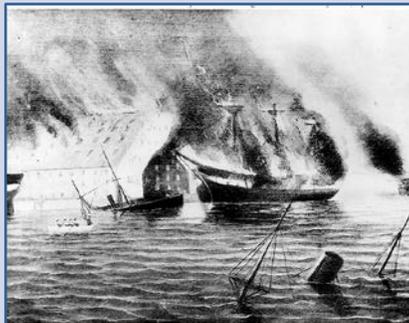


Education

A Look through Time



Drawing of the USS *Merrimack* burning at Norfolk Navy Yard. Courtesy U.S. Naval Historical Center

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.

National Standards:

History 5-12: Era 4: 2A; Era 5: 2A



USS *Monitor* and the CSS *Virginia* painting of battle in Hampton Roads on March 9, 1862. Courtesy Library of Congress

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

Use of Microsoft Word, <http://www.livebinders.com/> and <http://www.timetoast.com>, or other programs of your choice.*

*The inclusion of links in this guide does not imply endorsement or support of any of the linked information, services, products, or providers.

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



Teacher Prep

- Visit <https://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 or other program.
- Create a binder for student use.
- Review suggested resources and/or conduct a search for additional resources for each topic that best meets your students' reading levels and needs. Add them to the students' LiveBinder.
- Add an "Images" tab to Livebinder to include drawings, paintings, and photos.
- Introduce students to Livebinders, and instruct them on how to use the program, such as how to copy, paste, and save images.
- Demonstrate how to use TimeToast.com (or other program of your choice) to create an online timeline (teacher will need to set up an account(s).)
- Copy and distribute K-W-L chart for students to complete as they answer questions using dates and other information about the building and action of each of the ironclads.
- Print photos of 1862 turret and 2002 turret (p. 6) for each student, or download the images from website to view as a class on computer screen or TV.



Top: The turret breaks the surface of the ocean for the first time in 140 years on August 5, 2002. Courtesy NOAA
Middle: Conservators inside the drained turret in the conservation lab at The Mariners' Museum. Courtesy NOAA
Bottom: Officers standing in front of *Monitor's* turret in 1862. Courtesy Library of Congress

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

Activity Overview

After engagement activity, students work in pairs or small groups to 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 in its building and battle. After completion of their chart, students review all group charts and come to a consensus on ten items that they feel are the most important to include in the timeline. Each item is summarized, and using the summary and images/graphics, an interactive timeline is created on Timetoast.com, paper, or other program of your choice. Images may be in the form of drawings, paintings, and/or photographs.

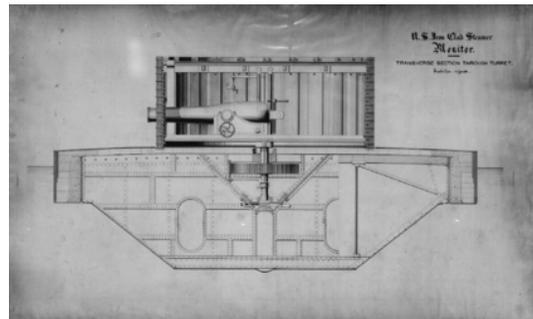
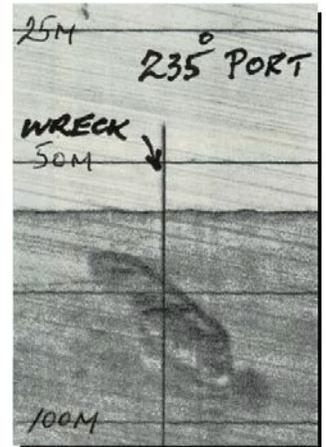
Assessment/Grading

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 <https://monitor.noaa.gov/150th> or other sites.

Image Gallery—Visit <https://monitor.noaa.gov/150th> or <https://monitor.noaa.gov> for more images:



Resources Books:

Herbert, Janis: *The Civil War for Kids: A History with 21 Activities (For Kids series)*. Chicago Review Press, 1999, ISBN-13: 978-1556523557.

Jerome, Kate Boehm: *Civil War Sub: The Mystery of the Hunley (Penguin Young Readers, L4)*. Penguin Young Readers, 2002, ISBN-13: 978-0448425979.

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 it, the men who commanded it, and the men that served and died on it.

<https://monitor.noaa.gov/150th>

The Mariners' Museum: USS *Monitor* Center

The Mariners' 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.

<https://www.monitorcenter.org/>

U.S. Naval History and Heritage

Visit this web site to learn more about the battle between the *Monitor* and the *Virginia*.

<https://www.history.navy.mil/content/history/nhhc/our-collections/photography/wars-and-events/the-american-civil-war--1861-1865/css-virginia-destroys-uss-cumberland-and-uss-congress--8-march-1.html>

The Mariners' Museum: USS *Monitor's* Story

Explore the history tab to learn about the *USS Monitor*, and click on the Battle of Hampton Roads' timeline to learn the sequence of events.

<https://www.monitorcenter.org/the-uss-monitors-story/>

National Inventors Hall of Fame: Profile of John Ericsson

Read about the man who designed the *USS Monitor* and one of his many inventions.

<https://www.invent.org/inductees/john-ericsson>

U.S. Naval History and Heritage

This page tells the story of the *CSS Virginia*. Images are also available.

https://www.history.navy.mil/research/histories/ship-histories/confederate_ships/virginia.html

U.S. Naval History and Heritage

The U.S. Navy has an extensive library of historic ship images. Visit this page to view images of the *USS Monitor*.

<https://www.history.navy.mil/content/history/nhhc/search.html?q=uss+monitor>



Swedish Inventor, John Ericsson, Father of the *Monitor*. Courtesy The Mariners' Museum

Acknowledgement

This lesson was developed by NOAA's Monitor National Marine Sanctuary from a lesson plan provided by Dawn E. Garvey, 21st Century ETeacher, Virginia Beach City Public Schools. This lesson is in the public domain and cannot be used for commercial purposes. Permission is hereby granted for the reproduction, without alteration, of this lesson on the condition its source is acknowledged. When reproducing this lesson, please cite NOAA's Monitor National Marine Sanctuary as the source, and provide the following URL for further information:

<https://monitor.noaa.gov/education>. If you have any further questions or need additional information, email monitor@noaa.gov.

Student Name: _____

Date: _____

A Look through Time Class Activity

Engage

1. In your group, view photograph A. This is 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*.
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 fair 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 and where 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 ten most important events in each ship's life.
13. 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.
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

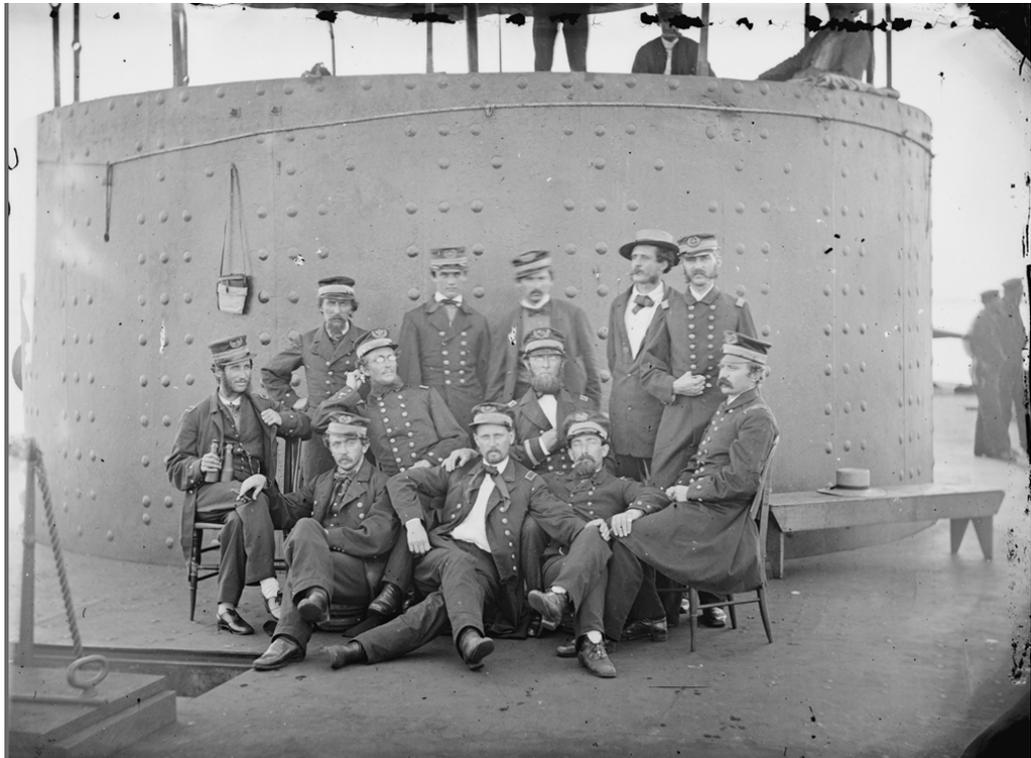
18. There were many other new and innovative technological advances made during the Civil War. Explore famous inventors of the time and any effects their innovations had on the war.

***Teacher Note: Engage activity may be teacher led.**

Photo A



Photo B



Looking through Time: Evaluation Rubric Cooperative Group Project

Contribution to Group	Beginning 1	Developing 2	Focused 3	Exemplary 4	Score
Is Punctual (5 pts*)	Doesn't hand in assignments	Hands in many assignments late	Hands in most assignments on time	Hands in all assignments on time	
Researches Information (5 pts)	Doesn't collect information	Contributes little information	Contributes information that mainly relates	Contributes a good deal of relevant information	
Shares Information (5 pts)	Shares no information with group	Shares some information with group	Shares important information with group	Communicates and shares all information with group	
Cooperation within Group					
Cooperates with Group Members (5 pts)	Never Cooperates	Seldom cooperates	Usually cooperates	Always cooperates	
Listens to Group Members (5 pts)	Always talks and never allows others to speak	Talks much of the time and rarely allows others to speak	Talks too much at times, but usually is a good listener	Balances listening and speaking well	
Makes Fair Decisions (5 pts)	Always wants things his/her way	Often sides with friends and doesn't consider all viewpoints	Usually considers other viewpoints	Total team player	
Responsibility to Group					
Fulfills Duties (5 pts)	Doesn't perform any duties	Performs very little in the way of duties	Performs nearly all duties	Performs all duties	
Shares Responsibility (5 pts)	Always relies on others to do the work	Rarely does work and needs constant reminding	Usually does the work and seldom needs reminding	Always does assigned work without being reminded	
Timeline					
All Content Questions Answered (15 pts)	Didn't answer any of the project questions	Answered some of the project questions, but missed the main points	Answered most of the project questions	Answered all project questions thoroughly and completely	
Relevant Milestones Included (15 pts)	Doesn't include any relevant milestones in timeline	Included some relevant content in timeline, but missed many major milestones	Included most of the significant milestones on the timeline	Included all significant milestones on the timeline	
Images Used Appropriately for Each Milestone (15 pts)	Didn't use any images	Used some images, but not all were appropriate	Used images for each milestone and most were appropriate	All milestones included images and they were all used appropriately	
Timeline is Presented Well (15 pts)	Used more than 60 words, had many spelling and or grammar errors	Used more than 60 words and/or had a few spelling and grammar errors	Used only 60 words and had few spelling and grammar errors	Used only 60 words and had no spelling and/or grammar errors	

***Adjust point values and add categories as needed**

Student Name: _____ Date: _____

K	W	L
What do you think you KNOW?	What do you WANT to learn?	What did you LEARN?

Use additional paper if needed.