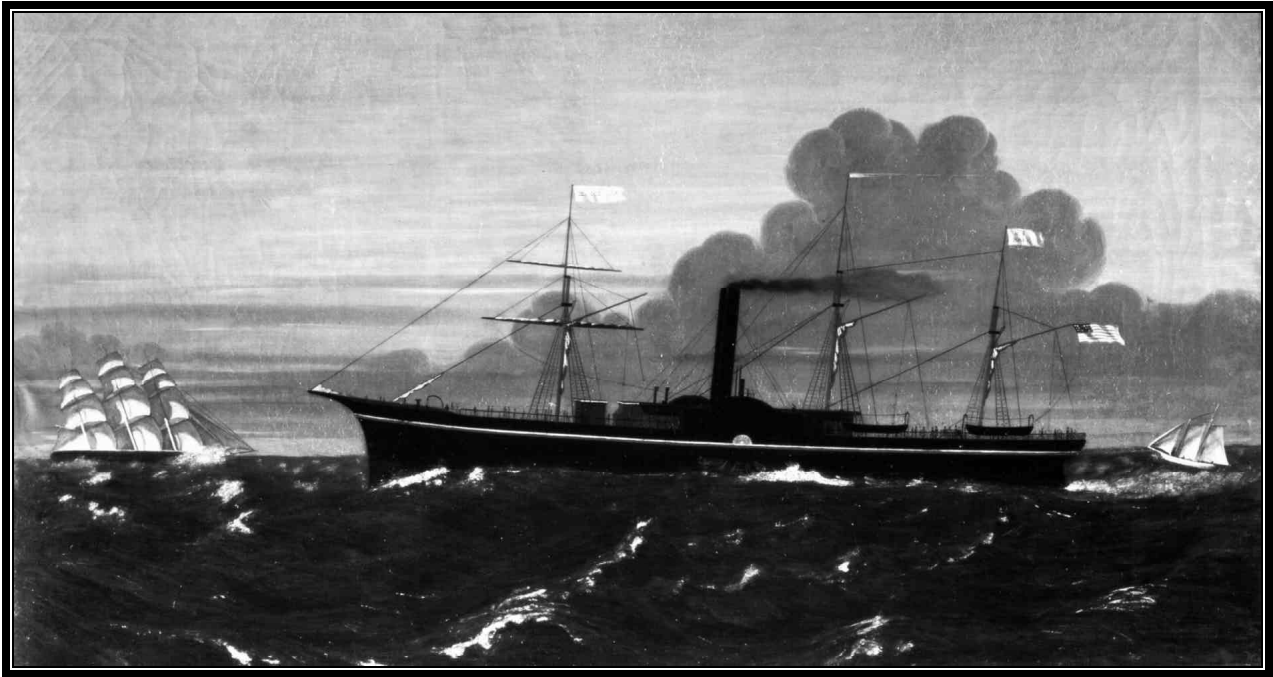


TEACHER'S GUIDE

SHIP OF GOLD

January 12 – February 11, 2001



Artist unknown, *SS Central America*, n.d. Oil. Mariners' Museum, Newport News, Virginia

WELLS
FARGO

SUPPORT FOR THIS EXHIBITION WAS GENEROUSLY PROVIDED BY WELLS FARGO.

PREPARING FOR YOUR VISIT

These questions are to help prepare your students for their visit to *Ship of Gold* at the California Historical Society. Prior to your museum visit, please involve the class in an open discussion about the exhibition's content, as well as the museum's role. This will maximize the students' learning experience and make their visit more enjoyable.

What is a museum?

A museum is a place where objects, artifacts, and art works are stored, collected, and cared for. It is also a place where you can go to learn about history, art, science, and the world. Museums are dedicated to collecting, preserving and presenting objects, artifacts and ideas and using those objects to enhance learning.

What museums have you been to? What was the subject of that museum (art, science, history, zoological)? What was your favorite part about your visit to that museum or what do you remember most?

What is the California Historical Society?

The California Historical Society (CHS) is the California's official historical society. It is a non-profit educational institution consisting of a museum, a research library, and a store. Many visitors and scholars come to CHS because knowledge of the past enables people to understand the present and to make informed decisions that will affect the future.

The mission of the Society is to ensure that the history of California and the West is kept alive and made accessible for the enlightenment of everyone. To fulfill this mission, the organization is a resource for people who seek to know about California's past.

What kinds of things do you think you might see there? (objects such as photographs, costumes, art, books, etc...) Is there anything that you remember from our California history lessons that you would really like to see?

What will you do there?

At the museum your class will take part in a one-hour docent-led tour of an exhibition about a historic shipwreck and its connection to the California Gold Rush. During this tour your docent, or guide, will show you historical artifacts and teach you about the role they played in California's history. It is okay to ask questions; in fact it is encouraged! The best part about history is that we are all a part of it. We encourage your group to share their stories and objects as well. If you have a story or Gold Rush artifact that you would like to share, please bring it with you.

Is there a place to buy souvenirs?

The California Historical Society operates a small bookstore at the museum. We carry many different items related to California history and our exhibitions. There are many items priced below \$5. Please note, chaperones must accompany the students in the bookstore.

What is gold and why is it so valuable?

Gold has been known from prehistoric times and was possibly the first metal used by humans. It was valued for ornaments, such as jewelry, and the magical capabilities attributed to it. The quest for gold stimulated European explorations and conquests in the Western Hemisphere, and its discovery has led to many gold rushes throughout the world. The chief producers are South Africa, Russia, Canada, and the United States, especially in South Dakota and Nevada.

The discovery of gold in California is generally attributed to James Marshall at Sutter's Mill in 1848. However, gold was discovered here earlier. The earliest recorded discovery was by a Mexican citizen named Francisco Lopez, who found gold in Placerita Canyon (southern California) in 1842.

Gold is considered valuable because of its unique properties. It is a very ductile and malleable metal, meaning, it can be beaten into extremely thin sheets, known as gold leaf. Also, it is unaffected by moisture, oxygen, or corrosion. You will see hundreds of gold coins and bars in the Ship of Gold exhibition. The gold in the exhibition was 8000 feet below the surface of the ocean for almost 150 years. Though metal parts from the ship had been badly eaten away by rust, the gold remained shiny and unharmed.

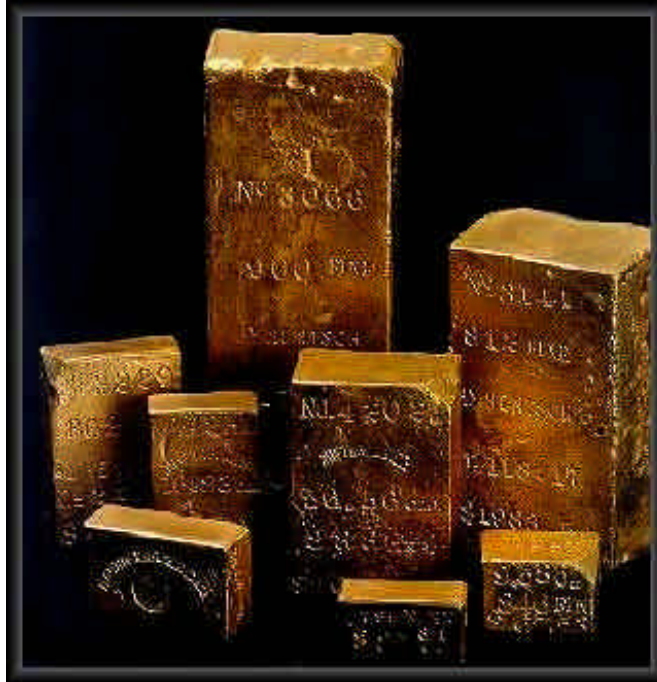
Gold can be found in veins and placer deposits. A gold vein forms when molten rock (lava), from deep inside the earth, eats its way to the surface. As the lava cools, large amounts of liquids and gases are given off. Some of these liquids and gases soak into the nearest rock, but most follow cracks, and deposit mineral matter along these cracks, forming a vein.

Gold is also found in alluvial placer deposits (a general term for dirt and other debris, deposited by running water). The gold ends up as sediment in the bed of the stream or on its flood plain or delta and can be gathered by panning, dredging, and hydraulic mining.

Gold is widely distributed on the earth and is even present in seawater. But, the cost of current methods for recovering it exceeds its value. Most gold is retrieved in a metallic state in the form of dust, grains, flakes, or nuggets. It is found, usually in association with silver or other metals, in quartz veins or lodes so finely disseminated that it is not visible.

What is an assay office?

A reproduction of the Kellogg & Humbert Assayers office is part of the *Ship of Gold* exhibition. One of the rarest treasures found in the SS Central America wreckage is the collection of assay ingots. Miners would bring the gold dust and nuggets to an assayers office to be measured and melted down into ingots, or gold bars. These bars were marked with the name of the assay office, the weight, and the purity of the gold. For payment, the assayer would shave off a corner of the bar to keep for himself as well as to test the purity of the gold. Banks preferred to receive gold in the form of ingots.



Ingots from the SS Central America shipwreck.
Image from the SS Central America website
www.sscentralamerica.com.

ACTIVITY IDEAS

Here are a few fun ideas to help get you excited for your visit. Please feel free to photocopy and distribute the gold rush letter and coin worksheet to your class.

Design your own robot!

The Columbus America Discovery Group designed and built a very special robot to recover the delicate treasures of the SS *Central America*. *Nemo*, as their robot was named, used suction to pick up individual coins from 1 _ miles under the ocean. *Nemo* had to be incredibly strong to withstand the strong pressure at that depth, but it also had to be able to work very delicately around rotting timbers and machinery of the ship.

Have the students determine what they want their robot to do and design one with features that will allow it to accomplish its tasks. Note: photographs of *Nemo* picking up coins can be seen on the Central America web site at www.sscentralamerica.com/recovery.html.

Coin Symbols

The 1857 gold coins found among the treasure are imprinted with many patriotic symbols. Have the students choose a modern coin and research its symbols.

Other Shipwrecks

There are thousands of sunken ships off of the California coast. Choose one and do a presentation for the class about the ship, how it sunk, and who/what was aboard.

Write a poem

Many songs and poems have been written about ships and shipwrecks. Write a poem about the SS *Central America*.

Gold Rush Activity

The following are some suggestions for exercises to be used in conjunction with the gold-rush letter on the following page.

Have students write a letter back to Oscar asking him more about life in California during the Gold Rush. As a class, make a list of all of the questions and have students do research to find the answers.

Historians study primary resources like this to draw conclusions about historical events, places, and people. Have the students make a list of the details in the letter that historians could use to determine what life was like in 1849 California.

In paragraph 2 of the letter Oscar talks about his fear of the “Indians.” Have a discussion on the discrimination the Native Americans endured before, during, and after the Gold Rush. How did they feel about the miners settling in the Sierra Mountains? What was their reaction?

Gold Mines of California on the "North Fork" of the Sacramento
Sunday July 15th 1849

Brothers:

As an opportunity now offers for me to give you a fair and accurate account of the "Gold Mines of California." On the 4th day of July I started in company with twenty-two others for the "Diggins" as they term it in this part of the world. We were two days and a half on our passage from San Francisco to Sacramento City on the Sacramento River. On arriving at that city which is composed of 25 canvas tents stuck up among the trees we were obliged for the first time to pitch our tent and commence the camping life. On the following day we procured pack mules to convey our baggage and eatables to the Mines at the round sum of \$600.

At day-light we partook of a dainty meal of hard-bread and raw salt-pork and again we were on our way traveling over the mountains. We were now on the look-out for the wild Indians which go about in bands of from 50 to 100 strong and intercept small parties of men on their way to the mines. The implements of warfare used by the Indian is merely a Bow and arrow. They will creep up slyly behind the trees and fire a volley of arrows and then flee. At night they creep slyly up to the camps and steal the pack mules. So in traveling through the mountains we have to use a great deal of precaution. We had an advanced guard of 8 men and the rest brought up the rear in regular military style. After a march of twenty miles we again halted for the night.

We encamped on the shore of the river where we now are. I have seen the "Elephant, tail and all"* and am satisfied that the gold digging is all a humbug in one sense of the word. There is gold here in all the mountains. I have been digging and washing gold for the last 3 days. Gold digging will not pay me. I can earn more in San Francisco and in the course of three or four days I shall start for San Francisco.

When the mines were first opened they were rich and those that were first on the mines made a fortune. But those that work the mines now have got to work the whole day very hard and will average from \$5 to \$20 per day. Board is \$5 per day and feed you on the sumptuous food of salt pork and bread and give you a chance to sleep on the ground wherever you can find a soft spot. Flour is worth \$90 per pound. Pork \$1.30 per pound. A small pie is worth \$1. Raisins \$1 per pound. Brandy \$6 per bottle. Tobacco \$2 per pound. Beans 75 cents per pound. A common pair of pegged shoes are worth \$10. In fact, everything is so high that it takes all a man can earn at the mines to live therefore I am satisfied that I can do better at San Francisco. I advise everybody to keep away from California.

From your brother,
Oscar

* "Seeing the elephant" was a phrase the gold-rush miners used to describe seeing gold.

Oscar Bennet letter from the North Fork of the American River, ca. 1849-50, The North Baker Research Library at the California Historical Society.