computer with Internet access
- Journal
- Rubric

Key Words
Artifact, Industrial Revolution, Ironclad, Timeline, Turret

Activity Summary
This lesson highlights the similarities and differences between Civil War ironclads.

Learning Objectives
To develop a timeline of the construction of Civil War ironclads.

Background Information
The Civil War was the first war to occur after the industrial revolution. There were many new advances and changes in industrial and technological development. However, during the Civil War, the South was at a distinct disadvantage due to a lack of raw materials and industrial facilities. Despite their disadvantage, the South set out to build a unique ship that was designed to win the war. It was an ironclad. Ironclads had been built before, but not in the U.S. They were not the standard fighting ship. Wooden ships had ruled the seas for centuries. However, the era of the wooden ship was about to come to an end.

When the Confederates captured Norfolk, they took control of the shipyard. In the river of the shipyard sat the burned hull of the USS Merrimack. It had been set ablaze by Union troops to keep it out of Confederate hands. However, the Confederates had different plans. They raised the hull and started construction of an ironclad, which they named CSS Virginia. Soon the Union heard of the ironclad and issued a call for proposals to build their own ironclad, which became the USS Monitor.

In this activity, you will explore how the introduction of ironclad ships affected the outcome of naval battles, a naval blockade, as well as changing naval history. They will learn about the unique design of the Union and the Confederacy ironclads and how they were built. You will research the building and naval actions of the first ironclad ships and then create a timeline of the USS Monitor and the CSS Virginia from conception to sinking.
Suggested Prerequisite Experience

NOTE: If technology is not available, print images from this document to use in a paper timeline.

Teacher Prep

- Visit http://monitor.noaa.gov/150th to learn more about the USS Monitor and to view images that students may use in project.
- Visit http://www.livebinders.com to familiarize yourself with how to use Livebinders.
- Create a LiveBinder for student use.
- Review suggested resources and/or conduct a search for additional resources for each topic that best meets your students' reading levels. Add them to the students' LiveBinder.
- Add an “Images” tab to LiveBinder to include drawings, paintings, and photos.
- Introduce to Livebinders. Instruct students on how to use Livebinders, such as how to copy, paste, and save images.
- Demonstrate how to use TimeToast.com to create an online timeline (Teacher will need to set up an account(s).)
- Copy and distribute chart for students to complete with dates and information about the building and action of each of the ironclads.
- Print photos of 1862 turret (photo B—to right) and 2002 turret (photo A) for each student (or download the images from website to view as a class on computer screen or TV).

Vocabulary

**ARTIFACT** – Any object made by humans, typically an item of cultural or historical interest

**INDUSTRIAL REVOLUTION** - The rapid development of industry in the late 18th and 19th centuries, brought about by the introduction of machinery to produce products

**IRONCLAD** – A steam-powered warship constructed of wood and covered with iron plating

**TIMELINE** - A graphic representation of the passage of time as a line

**TURRET** – On a warship, a tower-shaped structure heavily armored, usually rotating horizontally and containing mounted guns and crew

http://sanctuaries.noaa.gov/education
Activity Overview

After engagement activity, students in pairs or small groups, research the USS Monitor and the CSS Virginia using text and Internet resources. Students will complete a chart writing dates and details for each significant event. After completion of their chart, students review each chart and come to a consensus on ten items that they feel are the most important to include in a timeline. Each item is summarized, and using the summary and images/graphics, an interactive timeline is created on Timetoast.com. Images may be in the form of drawings, paintings, and/or photographs.

Assessment/Grading

A rubric is provided to aid in scoring the project based on the effectiveness of the project in answering the project questions, thoroughness of research, selection of items to include on the timeline, summaries, graphics, and completion of the timeline.

Time Management Tips

- Set predetermined time for research, summaries and for creating the timeline. Assign one student the job of timekeeper for the group.
- To reduce the amount of time spent surfing the Internet, create a LiveBinder that is student friendly and has several tabs identifying information found in the sources, as well as graphics from http://monitor.noaa.gov/150th or other sites.

Image Gallery—Visit http://monitor.noaa.gov/150th for more images:
A Look through Time
Class Activity

Engage
1. In your group, view photograph A. This is a photo of a recovered Civil War artifact.
2. Discuss the artifact with your group, come to a consensus on the identity of the artifact, and explain its possible uses. Record answers in your journal.
3. As a group, view photograph B. This image is of the Civil War artifact in its original condition in 1862. Discuss in your group any similarities and differences observed in the two photos. Explain why the artifact might look so different. Record answers in your journal.
4. Discuss to determine what or who might have made this artifact? Record.
5. As a group, create a K-W-L chart and list everything you know about the USS Monitor and the CSS Virginia (also known as the Merrimack).
6. The Monitor and the Virginia were known as ironclads. Develop a definition of an ironclad.
7. At the onset of the Civil War, there were only wooden ships. Discuss how an ironclad ship might fare against a wooden ship. Who would win in a battle? Would an ironclad be able to win a war against many wooden ships? Why or why not?

Explore
8. Individually, conduct research on the Monitor and the Virginia. Learn why they were built, when they were constructed, how they differ, what battles they participated in, what happened to them, and anything else that would be relevant to each ship. Add the information to your K-W-L chart.
9. Search for images that help to tell the story of each ship.
10. Complete a chart or concept map to organize your information.

Explain
11. Once each group member has completed their chart, discuss as a group what you have each learned.
12. As a group, come to a consensus to determine the criteria for choosing the ten most important events for the timeline. Use the list of criteria to score each item.
13. As a group, come to a consensus to determine the ten most important events in each ship’s life.
14. For each event, write the date of the event, an appropriate title, and a 60-word summary. The summaries may not exceed 60 words, so each sentence must be well thought out and every word carefully chosen.

Elaborate
15. Use those ten events to create an interactive timeline with the help of http://www.timetoast.com. If Internet is not accessible, then design a paper timeline. On the timeline, be sure to include the dates in chronological order, their titles and summaries.
16. Go through all the images collected and determine which images are appropriate for each event. Add images to the timeline.

Evaluate
17. When complete, present your group’s timeline to the class. Be ready to defend why you chose the events on your timeline.

Extend
18. There were many other new and innovative technological advances made during the Civil War. Explore famous inventors of the time and any effects their innovations had on the war.

*Teacher Note: An engage activity may be teacher led using 1-6.
Resources

Books:


Web Sites:

Monitor National Marine Sanctuary
Explore this 150th anniversary website to learn about the Civil War ironclad, USS Monitor, which changed naval warfare forever. Read about the men who made her, the men who commanded her and the men that served and died on her.
http://monitor.noaa.gov/150th

The Mariners' Museum: USS Monitor Center
The Marines' Museum is home to hundreds of artifacts recovered from the USS Monitor. Visit this site to learn how they are being conserved, watch conservations at work via webcams, and read the blogs of the conservators as they uncover new finds.
http://www.marinersmuseum.org/uss-monitor-center/uss-monitor-center

U.S. Naval Historical Center
The U.S. Navy has an extensive library of historic ship images. Visit this page to view images of the USS Monitor.
http://www.history.navy.mil/photos/sh-usn/usnsh-m/monitor.htm

YouTube: USS Monitor Steam Engine Model
Watch a video or a working model of the Monitor’s steam engine.
http://www.youtube.com/watch?v=VWn8qQ9Ykpk

YouTube: USS Monitor
This amateur video shows the turret on display in The Mariners’ Museum and discusses many of its attributes.
http://www.youtube.com/watch?v= n-Qb9GZB4Q

U.S. Navy History and Heritage Command
Visit this web site to learn more about the battle between the Monitor and the Virginia.
http://www.history.navy.mil/photos/events/civilwar/n-at-cst/hr-james/9mar62.htm

The Mariners’ Museum: USS Monitor History
Explore to learn the history of the Monitor. Chronological timeline from 1855 to 1862.
http://www.marinersmuseum.org/uss-monitor-center/history

Hall of Fame: Inventor Profile of John Ericsson
Read about the man who designed the USS Monitor and his many inventions.

U.S. Naval Historical Center
This page tells the story of the CSS Virginia. Images are also available.

Acknowledgement
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http://sanctuaries.noaa.gov/education
### Looking through Time: Evaluation Rubric

#### Cooperative Group Project

<table>
<thead>
<tr>
<th>Contribution to Group</th>
<th>Beginning 1</th>
<th>Developing 2</th>
<th>Focused 3</th>
<th>Exemplary 4</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is Punctual (5 pts*)</td>
<td>Doesn’t hand in assignments</td>
<td>Hands in many assignments late</td>
<td>Hands in most assignments on time</td>
<td>Hands in all assignments on time</td>
<td></td>
</tr>
<tr>
<td>Researches Information (5 pts)</td>
<td>Doesn’t collect information</td>
<td>Contributes little information</td>
<td>Contributes information that mainly relates</td>
<td>Contributes a good deal of relevant information</td>
<td></td>
</tr>
<tr>
<td>Shares Information (5 pts)</td>
<td>Shares no information with group</td>
<td>Shares some information with group</td>
<td>Shares important information with group</td>
<td>Communicates and shares all information with group</td>
<td></td>
</tr>
</tbody>
</table>

#### Cooperation within Group

<table>
<thead>
<tr>
<th></th>
<th>Never Cooperates</th>
<th>Seldom cooperates</th>
<th>Usually cooperates</th>
<th>Always cooperates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listens to Group Members (5 pts)</td>
<td>Always talks and never allows others to speak</td>
<td>Talks much of the time and rarely allows others to speak</td>
<td>Talks too much at times, but usually is a good listener</td>
<td>Balances listening and speaking well</td>
</tr>
<tr>
<td>Makes Fair Decisions (5 pts)</td>
<td>Always wants things his/her way</td>
<td>Often sides with friends and doesn’t consider all viewpoints</td>
<td>Usually considers other viewpoints</td>
<td>Total team player</td>
</tr>
</tbody>
</table>

#### Responsibility to Group

<table>
<thead>
<tr>
<th></th>
<th>Doesn’t perform any duties</th>
<th>Performs very little in the way of duties</th>
<th>Performs nearly all duties</th>
<th>Performs all duties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fulfills Duties (5 pts)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shares Responsibility (5 pts)</td>
<td>Always relies on others to do the work</td>
<td>Rarely does work and needs constant reminding</td>
<td>Usually does the work and seldom needs reminding</td>
<td>Always does assigned work without being reminded</td>
</tr>
</tbody>
</table>

#### Timeline

<table>
<thead>
<tr>
<th></th>
<th>Didn’t answer any of the project questions</th>
<th>Answered some of the project questions, but missed the main points</th>
<th>Answered most of the project questions</th>
<th>Answered all project questions thoroughly and completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Content Questions Answered (15 pts)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relevant Milestones Included (15 pts)</td>
<td>Doesn’t include any relevant milestones in timeline</td>
<td>Included some relevant content in timeline, but missed many major milestones</td>
<td>Included most of the significant milestones on the timeline</td>
<td>Included all significant milestones on the timeline</td>
</tr>
<tr>
<td>Images Used Appropriately for Each Milestone (15 pts)</td>
<td>Didn’t use any images</td>
<td>Used some images, but not all were appropriate</td>
<td>Used images for each milestone and most were appropriate</td>
<td>All milestones included images and they were all used appropriately</td>
</tr>
<tr>
<td>Timeline is Presented Well (15 pts)</td>
<td>Used more than 60 words, had many spelling and or grammar errors</td>
<td>Used more than 60 words and/or had a few spelling and grammar errors</td>
<td>Used only 60 words and had few spelling and grammar errors</td>
<td>Used only 60 words and had no spelling and/or grammar errors</td>
</tr>
</tbody>
</table>

*Adjust point values and add categories as needed*
<table>
<thead>
<tr>
<th>K</th>
<th>W</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do you think you KNOW?</td>
<td>What do you WANT to learn?</td>
<td>What did you LEARN?</td>
</tr>
</tbody>
</table>

Use additional paper if needed.