

Education

Sleuthing Through 1862



Casts of the skulls from two sailors' remains recovered from the USS *Monitor's* turret during excavation in 2002.

Grade Level

- 4-8

Timeframe

- 1-2 hour

Materials

- Small Cloth Bags (8)
- Tub with Sand
- Artifacts for Bags and Tub
- Disposable Gloves (for teacher)
- Story Sheet (per group)
- Worksheet (per student)

Key Words

Artifact, DNA, Genealogy, JPAC, Forensics

Activity Summary

Students become detectives to identify the remains of an unknown sailor

Learning Objectives

To understand the difficulty in identifying unknown service members

National Standards:

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



Using the casts of the skulls and clay, Louisiana State University recreated the sailors' faces. Courtesy NOAA, *Monitor* Collection.

Background Information

On December 31, 1862, a stormy New Year's Eve, 16 men perished when the USS *Monitor* sank off Cape Hatteras, N.C. Official reports of the incident listed four officers and twelve enlisted men as lost. The USS *Rhode Island* brought onboard the remaining 47 *Monitor* sailors, who were affectionately known as the *Monitor Boys*.

In 2002, when NOAA archaeologists and U.S. Navy divers worked to raise the *Monitor's* turret, they knew that it was possible that they might encounter human remains. Therefore, in anticipation of a likely encounter with skeletal remains inside the turret, the *Monitor* National Marine Sanctuary solicited participation of the U.S. military's Central Identification Laboratory in Hawaii (now known as the Joint POW/MIA Accounting Command, JPAC). Two sets of skeletal remains were discovered and the remains were sent to JPAC for further investigation. Personal artifacts recovered with the remains were sent to The Mariners' Museum for conservation.

At JPAC, scientists collected mitochondrial DNA from both sets of remains. It is hoped that with the national and international publicity generated related to *Monitor* expeditions, excavations and the 150th anniversary, maternal descendants of the lost crewmen will come forward to submit DNA samples for comparison. To aid in that effort, NOAA hired a genealogist in March of 2011 to trace the family history of each of the 16 sailors that died. In an effort to bring the sailors to life, Louisiana State University voluntarily recreated the sailors' faces using casts of their skulls and clay. We now know what the sailors looked like; we just do not know their names.

Today the skeletal remains continue to reside at the Joint POW/MIA Accounting Command. The *Monitor* National Marine Sanctuary, working with the U.S. Navy and Congress, continue to seek any living relatives of the two sailors, and if none are found, hope to inter them at Arlington Cemetery commemorating the 150th anniversary of their death—December 31, 2012.

Teacher Prep

In this activity, students read a story of a fictional ship, USS *Martin*, which was to have sunk in 1862. In the story, eight sailors perished with the ship. Then the story jumps to 2011, when the shipwreck was found, along with human remains. The remains were sent to JPAC in Hawaii, but the section of ship that held the remains, went to The Mariners' Museum, where it was carefully excavated. During the excavation, clues were found that could help to identify the unknown sailor.

The teacher will create eight sailor bags. Inside each small cloth bag, place "artifacts" that help to identify the owners of each bag. Suggested "artifacts" are listed on the *Artifact Sheet*, but you may substitute other items that might be more readily available. Just be sure to have the stories of each sailor match the items you place in the sailor's bag (e.g.—if the story says that the sailor had a wife and two children, then the photograph should be of a woman and two children). Search the Internet for images that match information. Write letters from sweethearts (see *Sample Letters for Sailors' Bags*).

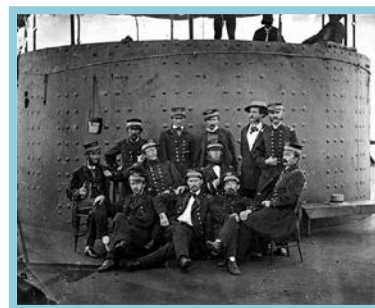
You will need a large tub or small swimming pool filled about halfway with sand. In the sand, bury the suggested "artifacts" for the sailor, Noah Street, whose remains have been discovered. Also in the sand, bury some seashells and other ocean related items you might have on hand. To spark a conversation on marine debris, you may also want to put some marine debris, such as a soda can, into the sand. Ask the students if they had soda cans in 1862, and if not, then how did the can get there?

Print story sheet, *Sleuthing Into 1862* and *List of Sailors* for each group of students and a worksheet for each student. Have students read *Historical Synopsis of the USS Monitor* to answer questions to determine which sailor's remains were found.

***NOTE: For realism, wear gloves as you handle the "artifacts."**

Extension:

- Set up each bag as a station and have students rotate through each station to determine who belongs to each bag.
- Discuss the USS *Monitor* and the two sets of remains discovered in 2002 inside the turret as it was excavated. Visit the 150th website <http://monitor.noaa.gov/150th> to learn more about the 16 sailors that died, the genealogy research conducted, the unveiling of the face for the two sailors recovered, and more. Have students debate what should happen to the remains if no living relatives are found. Should they be buried? If so, where?



Top: The turret breaks the surface of the ocean for the first time in 140 years, Courtesy NOAA

Middle: Conservators inside the drained turret in the conservation lab at The Mariners' Museum, Courtesy NOAA

Bottom: Officers standing in front of the *Monitor's* turret in 1862, Courtesy Library of Congress

Vocabulary

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

DNA – Deoxyribonucleic acid, the genetic material in the nuclei of all cells; nucleic acid that carries the genetic information in the cell and is capable of self-replication and synthesis of RNA

FORENSICS- The use of science and technology to investigate and establish facts in criminal or civil courts of law

GENEALOGY – the study or investigation of ancestry and family histories

JPAC – Joint POW (Prisoner of War) / MIA (Missing In Action) Accounting Command where unknown service members' remains are flown for identification.

Name: _____

Date: _____

Sleuthing Into 1862 Fictional Story of a Fictional Ship

On the night of June 2, 1862, a strong gale blew as a nor'easter came onshore. Just shortly after midnight, after a long struggle to keep the ship afloat, the USS *Martin* succumbed to the sea as she sank just off the Virginia coast. Eight brave souls drowned that night as the ship sank beneath the water.

On April 28, 2011, two young maritime archaeologists, John and Joe, and a research coordinator, Lauren, discovered the wreck of the USS *Martin*. As the three dove on the wreck site to document and survey it, they came across a section of the ship with the human remains of a sailor. The Joint POW/MIA Accounting Command (JPAC) was called and a decision made to remove that section of the ship, so they could recover the remains. The remains were flown to Hawaii, where they will have DNA samples collected and other forensics conducted.

The archaeologists were tasked with bringing up that small section of the ship and taking it to The Mariners' Museum, where conservationists carefully excavated the section to locate and remove any artifacts found. These artifacts might offer clues to the identity of this sailor.

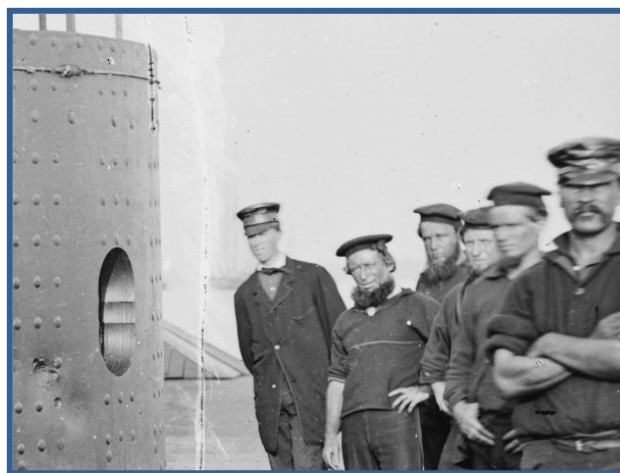
In researching the ship, a roster of the eight sailors that died that night was found. The *List of Missing Sailors* has physical descriptions of each sailor taken from their medical record, as well as short descriptions of each sailor as recollected by the officers and crew. Unfortunately, in 1862, detailed records were not kept and often sailors would not even give their real names. Hopefully, there are enough clues to help you identify the sailor.



Top: Sailors onboard a Civil War ship in 1863, courtesy U.S. Navy History and Heritage Command

Top Right: Cast of skeleton found on USS *Monitor*, courtesy The Mariners' Museum.

Bottom Right: Sailors onboard the deck of the USS *Monitor*, courtesy Library of Congress



List of Missing Sailors Student Sheet

John Tommy

Height—5'5" Weight—125 lbs

John was of Asian descent, and he was just 18 years old. He came from California after hearing about the Civil War. He was passionately against slavery and wanted to do whatever he could to help end it. He was not married and no one remembers him talking about a sweetheart.

Siah Williams

Height—6' 2" Weight—200 lbs

Siah was in his early 30s and from South Carolina. He was a runaway slave, who wanted to fight for the freedom of all slaves. He talked all the time about his sweetheart and how she had run away with him. He was eager to have the war over so he could go home and marry her. As he sat out on the deck smoking, he would talk about all the things he was going to do when the war was over and he was a free man.

Charles Wright

Height—6' Weight—180 lbs

Charles was one of the older men on the boat, probably around 50. He was an officer. He hailed from Kentucky and talked about how beautiful his farm was just outside of Louisville. Charles was married, but he did not talk much about his wife. He did say he had two children.

Robert Carter

Height—6' 4" Weight—220 lbs

Robert was a big man from Charlottesville, Va. He was in his 40's, probably about 45 or 46. He loved to sit on the deck and roll and smoke cigarettes as he talked about his wife and kids. He couldn't wait to go home to them.

Noah Street

Height—5' 11" Weight—190 lbs

Noah was in his early 30s, married, and had a baby. Noah loved to brag, but he would always say that he wasn't bragging it was just fact. He hailed from the "Great State of Texas" and was he proud to be a Texan. His father and uncles had fought against Santa Anna in Texas's war where Texas gained its independence from Mexico. Therefore, Noah wanted to be as brave as his father and uncles. He would sit out on the deck, smoke his pipe, and tell tall tales of Texas. He had a wife and child.

Timmy Able

Height—5' 2" Weight—100 lbs

Timmy was the cabin boy on the ship. He had just had his 12th birthday before the ship sank. He had walked all the way from Massachusetts to join the ship in Virginia. He would love to sit on the deck at night and whittle. He whittled this whistle that sounded just like a train.

Antonio Gomez

Height—5' 10" Weight—160 lbs

Antonio was quiet and didn't talk much. He might have been from North Carolina. He was a Native American, but not sure what tribe. He would hang up a circle thing with feathers where he slept and said it was to catch dreams. He also had a sweetheart at home.

Elijah Benning

Height—5' 11" Weight—170 lbs

Elijah was young, maybe around 20, and from New York. He talked about how he was going to singlehandedly win the war. He would sit on the deck, smoke his cigarettes, and write his sweetheart back at home. He wanted to marry her before he left, but her dad said no, so Elijah was trying to prove himself as a man to her father.

Artifact Sheet For Teacher Prep

To offer clues for identification, use these suggested items or items that might be more readily available. Be sure to make the items in the bags correlate with the information given for each sailor. Add additional general items to the bag, such as soap, clothing, shaving kit, hardtack, and other items as available.

In the pool, place items related to **Noah Street**. The bold items are linked positively to identify him as the unknown sailor: **wedding ring, pipe, pants, letter** (tear into pieces and place in pants pocket—handwriting will match letter in sailor bag), **Texas flag** (also place in pants pocket), buttons, belt or belt buckle, silverware, and/or comb.

Sailor Bags and Contents:

<p><u>Noah Street</u> Age: 32 Home state: Texas (Austin) Other: Married with a baby Items in bag:</p> <ul style="list-style-type: none"> • Picture of wife (and baby) • Letter from wife with pressed blue bonnet inside (TX state flower). Letter could have a mention of Austin. • Pipe tobacco in drawstring pouch (this will link him to the pipe) 	<p><u>Timmy Able</u> Age: 12 Home state: Massachusetts Other: Youngest member of the crew Items in bag:</p> <ul style="list-style-type: none"> • Wooden toy • Candy • Boys shirt • Train whistle or other item he whittled
<p><u>Charles Wright</u> Age: 50 Home state: Kentucky Other: Married with two children Items in bag:</p> <ul style="list-style-type: none"> • Hometown of Louisville pinned to his bag • Letter from wife • Picture of wife (and kids) 	<p><u>Siah Williams</u> Age: 30 Home state: South Carolina Other: African American, has a sweetheart Items in bag:</p> <ul style="list-style-type: none"> • Letter from sweetheart with a sketch of a palmetto tree (SC tree) • Picture of sweetheart (African American woman) • Pipe tobacco in drawstring pouch
<p><u>Robert Carter</u> Age: 45 Home state: Virginia Other: Married with four children Items in bag:</p> <ul style="list-style-type: none"> • Hometown (Richmond) pinned to bag • Tobacco and cigarette rolling papers • Letter from wife • Picture of wife (and four children) 	<p><u>John Tommy</u> Age: 18 Home state: California Other: Of Asian descent Items in bag:</p> <ul style="list-style-type: none"> • Letter from his mother • Asian trinket (i.e. Buddha figure) • Chopsticks
<p><u>Antonio Gomez</u> Age: 20 Home state: North Carolina Other: Native American, Has a sweetheart at home Items in bag:</p> <ul style="list-style-type: none"> • Dream catcher (or other Native American item) • Picture of sweetheart 	<p><u>Elijah Benning</u> Age: 20 Home state: New York Other: Items in bag:</p> <ul style="list-style-type: none"> • Unfinished letter to sweetheart at home • Picture of sweetheart • Tobacco and cigarette rolling papers

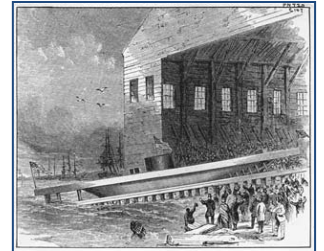
Visit <http://monitor.noaa.gov/150th/sailors.html> to learn more about the *Monitor* sailors that died, the discovery of the remains of two sailors, and the artifacts found with them.



Historical Synopsis of the USS *Monitor*

Swedish-American engineer John Ericsson designed the *Monitor*. Based on an earlier concept Ericsson had presented to Napoleon III of France in 1854, the *Monitor* was a radical departure from traditional warship design. The vessel was fully steam powered, with engineering, crew and officer spaces and the galley all below the waterline. The vessel, constructed almost entirely of iron, was completely armored. A notable feature was the *Monitor's* 21 ½-foot diameter, 9-foot-high revolving turret, which was located at midships and housed two 11-inch Dahlgren smoothbore cannons.

Built at the Continental Iron Works in New York, the *Monitor* launched on January 30, 1862. In early March 1862, the *Monitor* was ordered to Hampton Roads to counter the threat to the federal fleet posed by the CSS *Virginia*, a Confederate ironclad built from the burned hull of the USS *Merrimack*. The Union ironclad arrived on the evening of March 8 in time to see the results of the havoc and destruction caused by the *Virginia* on the Union wooden frigates *Cumberland* and *Congress*. The steam frigate, USS *Minnesota*, had run aground and the *Monitor* was ordered to protect her because the *Virginia* was sure to return at first light.



When the *Virginia* steamed out the next morning on March 9, it was with the purpose to finish the *Minnesota*. However, she was met by the *Monitor*, and thus began what is known as the Battle of Hampton Roads. Despite the *Virginia's* much larger size, the *Monitor* demonstrated the advantages of a rotating turret over traditional broadside guns. Over the course of four hours, the two vessels frequently bombarded each other at point-blank range with no substantial damage to either vessel. However, a shell exploded in the viewport of the *Monitor's* pilohouse, temporarily blinding Captain John Worden. The *Monitor* steamed off into shallow water, where the *Virginia* could not follow, to assess the captain's wounds and damage to the ship. The *Virginia's* captain, assuming that the *Monitor* was leaving the battle, withdrew in supposed victory. When the *Monitor* returned to resume the engagement and found the *Virginia* gone, her crew also assumed victory. Although there was no clear victor in the battle, the *Monitor* succeeded in preventing further destruction to the Union blockade.



After the Battle of Hampton Roads, the *Monitor* did not see much action. However, the ship participated in the bombardment of Sewell's Point and in the battle at Drewry's Bluff. In addition, there was a small skirmish in the Appomattox River, but it was considered a failure. Then on Christmas Eve 1862, orders came for the *Monitor* to proceed to Beaufort, N.C. On December 29, two massive hawsers were passed from the *Monitor* to the vessel assigned for the ocean tow—the USS *Rhode Island*. At 2:30 p.m., the two vessels got underway. The weather was clear and pleasant.

Just before dawn on December 30, the *Monitor* began to experience a "swell from the southward," and as the day progressed, the clouds increased "till the sun was obscured by their cold grey mantle." Soon the sea began to break over the vessel and the storm grew worse. By 7:30 p.m., one of the hawsers snapped and the *Monitor* began rolling wildly. Below deck, the water level rose and at 10:00 p.m., the red distress lantern was ordered hoisted. At 11 p.m., the *Rhode Island* launched rescue boats, and the *Monitor* crew began to abandon ship. Shortly after midnight on December 31, 1862, just off Cape Hatteras, N.C., the red lantern was seen from the *Rhode Island* for the last time. Sixteen sailors (4 officers and 12 enlisted men of which three were African American and nine were Caucasian) lost their lives that night, but 47 *Monitor* sailors were safely rescued, and they became affectionately known as the "*Monitor* boys."



Name: _____

Date: _____

Sleuthing Through 1862

Read *Historical Synopsis of the USS Monitor* to answer the questions below. Place the letters in the bubbles in the answer section at the bottom of the page to identify the unknown sailor.

1. What is the name of the first Civil War Union Ironclad?

_____ () _____

2. Off the coast of which state did the USS *Monitor* sink during a violent storm?

_____ () _____

3. What is the name of the first Civil War Confederate Ironclad?

_____ () _____

4. Where did the two ironclads meet in an infamous battle of iron vs. iron?

() _____

5. What is the name of the ship that was towing the USS *Monitor* when she sank during a violent storm off the east coast?

_____ () _____

6. How many sailors died when the USS *Monitor* sank?

_____ () _____

7. How many African American sailors died when the USS *Monitor* sank?

_____ () _____

8. What is the exact date of the sinking of the USS *Monitor*?

_____ () _____, _____

9. What item onboard the USS *Monitor* was the last thing seen from the *Rhode Island* before she sank to the bottom of the Atlantic Ocean?

_____ () _____

10. What caused the USS *Monitor* to sink?

_____ () _____

ANSWER:

Sleuthing Through 1862

Answer Key

1. USS *MONITOR*
2. NORTH CAROLINA
3. CSS *VIRGINIA*
4. HAMPTON ROADS
5. USS *RHODE ISLAND*
6. SIXTEEN
7. THREE
8. DECEMBER 31, 1862
9. RED LANTERN
10. STORM

ANSWER: NOAH STREET

Resources

Books:

Abnett, Dan: *Ironclads at War: The Monitor vs the Merrimac (Graphic History)*. Osprey Publishing, February 27, 2007, ISBN-13: 978-1846030536.

Broadwater, John D.: *USS Monitor: A Historic Ship Completes Its Final Voyage*. Texas A&M Press, February 14, 2012. ISBN-13: 978-1603444736.

Hopkinson, Deborah: *From Slave to Soldier: Based on a True Civil War Story (Ready-to-Read-Level 3)*. Simon Spotlight, January 9, 2007, ISBN-13: 978-0689839665.

Quarstein, John V.: *The Monitor Boys: The Crew of the Union's First Ironclad*. The History Press, February 25, 2011, ISBN-13: 978-1596294554.

The Mariners' Museum: *The Monitor Chronicles: One Sailor's Account. Today's Campaign to Recover the Civil War Wreck*. Simon & Schuster, July 3, 2000, ISBN-13: 978-0684869971.

Thompson, Gare: *The Monitor: The Iron Warship That Changed the World (All Aboard Reading, Station Stop 3)*. Grosset & Dunlap, September 29, 2003, ISBN-13: 978-0448432458.

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 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.

<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>

Joint POW/MIA Accounting Command (JPAC)

Located in Hawaii, JPAC conducts global search, recover, and laboratory operations to identify unaccounted-for Americans from past conflicts.

<http://www.jpac.pacom.mil>

Acknowledgement

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

SAMPLE Letters for Sailors' Bags

For Noah Street:

March 15, 1862

My Darling,

I have missed you so much. I hope that this finds you in good stead. I pray every day that you are safe and that you will hurry home to me and the baby, although he is not a baby anymore. It is hard to believe Adam will turn two years old next Christmas. I speak of you every day, but I fear he will not know you when you return. I pray for an end to this war to come very soon.

The winter is finally coming to an end, but the weather still has a bit of a chill in the air at night. I went to visit with Mrs. Trygstad a fortnight ago, and the foothills around Austin were so beautiful that day. It made me think of you. I miss our picnics on the Colorado River. I can't wait for you to come home so we can once again enjoy the beauty around us.

I must go darling. I miss you and love you very much. I pray that you will be home soon.

Your loving wife,
Susan

For John Tommy:

April 2, 1862

My Dearest Son,

I write this letter with a heavy heart to tell you that your father died on March 1, 1862. He was in San Francisco visiting his Aunt, when he took ill. The doctors were not able to help him and after two weeks, he eventually succumbed to the illness. His last thoughts were of you and how proud he was of his son for going to war to fight for his new country. Be safe my darling boy. I miss you and love you.

Your loving Mother