

Teacher's Guide

Stay East Young Man:

California Gold Rush Letter Sheets

January 21 – May 22, 1999



This Teacher's Guide is designed to support the exhibition *Stay East Young Man: California Gold Rush Letter Sheets*. When used in conjunction with the exhibit, this guide can provide a meaningful experience for students studying the Gold Rush. This guide does not, however, provide a comprehensive historical and cultural overview. It is designed as a supplementary tool to enhance your visit to the Society.

The *Stay East Young Man* Teacher's Guide was written and compiled by Janelle Wise, Director of Education, and Larisa Somsel, Education and Outreach Coordinator at the California Historical Society, 1999.

Table of Contents

Preparing for Your Tour	1	
Introduction	3	
A Brief History	4	
Eureka! Gold is Discovered – January 24, 1848	4	
The Journey West	4	
Population Change	5	
Mining Techniques	6	
Vigilantes	8	
Fires	9	
Floods	10	
Gold Rush People	11	
Fun Facts	16	
How to Talk Like a Miner	17	
Gold Rush Map	18	
Going West Map	19	
Original Sources	20	
Songs		21
Activities	22	
Gold Rush Timeline	25	
Glossary	27	
Exhibition Vocabulary Words	29	



Preparing for Your Tour

To prepare your class for their visit to the California Historical Society it will be helpful to introduce them to the following material.

What is CHS?

The California Historical Society (CHS), the State's official historical society, is a non-profit educational institution committed to serving the public at large. 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: the Society preserves, collects, interprets, publishes and exhibits materials about the history of California and the West.

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. Because we are trying to preserve our objects for future generations, we ask that you don't touch them.

What will you do there?

At the museum your class will take part in a one-hour docent-led tour of the exhibition. During this tour your Docent, or guide, will show you art works, objects, and artifacts and tell you all about them. It is ok to ask questions, in fact we encourage it. After the tour your class will participate in a hands-on arts and crafts project or a creative writing project.

What is a letter sheet?

A letter sheet is an elaborately illustrated piece of stationery that usually consists of a large single piece of paper, folded in half (hamburger fold), with one panel for illustration and three blank panels for letter writing. Letter sheets were popular among gold miners and newcomers to California during the Gold Rush. They allowed the sender to communicate visually with folks at home, and were much like the modern picture postcard.

What is gold and why is it so valuable?

Gold is a precious yellow metal, very ductile and is the most malleable metal; it can be beaten into extremely thin sheets of gold leaf. It is unaffected by moisture, oxygen, or corrosion. Because of these unique properties, gold is very valuable.

Gold is a mineral found in veins and placer deposits. A gold vein is formed 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 widely distributed on the earth; although large amounts are also present in seawater, 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. It is also found in alluvial placer deposits (a general term for unconsolidated material, deposited by a body of running water, as sediment in the bed of the stream or on its flood plain or delta), which are worked by panning, dredging, and hydraulic mining.

Gold has been known from prehistoric times and was possibly the first metal used by humans. It was valued for ornaments and the magical capabilities attributed to it. In the Middle Ages alchemists sought to transform baser metals into gold. 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 San Francisquito Canyon in 1842.



Introduction

Stay East Young Man: California Gold Rush Letter Sheets is an exhibition on the history of the Gold Rush as depicted through illustrated letter sheets. In the early 1850s, while thousands of miners were in the gold fields attempting to strike it rich, California artists, printers, publishers, and booksellers were instead striking prints, usually lithographs or wood engravings, on sheets of letter paper. What they produced is called a pictorial “letter sheet.” A letter sheet is an elaborately illustrated piece of stationery that usually consists of a large single piece of paper, folded in half, with one page for illustration and three blank pages for letter writing. Letter sheets were popular among gold miners and settlers of California. They allowed the sender to communicate visually with folks at home, and served a similar function as the modern picture postcard.

The majority of letter sheet images record places, events, and daily life. These are unflinching in their depiction of the harsh realities of life and mining in California. The sense of disillusionment so frequently expressed in letter sheet images is often restated in letters. Authored mostly by young men, these letters expressed horror at the population’s lack of civility, disappointment at their success in the gold fields, and a deeply-felt longing for their loved ones and home. Surviving pictorial letter sheets and accompanying letters provide us with a rich visual record of the Gold Rush era and the period of the 1850s and 1860s. Artists created images that presented what was most “Californian” about their surroundings, depicting stereotypical scenes of unkempt miners working their claims, menacing grizzly bears, and mammoth trees.

Stay East Young Man: California Gold Rush Letter Sheets brings together approximately sixty pictorial letter sheets from the California Historical Society’s rich collection of works on paper. Representative images include the life of the miner, bird’s-eye views of Gold Rush cities, local disasters, Committee of Vigilance activities, humor and satire, special events, California’s diverse population, and the role of women.

In addition to the core group of letter sheets, other objects included in the exhibition are miner’s letters and diaries (some of which include pasted-in letter sheet images), mining artifacts, Committee of Vigilance materials, chromolithographs, and paintings.

By Scott Shields, Fine Arts Curator



A Brief History

Eureka! Gold is Discovered - January 24, 1848

The California Gold Rush began on January 24, 1848 when James Marshall saw some shiny metallic rocks in the water at Sutter's Mill on the American River. "I reached my hand down and picked it up; it made my heart thump, for I was certain it was gold. The piece was about half the size and shape of a pea. Then I saw another." Marshall raced to John Sutter's fort south of the mill at Coloma. After testing the metal, using their encyclopedia for guidance, the men concluded that it was indeed gold. Although they vowed to keep the news a secret, the word soon spread throughout the land.

At first, many people did not believe the rumors of the gold discovery. But an enterprising fellow, Samuel Brannan, spread the news by running down the streets of San Francisco, waving a bottle full of gold dust and proclaiming, "Gold, gold, gold from the American River!" Samuel Brannan was probably the first person to benefit from the Gold Rush. He had planned his announcement perfectly and stocked his store with mining pans, tents, pick axes, and all the tools a gold miner would need. Brannan's announcement spurred the rush of the 48ers, locals who quickly abandoned what they were doing and rushed to the gold fields. This first gathering of miners included teachers, farmers, sailors, soldiers, and merchants.

Word of the discovery soon traveled throughout the United States. However, it wasn't until December 5, 1848, when President James Polk confirmed the discovery in a speech to congress, that Easterners and people from all over the world began to travel to California in search of their fortunes. Most of these gold seekers left for California in 1849 and were therefore dubbed the 49ers.

The Journey West

During the Gold Rush there were three routes from the East Coast to California. The first of these, used mainly by Midwesterners, was the overland route. This journey often began in Iowa or Missouri and the 1,500 to 2,000 mile walk typically took between three to six months. For more information on the land route visit the *Sacramento Bee* web site: <http://www.calgoldrush.com/graphics/byland.html>.

From East Coast ports, two routes were available: sailing around the tip of South America (known as sailing around the Horn) or sailing to Panama, crossing the Panama Isthmus (by mule and canoe), and sailing up the West Coast. The South American route was 15,000 miles and could take 5 months. Passengers were subject to rough seas, seasickness, and boredom. Despite this, at least 500 ships journeyed this route in 1849. The Panama route was usually the shortest, taking only 3 months. Many of the 49ers who journeyed across the isthmus caught malaria or cholera and never completed the trip. For more information on the sea journey, visit the *Sacramento Bee* web site:
<http://www.calgoldrush.com/graphics/bysea.html>.

Population Change

Population records were not very accurate during the Gold Rush era and were often based on various sources. Estimates of miners in the area for 1848 were 6,000, more than 40,000 in 1849, and 100,000 by 1852. Some statistics suggest that over 90,000 people came to California in the two years following the discovery, and more than 300,000 by 1854.

Many California residents left their towns to work in the mines. In May and June of 1848, so many residents had left San Francisco for the mines that the newspapers *The Californian* and *The Star* had to cease publication due to lack of readership.

San Francisco Population

1847	~400 (not including Native Americans and probably not women)
1848	“A school census recently completed in town indicates the population as follows: 575 males; 177 females; 60 children, totaling 812 white population.” (<i>California Star</i> , March 18, 1848)
1850	24,000 (est. from <i>A Companion to California</i>)
1851	30,000
1852	34,776 (State Census)
1860	56,802 (U.S. Census)

One of the reasons that California is so diverse today is because of the huge influx of immigrants from all around the world during the Gold Rush. For further information about the effects of the Gold Rush on California’s diversity, see the *Sacramento Bee’s* comprehensive web site that discusses the impact the Gold Rush had on women, Native, African, Chinese, and Mexican Americans. The site shares stories, images, and profiles of noteworthy individuals of the Gold Rush. You may explore their web site at <http://www.calgoldrush.com/>. Also visit the Oakland

Museum of California's Gold Rush web site at
<http://www.museumca.org/goldrush/art.html>.

Mining Techniques

As the Gold Rush progressed, mining tools and techniques evolved as competition grew and the surface gold became more scarce.

The Evolution of Gold Mining

The methods of gathering gold changed rapidly as the 'easy pickings' disappeared. Tools were invented at a rapid rate as miners from all over sought new and more effective means of mining the ore. Here is a look at three basic stages in the evolution of gold mining.

The Early Days

Gold could be found loose in riverbeds. Miners would divert streams, sending smaller streams off to each side, leaving streambeds exposed. The dry days of summer and early fall were best as low water levels exposed stone areas where gold may have been hiding.

Staking Claims

Land ownership became an issue as gold grew scarcer and the population grew larger. A miner could claim an area from 50 to 100 feet wide as their own. A piece of personal property signified claim. This claim was filed with the camp's claim officer. If it was not worked within a certain amount of time, it could be claimed by another miner.

Panning/Placer Mining

Using shallow metal pans, miners mixed water with soil from the riverbed. By gently swirling the mixture in circular motion, the lighter soils washed away, leaving the heavy gold at the bottom of the pan.

Winnowing

Chileans, Sonorans from Mexico, and Indians gently bounced dry soil on wool sarapes. Wind took the dried sand, leaving the heavier gold behind.

The Rocker or Cradle

With one man to load water and soil and a second to rock it, this gold washing machine could process 200 bucketfuls of soil per day. The rocker was set on sloping ground to allow water to run through it. Wooden or metal spikes formed riffles on the bottom level that caught the heavy gold.

The Long Tom

With two men, a long tom was capable of handling 400-500 bucketfuls per man per day. A long tom was operated by at least one miner who shoveled dirt into

the long tom, and another who removed large rocks and kept the dirt moving through the trough and across an iron plate that had holes in the bottom. Sand and gold dropped through these holes. Particles of gold lodged in the riffles of a lower box while the sand washed away. The final separation was done by panning.

Hydraulic Mining

This method was developed to explore the soil of older, dried riverbeds and later, any available soil. In hydraulic mining, riveted pipes guided water down from higher elevations. As the water traveled down, its pressure increased. The water was then channeled into iron nozzles called monitors. By this time, the pressure was sufficient to blast away hillsides. The monitors were systematically waved back and forth, boring into the land. The soil would then run down into a valley and a series of sluices where the silt and water would be separated through traditional mining techniques.

The Environmental Effects of Hydraulic Mining

Hydraulic mining damaged rivers, filled bays, and destroyed habitats. Water that was diverted to dry land created boggy mud that destroyed habitats and flooded the land of farmers living downstream. Worthless mountains of sand and gravel still clog the San Francisco Bay today. The effects of hydraulic mining were so profound that they literally changed the physical landscape of California.

Into the Earth

Once the earth's surface had been picked clean, miners organized into larger camps and began digging deeper into the earth.

Quartz or Hardrock Mining

Shafts were sunk and large machinery was needed to remove the veins of gold from the quartz rock. Drilling could be done by hand or by compressed air-drill. Dynamite was placed into the holes created and detonated.

Hydraulic Drills

A hole would be started using a drill bit. As the hole deepened, drill bits would be exchanged for progressively longer and narrower ones. Water was added to the hole to create a grinding compound and to help remove dirt and debris.

Diminishing Returns

By 1858, only those with big machinery could effectively mine the hills. Individual miners and their small claims were replaced by large companies that worked large tracts of land, employing scores of men. Many of the miners moved

on to newer diggings in such places as Pike's Peak in Colorado and Nevada's Comstock Lode.

See the following two web sites for the evolution of gold mining techniques and some useful illustrations: <http://www.calgoldrush.com/graphics/evolution.html> and

<http://www.recordnet.com/daily/newsstatic/goldrush/1dnews011898.html>.

Vigilantes

In 1851 and 1856 San Franciscans organized Committees of Vigilance. The committees arose in California during the Gold Rush to help establish law and order, and to convict those who had gone unpunished by the weak city government.

In San Francisco, the first of two committees was organized in June 1851. It started as part of a legal trial against the Sydney Ducks, a group of convicts from Australia who came to California during the Gold Rush, and committed crimes of both robbery and arson. On the same day the Committee was founded, they hanged John Jenkins, a Sydney Duck, after he was caught stealing. Five days after the hanging, Rev. Dwight T. Hunt said in his sermon "Actual incapacity, or gross corruption, on the part of rulers, may sometimes justify, or even require, a people to ... take power into their own hands...." The Committee's own behavior often went above the law. It broke down jailhouse doors, kidnapped prisoners and hanged them, despite efforts by the Mayor and Sheriff to rescue the prisoners. The committee hung, whipped, and deported individuals; some were put on trial and some were not. There were 103 members of San Francisco's original committee. This number rose to more than 600 before it ended its activities three months later.

A second Committee was established in 1856 following the murders of General William H. Richardson by Charles Cora, and James King of William by James Casey. James King of William was the editor of the *San Francisco Evening Bulletin*, a newspaper which ran scathing articles about politicians, lawyers, judges, and institutions that King felt were responsible for local corruption. The *Bulletin* ran an article calling James P. Casey crooked and revealed that he was an ex-convict. When Casey could not get the *Bulletin* to print a retraction, he openly shot King in the street. King had been an executive on the first Committee of Vigilance, and his death helped initiate the creation of the second.

James Casey was jointly executed with Charles Cora. Cora, a San Francisco gambler, insulted General William H. Richardson who in return accosted him with a pistol. Cora then shot the general and argued that he had done so in self-defense. Cora's original trial ended in a hung jury, but the Committee of

Vigilance took matters into their own hands. The Committee took Cora and Casey out of jail and into their own custody, quickly tried them, found them guilty, and publicly hanged them within four days.

The second Vigilance Committee became much larger than the first, eventually numbering over 6,000. They considered the city government corrupt, and even went so far as to seize arms from the state militia. Eventually they disbanded and sought to reform the government through elections.

The Committee's emblem, the "all-seeing eye," a single human eye surrounded by radiating beams of light, is a symbol of watchfulness and protection. Today it can also be found on the back of the one-dollar bill.

Fires

Fires were prevalent in early California. Because wood was the primary building material and structures were often built side by side, fires spread rapidly. Towns were growing so quickly that they had not yet formed fire-fighting companies. They also did not have the resources, water, manpower, or vehicles to deal with fires. Many of the fires in San Francisco were set as a diversion while criminals committed robberies. The destruction caused by these arson fires was one of the reasons the first Committee of Vigilance formed.

In San Francisco alone there were six major fires which nearly destroyed the city between 1849 and 1851.

- December 24, 1849 – property loss of \$1M (all dollar amounts are historical value).
- May 4, 1850 – destroyed 3 blocks of the most valuable buildings in the city; property loss of \$4M.
- June 14, 1850 – fire broke out in a bakery's chimney; blocks between Clay, California and Kearny streets to the Bay were burnt; damage \$5M.
- September 17, 1850 – damage was minimized because only one-story buildings had been built due to June's recent fire; damage totaling \$250,000.
- December 14, 1850 – property loss of \$1M.
- May 4, 1851 – this was the worst of all the fires; the fire burned for ten hours; between 1,500 and 2,000 houses and eighteen blocks in the main business district were destroyed; only five of the brick buildings on Montgomery survived; the area of the fire spanned three quarters of a mile North to South and one-third of a mile East to West; damage was estimated at \$12 M.

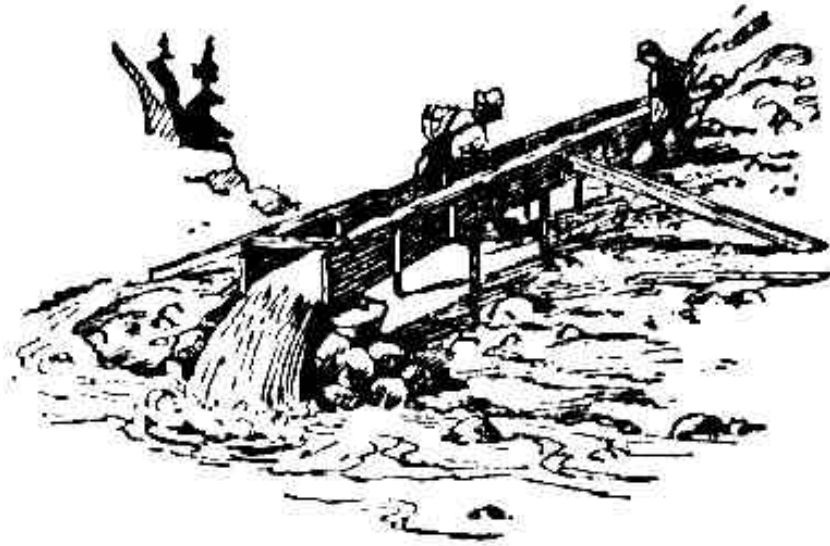
This fire was suspicious in nature. Because loot from the fire was found in Sydney Town, there was suspicion that the fire was set by the Sydney Ducks

and another criminal group, the Hounds. The flames were so bright they would be seen as far as Monterey.

After each fire the city was rebuilt bigger and better. In response, volunteer fire companies and districts were formed and builders started using brick instead of wood. The first election for Fire Chief took place on October 19, 1850 and an active paid fire department went into service in 1866.

Floods

Most streets of the Gold Rush era were not paved. This meant that heavy rains often caused terrible flooding. Because there were no sidewalks, early settlers often threw whatever they could find into the streets in order to form a walking surface – pianos, dead cows, etc. The city of Sacramento was flooded beginning in March 1852 and was under water for six weeks. Boats, rafts, horses, and pedestrians tried to navigate the waterlogged streets with limited success.



Sluice for washing gold

Gold Rush People

African Americans 49ers – African Americans in the Gold Rush were mainly runaway slaves or slaves brought to the mines by southerners. Some came as slaves and bought their freedom with gold dust. By 1852, more than half of the 338 African Americans in Sacramento were free people. Deep prejudice against African Americans remained even though California was admitted to the Union as a free state.



One of the most famous African American of this time was Jim Beckwourth, a former trapper, guide, and mountain man. He found gold on the Stanislaus River and later ran a trading post in Sonora. Beckwourth Pass in northern California is named after him.

For more information about African Americans and the Gold Rush go to:

<http://www.museumca.org/goldrush/fever01.html>

<http://www.calgoldrush.com/part3/03blacks.html>;

<http://www.sfmuseum.org/bio/coffey.html>;

<http://www.sfmuseum.org/hist6/blackrights.html>

Samuel Brannan (1819-1889): Born in Maine, Samuel Brannan came to San Francisco with a large group of Mormons in 1846. He published San Francisco's first newspaper, *The California Star*, served on the first city council, helped organize the Society of California Pioneers, and was the state's first millionaire. Brannan is credited with setting off the Gold Rush by shouting "Gold, gold from the American River," on the streets of San Francisco. Within days, San Francisco was nearly deserted as people went off in search of gold. Brannan owned the only store between San Francisco and the gold fields and profited heavily from the flood of forty-niners. After some disastrous business decisions and an expensive divorce, Brannan died nearly penniless.



Children – Because the journey west was so strenuous, there were few children in the gold camps. Gold seekers were in such a hurry to reach California, they didn't want to take anyone along who would slow down their journey.

The few children who did make it to the camps became popular entertainers to the miners. The most famous child star was Lotta Crabtree. When Lotta's father failed to strike it rich as gold miner, her mother put her on stage as a dancer. She was an instant success and toured the mining camps for many years before becoming famous worldwide. When this daughter of an unsuccessful miner died, she left behind four million dollars!

Chilean 49ers – The gold-seekers from Chile were the second largest group of foreign miners. Most of the Chileans were highly educated men from prominent families. They were experienced miners and knew how to find gold. This led to a lot of jealousy and conflict with the white miners. The conflict even turned into the “Chili Gulch War” of 1849. Several miners were shot and prisoners were taken by both sides.

Chinese 49ers – According to historians there were only seven Chinese people in California when the discovery was made at Sutter's Mill. By 1852 there were 25,000. Thousands of Chinese hopefuls boarded boats to “Gum Shan,” or “Gold Mountain” as it was known. Because of civil war, floods, droughts, and other disasters that struck the Canton province that year, California gold did not seem a risky venture.

Some Chinese people worked in the diggings. But like others they suffered from a great deal of discrimination by white miners. Most often they were only allowed to dig in areas that white miners thought were worthless. If they did find gold, they were usually chased off their claim by a white miner. Many became laborers, cooks, restaurateurs, and merchants.



They built stores and temples that still remain in former Gold Rush towns.

For more information about Chinese miners and the Gold Rush go to:

<http://www.calgoldrush.com/part3/03asians.html>

<http://www.museumca.org/goldrush/fever13-ch.html>

French 49ers – There is no doubt that the French were very active in the Gold Rush. There were two French Bars, four French Camps, four French Gulches, two French Flats, two French Hills, a French Corral, a Frenchman's Bar and a Frenchtown among the camps and diggings. By 1853 it is estimated that there were 32,000 French people in California.

Hawaiian 49ers – Natives of the Hawaiian Islands first arrived in California in the early 1800s. Records show that ten native Hawaiians, called Kanakas, were

employed by John Sutter when gold was discovered at Sutter's Mill. As word of the discovery of gold traveled to the islands, hundreds of Kanakas joined the rush to the gold fields. Today there is a creek in Sierra County that bears their name and still produces gold.

Irish 49ers - The Irish were among the earliest miners to arrive in the gold fields. They played an important role as early politicians and built many of the camps' first churches.

Jewish 49ers - Jewish people helped establish some of the most successful early mining companies. They also opened stores in the camps and were a big part of turning those mining camps into today's cities, instead of letting them become ghost towns.

The most famous Jewish man of the Gold Rush was Levi Strauss, who arrived in California in 1850. When a miner complained that no clothes could hold up under the rough wear and tear of mining, Mr. Strauss made him a pair of pants out of tent canvas. They wore so well, soon other miners wanted a pair of "Levi's pants." Some say Strauss used the sails from the abandoned ships in the San Francisco Bay to make the pants until he could get blue denim, which was easier to sew. The Levi's jeans people wear today were born during the California Gold Rush!

James M. Hutchings (1818-1902): James Hutchings was an English born author and editor who went to California in 1849. After trying his hand at mining (and failing), Hutchings concocted "The Miner's Ten Commandments," a highly successful letter sheet whose sales furnished him with enough capital to found *Hutchings' California Magazine*. His journal eventually reached a circulation of 8,000. Hutchings was one of the first non-natives to visit Yosemite Valley where he built a hotel and settled with his wife.

James Marshall (1810-1885): Born in New Jersey, James Marshall arrived at Sutter's Fort in 1845. While working for John Sutter, he discovered gold on January 24, 1848 at Sutter's Mill in Coloma, and launched the Gold Rush. Marshall did not prosper from his discovery and ended up bankrupt. Although credited with the discovery of gold in California, gold was known to exist much earlier (see page 3).



Mexican 49ers - Mexicans were some of the first, and most skilled, miners to rush to California when gold was discovered. They were also the largest group of foreign miners. Many came from Sonora, Mexico and established a camp in northern California called Sonora, which is a town today. Unfortunately, the white miners often discriminated against the Mexican miners. Many Miners from the rich Mexican mining state of Sonora had come to the area east of Stockton to try their luck in the mines. In the beginning, they staked their

claims and mined in relative peace alongside all of the other gold-seekers arriving daily in California. They were admired for the well-honed "dry digging" skills they had developed in their native land, techniques that brought them a modicum of early success.

Later, Anglo miners and eastern politicians, their own numbers growing in California, launched a campaign to force the Sonorans from the mines. In a little over two years, Americans came to resent the fact that foreigners – particularly those from a country the United States had just defeated in war – were making it rich off land that they considered exclusively theirs. State lawmakers found an effective cure for ridding the mines of Mexican gold seekers when they adopted the Foreign Miners' Tax Law of 1850. In that same year, upper-crust *Californios* (native Californian-Mexicans) came under legislative attack; lawmakers passed the Land Law of 1851, which established a tribunal in San Francisco to rule on the validity of Spanish and Mexican land grants. Those found to be invalid were declared public property and made available to squatters. While some *Californio* families succeeded in holding their land, others were not so lucky. Spanish and Mexican residents who had first settled California and had once been land owners were forced out. For more information on Mexicans during the Gold Rush visit: <http://www.calgoldrush.com/part3/03mexicans.html>.

Charles Christian Nahl (1818-1878): Charles Nahl is remembered as one of California's foremost visual interpreters of mining life and one of the most imaginative and famous of letter sheet illustrators. He was both an illustrator and a painter who produced highly detailed genre scenes of miners and settlers. Nahl was born in Germany, and received art training in Europe before moving to the United States in 1849. He settled first in New York, but two years later moved to California to try his hand at gold mining. Initially unsuccessful, he resumed his artistic career, and focused on his new surroundings. He produced numerous letter sheet designs that include *Sunday in the California Diggings*, *Hutchings' California Scenes—Methods of Mining*, *Hydraulic Method of Mining*, *Chinese Buddhistic Worship in San Francisco*, and *Way-Side Scenes in California*.



Native Americans – The Native Americans of California suffered the most and benefited the least from the Gold Rush. Because they believed that people could not own parts of the earth, they were never very interested in the gold or in mining it. Even when they did join in the mining, they were soon forced out of the gold fields by the white miners.

California tribes such as the Yalesumni, Miwok, Yokuts, and Nisenan were pushed farther and farther away from their homelands. Usually the miners organized themselves to fight the native tribes and take their land, but sometimes the U.S. military even joined in. When the tribes tried to fight back, they were overwhelmed by the number of miners and their weapons. Tragically, some of the tribes were completely wiped out.

Before the first Europeans arrived in California, some sources estimate 300,000 Native Americans lived in the state. By the start of the Gold Rush, their numbers had been reduced to 150,000, due to violence, disease, and starvation. Twenty years later, the population stood at about 30,000. For more information about Native Americans and the Gold Rush visit these web sties:

<http://www.calgoldrush.com/part3/03native.html>

<http://www.museumca.org/goldrush/fever13-mi.html>

James Polk (1795-1849): The eleventh president of the United States. After provoking the Mexican War and winning it, under Polk's leadership the US acquired Texas and the future states of California, Arizona, Nevada and Utah. Polk's December, 1848 message to Congress reporting the discovery of gold in California confirmed what had until then only been rumors. His speech launched the migration of Easterners to California in search of gold.



John Augustus Sutter (1803-1880): Born in Germany and a Swiss citizen, John Sutter left his family and failing business in Switzerland and came to the US in 1834 and to Mexican California by 1839. He obtained a large land grant and set up a fort on the American River, near present-day Sacramento. He had a profitable store at Sutter's Fort equipping new residents with tools, food, and supplies. Sutter was ruined by the discovery of gold at his mill as gold seekers took over his land and his workers went off in search of gold, leaving his crops to rot in the fields.



Women 49ers – In 1849, there was only about one woman for every twelve men in California. The first female 49ers were mainly miners' wives or entertainers. However, some women disguised themselves as men so they could try their luck in the fields too. These masked miners were called "Madame Pantaloons" by their male counterparts.



Women often earned as much or more than miners by cooking, sewing, cleaning, ironing, washing, running hotels, dealing cards, or pouring drinks in gambling houses. For more information about women in the Gold Rush visit these web sites: <http://www.calgoldrush.com/part3/03women.html>
<http://www.goldrush.com/~joann/>

Fun Facts

- Gold is so heavy that a solid gold golf ball would weigh more than a brick.
- Gold can be hammered so thin that a cup of it could be flattened over an entire football field.
- All the gold that has so far been discovered in the world could fit inside your school gym.
- Gold is so strong that a gold hammer could break down an iron door.
- Gold is so hard to find that in ancient times only kings, queens and other rulers had enough workers to collect it. Gold became a symbol of wealth and power and still is.
- Gold is so valuable that ancient Egyptians actually believed it was sacred and gave magic power to its owner. They buried their rulers with many gold objects so that the gold's power and magic would help them in the afterlife.
- Gold is so durable that a piece of gold jewelry will have the same beautiful shine for thousands of years. It will not rust or tarnish, even if it is buried in the ground or under water. It can be used over and over again by melting it down and making it into new objects.
- Gold is always measured in ounces instead of pounds (there are 16 ounces in a pound). This is because gold is so rare that it is usually found in very small amounts.
- If a miner in 1850 found a nugget of gold worth \$10 dollars, nowadays that same gold nugget would be worth about \$300 dollars!
- Experts believe that only 10% of the gold in California has been discovered. That means there is still plenty of gold for *you* to find!
- Levi Strauss invented denim jeans in the 1850s when a miner complained that no clothes could hold up under the rough wear and tear of mining. Levi made him a pair of pants out of tent canvas. They wore so well, soon other miners wanted a pair of "Levi's pants." Later in 1873, he added the metal rivets that made Levi's unique. Traditionally the work pants were called "waist overalls." The word "jeans" didn't come into use until 1960.
- There has been more gold found in California than in any other state.



How to Talk Like a Miner

All that glitters is not gold – This phrase comes from an old proverb dating back to ancient Roman times. During the Gold Rush it referred to fool's gold, which is bright and glittery in the pan, but is worth nothing. Today it means that even if something looks good, it is possible that it is not.

El Dorado – During their conquest of South America the Spanish heard of a place with so much gold that the people there coated their king with it once a year and called him “El Dorado,” meaning “The Painted One.” During the Gold Rush, miners would say that they found El Dorado when they found a place with a lot of gold. Today El Dorado means something very hard, or even impossible, to find.

Eureka – Comes from the Greek word meaning “I have found it.” Supposedly Archimedes, a famous Greek inventor, said this when he discovered a way to determine the purity of gold. When a miner found a rich area of gold he would shout, “Eureka!”

Hit Pay Dirt – The gold in placer deposits is mostly found in one area of dirt, while the areas around it have no gold. A miner digs until he finds the layer with gold—this is the “pay dirt.” Today it means to work hard and finally get what you want.

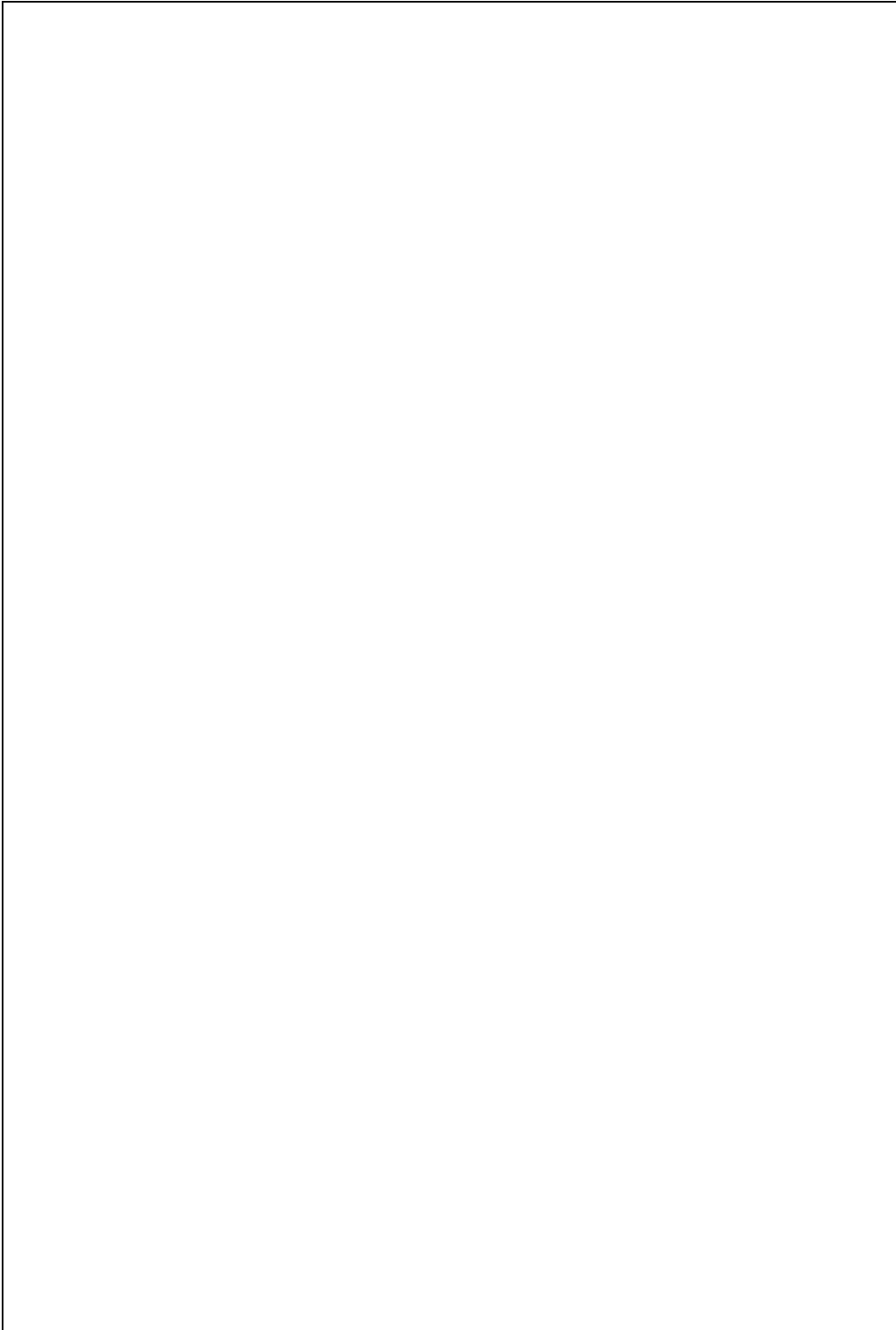
Hit Rock Bottom – When a miner digs out all of the pay dirt until he hits bedrock and runs out of gold, he has “hit rock bottom.” Today it means when things are as bad as they can get.

It's A Gold Mine – When someone has an idea or business that will surely make them a lot of money, we say “it's a gold mine.”

It Didn't Pan Out – If a prospector pans some dirt to see if there is any gold and finds none, then “things didn't pan out.” Today it means things didn't work out the way we wanted them to.

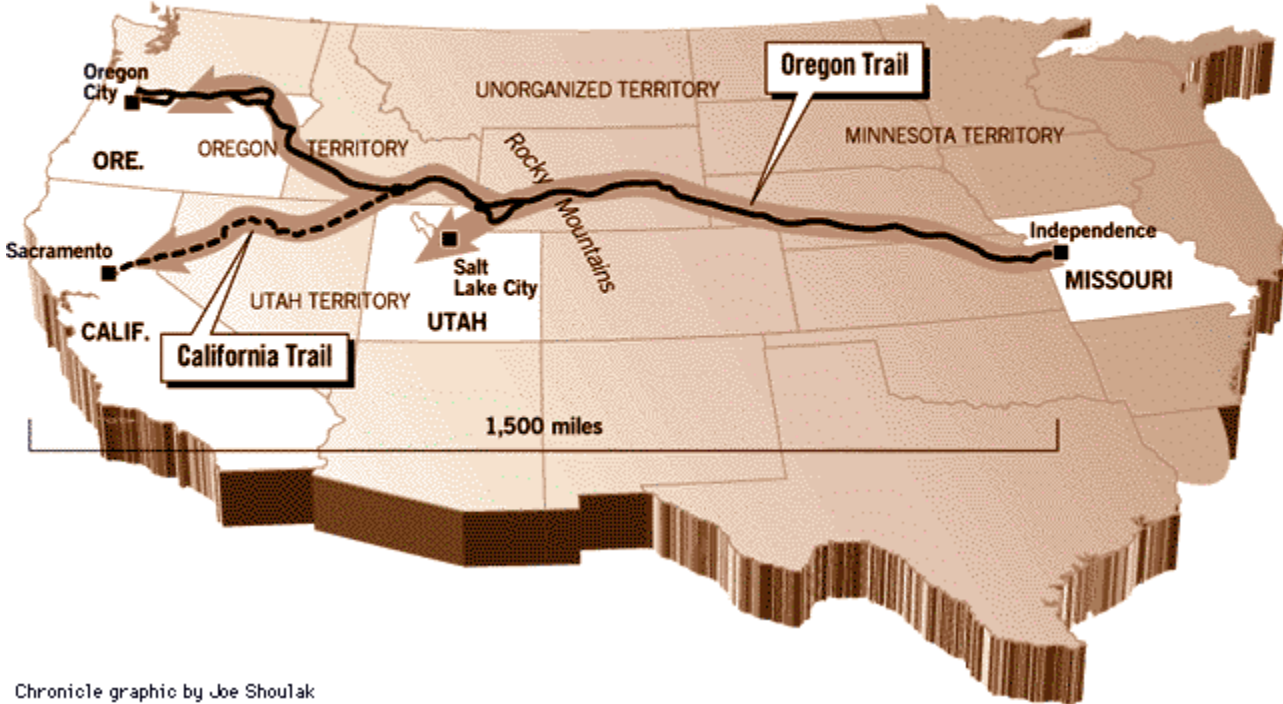
Strike It Rich – When a miner hits a rock wall or a gravel deposit with his shovel and sees gold, he has “struck it rich.” Today it means to get lucky.

Gold Rush Map



Going West map

GOING WEST



Chronicle graphic by Joe Shoulak

development; the often-turbulent growth of communities and cities; and California's emergence as both a state and a place of uniquely American dreams. "California as I Saw It" may be found at <http://lcweb2.loc.gov/ammem/cbhtml/cbhome.html>.

Songs

Many songs were written about gold mining and the lives of 49ers. Just as today's music reflects our times, so did the music of the past. The following is a song that the miners adapted from an old favorite.

"Oh Californy!" (to the tune of 'Oh Susanna!')

I come from dear old Boston with a washbowl* on my knee,
I'm going to California, the gold dust for to see.
It rained all night the day I left, the weather it was dry,
The sun so hot I froze to death, dear brother, don't you cry.

(CHORUS)

Oh, Cal-i-for-ny!
Oh, that's the land for me!
I'm going to Sacramento
With a washbowl on my knee



I jumped aboard the largest ship and traveled on the sea,
And every time I thought of home, I wished it wasn't me!
The vessel reared like any horse that had of oats a wealth,
I found it wouldn't throw me, so I thought I'd throw myself!
(CHORUS)

I thought of all the pleasant times we've had together here,
And I thought I ought to cry a bit, but I couldn't find a tear,
The pilot's bread was in my mouth, the gold dust in my eye,
And I thought I'm going far away, dear brother don't you cry.
(CHORUS)

I soon shall be in Frisco, and there I'll look around,
And when I see the gold lumps there I'll pick them off the ground.
I'll scrape the mountains clean, my boys, I'll drain the rivers dry,
A pocketful of rocks bring home, so brother, don't you cry.

*A washbowl – the pan miners used to separate gold from sand.

You may find the words to other Gold Rush songs at:
<http://memory.loc.gov/ammem/afcchtml/cowhome.html>,
<http://www.sfmuseum.org/hist6/goldsong.html>
<http://www.malakoff.com/tcsong.html>

Activities

Literature

Research and read stories about the Gold Rush and gold mythology. Examples: *The Californian's Tale* and *The Notorious Jumping Frog of Calaveras County* by Mark Twain; *Stories of Virginia City, Nevada* by Dan De Quille; *The Shirley Letters from the California Mines, 1851-1852* by Louise Clappe; *The Luck of Roaring Camp* by Bret Harte; poetry by Joaquin Miller; *Jason and the Argonauts*; *King Solomon's Mines*; *Blackbeard's Treasure*; *Rumpelstiltskin*; *King Midas* and *The Golden Touch*; *The Lost Dutchman's Mine*; *Thomasina and the Tommyknocker*.

The gold of metaphor and myth constantly appears in our everyday conversation. Brainstorm with your class to make a list of words and expressions linked to gold (e.g. eureka, hit pay dirt, see page 18 for more). Discuss and investigate the origin and meaning of these terms.

History

To understand what life was like for the 49ers, try going through an evening without any modern conveniences. No electric lights, computers, or TV! Make a complete list of all the things you gave up. (You might make an exception for bathrooms!)

Many of the 49ers were teenagers who left home on a 2,000-mile journey to California. Some walked the entire distance on foot! If you were planning to journey 2,000 miles across the wilderness, what would you take along? Remember, there are no supply points along the way; you must pack everything you need to last 3 months. Make a list of your supplies.

Before they left for California, the 49ers plotted their route west. With a modern map, plot YOUR route to Sacramento. Try to find the fastest route.

Imagine that you are traveling back in time to become a 49er. You are allowed to take along one modern invention; something that will fit in your pocket. What would you take? Why?

Sam Brannan was an entrepreneur and a manipulator of hype. He promoted the Gold Rush when no one else seemed to care very much. Brannan ran down the streets of San Francisco shouting "GOLD! GOLD FROM THE AMERICAN RIVER!" How do promoters get our attention today? Is hype good or bad? Can

you think of events in modern life that are over-promoted or “hyped” by the media (Super Bowl, elections)?

Research and prepare reports on other gold discoveries around the world (Alaska, Australia, etc.).

Math

Figure out how many steps it took for a 49er to walk to California. First, measure one of your normal steps from front heel to back heel. How many inches is it? Next, divide 63,360 (the number of inches in a mile) by that number. Now you have figured the number of steps in a mile. Now, multiply the number of steps by 2,000 miles – the distance to California. The answer is the number of steps it would take for you to walk from Missouri to California.

Before the California Gold Rush, a metal pan cost 30 cents, but after gold was discovered, gold pans sold for 15 dollars each! The price change was a result of the economic laws of supply and demand. Can you think of items today that are more expensive because they are in short supply (beanie babies, Furbies, rare coins, all-star basketball players, classic cars, downtown real estate)? What about things that are inexpensive because they are in large supply (salt, water, topsoil)? Can you think of things that have gone up in price as demand has increased or supply has dwindled (gasoline, timber, Nike shoes)?

Science/Geology

Show students samples of pyrite (fool’s gold). How could prospectors distinguish between fool’s gold and real gold? You can distinguish between the two by comparing their hardness and color. In a streak test, gold leaves a yellow streak, and pyrite leaves a greenish black streak. Pyrite has a hardness of 6.5, gold a hardness of 2.5. Pyrite will scratch gold, but gold will not scratch pyrite.

What is the symbol for gold on the periodic table? Study gold’s chemical structure and its traits. Make a list of the unique physical properties of gold. (Gold is highly malleable, highly reflective, and an excellent conductor. It is also ductile; that is, it can be hammered out into wire or threads. Gold does not rust, tarnish or corrode, nor does it dissolve in water or most acids.)

Carried in solution by water, metals may precipitate to form ore. Inside the Earth, metals seep into cracks, forming veins of ore. To observe this phenomena, put an iron nail in a bowl of water. After the rust forms, add a dry sponge. Wait a few days to observe how the rust gets absorbed by your sponge “rock”.

Art

Pretend you are a California gold miner and the year is 1849. Take a piece of paper and fold it in half (hamburger fold). Design an image of California miner's daily life on the front panel, and using the other three panels, write a letter to a fictional friend or family member back home.

Writing

Write a story about life in a mining camp or write lyrics to a Gold Rush song.

Read about the history of the Gold Rush. Choose a historically recognized figure and write a journal in the voice of that person.

Civics

Discuss law and order. Is vigilantism good or bad? Split the class in half and have them discuss or write reports defending each side of the issue. Have the class debate the issues, based on the actual historical events of the Gold Rush era.

Panning and Mining

For a classroom panning exercise, obtain some fine copper beebee pellets or iron fillings from a hardware store. Mix one-quarter cup of the "gold" with about 10 liters of course sand. Put the mixture in a bucket and add water to make a slurry. Have students use small shallow bowls or old pie pans to scoop up a bowl of slurry and swirl it over another bucket or large pot. Tell them not to tip the pan too far and to continue adding plain water while swirling until only the pellets or fillings remain in the bowl. The exercise illustrates the techniques used by miners while panning and the difficulties involved.

Give each student a chocolate chip cookie (Chips Ahoy Soft Cookies work well) and "mining tools" such as flat toothpicks, round toothpicks, and paper clips. Tell the students to mine the chocolate chips. Allow about 10 minutes for the mining operation. Discuss how the students could have mined more effectively. Then treat yourselves to a snack!

Gold Rush Timeline

- 1821 Mexico gains independence from Spain.
- 1826 Jedediah Smith travels from the United States to California.
- 1839 John Sutter arrives in California.
- 1846 May 13 Mexican-American War begins (ends 1848).
June Bear Flag revolt against Mexico.
July 31 Sam Brannan arrives at Yerba Buena.
November Donner Party is trapped by heavy snows in the Sierra.
- 1847 Yerba Buena is renamed San Francisco.
August John Sutter hired James Marshall to begin construction of a sawmill in Coloma.
- 1848 January 24 James Marshall finds gold at Sutter's Mill.
February 2 Guadalupe Hidalgo treaty ends the Mexican/American War, and calls for the sale of California to the US for \$15 million.
March 15 *The Californian* is the first newspaper to print an article on the discovery of gold.
May 12 Sam Brannan takes news of gold discovery to San Francisco.
May 19 First wave of miners (the "forty-eighters") reaches Sutter's Fort.
August 19 The New York Herald prints an article on the discovery of gold.
October 6 The steamship *California* leaves New York for California.
December 5 President James Polk verifies the gold discovery in a speech to congress.
- 1849 Gold Rush begins.
February 28 First steamer reaches Bay of San Francisco.
March Floods. The city of Sacramento was flooded beginning in March and was under water for six weeks.
April First wagon train departs from Missouri and Iowa traveling to California. Over 20,000 people make the trip.

- November California State Constitution signed.
- 1850 California becomes 31st state; Gold Rush compresses a half century of normal growth into a half decade; people came from all over the United States and the world, by land and by sea.
- The Terre Haute Express advises: "Go West, young man, go West."
- Levi Strauss begins manufacturing heavyweight trousers for gold miners made of the twilled cotton cloth known in France as "genes."
- January Ten days of flooding wipe out the town of Sacramento.
- April Foreign Miners' Tax instituted which requires all miners who are not native or naturalized citizens of the US to obtain a license at a cost of \$20 per month (a great deal of money back then). Within a year the tax was repealed, and then in 1852 reinstated at \$4 per month.
- September 9 California admitted to the Union.
- 1851 The first Committee of Vigilance is formed in San Francisco.
- 1852 Placer mining begins to wane. San Francisco becomes an instant metropolis.
- 1853 Sacramento becomes the capitol of the state of California.
- A 195-pound mass of gold, the largest known to have been discovered in California, was found at Carson Hill in Calaveras County.
- 1864 California Gold Rush had ended. Surface and river placers were largely exhausted, hydraulic mines were the chief sources of gold for the next twenty years.



Glossary

ASSAY OFFICE – Miners brought samples of ore (the minerals from which metal can be mined) from their claims to the assay office. The assayer performed tests to determine the amount of gold in the ore. An assay certificate was then issued. With this valuable document, a miner could sell his claim with written proof of its value.

ASSAYING – Fire assaying is the oldest and most reliable method of determining gold and silver in rock or concentrate samples. This method is still the industry standard. It is called “fire” assay because it involves smelting the sample that has been mixed with lead oxide. Until electric furnaces were available, samples were smelted literally in a fire.

CALIFORNIA – Became the 31st state on September 9th, 1850. Because the State’s initial growth took place during the Gold Rush, much of its identity relates to the discovery of gold. California is nicknamed the “Golden State” and the state motto is “Eureka” (I Have Found It). The State Capitol is in Sacramento, California’s capital since 1854. Monterey, San Jose, Vallejo, Benicia, and San Francisco were temporary capitals between 1850 and 1854.

CLAIM – A piece of land that was staked by a miner and legally held for mining purposes. Most mining claims were a piece of land along a river or stream. The claim was usually 50 to 100 feet wide, and would stretch from the center of the stream as far back as was needed for equipment and a shelter. Wooden stakes were used to mark its boundaries, and its location was registered so that no other miner could mine there.

CRADLE – (also known as a rocker) A wooden box-like device furnished with rockers, used for washing gold-bearing dirt. Gold-bearing dirt was shoveled into the cradle, and as the water washed over it, the cradle was rocked back and forth to help sift the dirt. The tiny gold particles fell through the bottom and were collected on canvas underneath.

DIGGINGS - Location of mining activity.

ELEPHANT – The expression “seeing the elephant,” stood for the thrills of gold mining – both good and bad. The expression predated the Gold Rush, arising from a tale current when circus parades first featured elephants. According to legend, a farmer who had never seen an elephant excitedly went into town to see the elephant parade. Although he was very excited, his horses were so terrified

they overturned his wagon and ruined the vegetables it was carrying. “I don’t give a hang,” the farmer said, “for I have seen the elephant.”

FOOL’S GOLD - Brittle iron pyrite sometimes mistaken for gold.

GOLD RUSH – On January 24, 1848, James Wilson Marshall discovered gold in the waters of the American River at Coloma. Hundreds of thousands of newcomers rushed to California from around the world. The Gold Rush was on!

HISTORY – A chronological record or story of past events.

HYDRAULIC MINING – A mining technique in which large, powerful jets of water were blasted against mountains and riverbeds to loosen gold from the rocks.

LAW OF SUPPLY AND DEMAND – Economic law which states that prices rise when demand is high and supply is low; and the prices fall when demand is low and supply is high.

LETTER SHEET – A letter sheet is an elaborately illustrated piece of stationery that usually consists of a large single piece of paper, folded in half, with one page for illustration and three blank pages for letter writing. Letter sheets were popular among gold miners and newcomers to California during the Gold Rush. They allowed the sender to communicate visually with folks at home, and were much like the modern picture postcard.

LONG TOM – The long tom is a tool that prospectors used to separate gold from sand or gravel. It is a long wooden box with metal screens above and riffles (ridges) on the bottom. It allowed miners to wash more sand at a faster rate than they could with a rocker. The long tom did have two disadvantages: first, it required a lot of water, and second, the water rushed through it so fast that only big nuggets were caught in its riffles, therefore, fine gold dust was swept away. So, if a prospector’s claim contained a lot of fine gold, he might choose to use the rocker to wash the sand instead of the more efficient long tom.

MINER – The name given to those seeking gold or other precious metals. California Gold Rush miners were also called prospectors, argonauts (in Greek mythology, Jason and his men sailed the ship *Argo* in search of the Golden Fleece), and forty-niners (after the year in which most people arrived to search for gold).

PANNING – Method of mining where a large pan with slanted sides is used to wash gravel in water. The lighter gravel is washed away, and the heavier gold settles to the bottom.

PAY DIRT – The gold in placer deposits is mostly found in one area of dirt, while the areas around it have no gold. A miner digs until he finds the layer with gold – this is the “pay dirt.” Today it means to work hard and finally get what you want.

ROCKER – See cradle.

SCALE – A weighing device used to measure the value of gold collected by the miners.

LODE – A vein or pocket of mineral-rich material.

MOTHER LODE – belt of gold-bearing quartz veins in central California along the western foothills of the Sierra Nevada. The term is sometimes limited to a strip about 70 miles long and from 1 to 6 1/2 miles wide, running NW from Mariposa.

PLACER GOLD – Loose or free gold.

Exhibition Vocabulary Words

attr. – Attributed to; by.

chromolithography – A lithographic process using several stones or plates – one for each color, printed in register. The result is a color print, to be distinguished from colored prints that have the color hand-applied after printing.

daguerreotype – (pr. duh-gayr-oh-type) The first commercial photographic process, introduced in Paris in 1839 by Louis J.M. Daguerre (French, 1787-1851). Each daguerreotype consisted of a copper plate, coated with silver, which when sensitized with iodine vapor, produced silver iodide. After a long exposure in the camera, the positive image on this surface was developed by mercury vapor – a process very hazardous to the photographer. Daguerreotype images, most of which were portraits, require viewing from a certain angle, but their permanence was a tremendous achievement in the emergence of photography.

del. – Abbreviation for *delineavit* (the Latin term for “drew it”); indicates that a work has been drawn and is usually in conjunction with the artist’s name.

lith. – Indicates that a work is a lithograph.

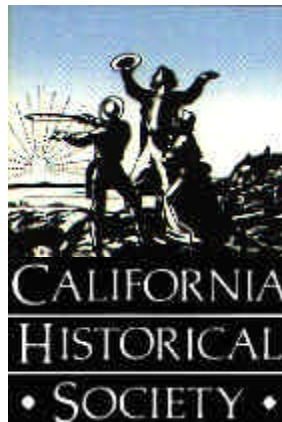
lithograph – A print made by drawing on a fine-grained, porous limestone block or zinc plate with a greasy crayon. The stone is then wetted and ink is applied which adheres only to the drawn lines. Dampened paper is applied to the stone and run through a special press to make the final print.

n.d. – No known or given date.

pub. – Followed by a year, it indicates when a work was published.

sc. – Abbreviation for *sculpsit* (the Latin term meaning “engraved it”); indicates that a work was engraved.

sic. – Misspellings or typographical errors which appeared in the original text.



This guide is heavily indebted to the following sources...

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PBS Online, *Gold Rush Teacher Guide* at
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Rawls, Jim, *California: An Interpretive History*. McGraw Hill, 1998.

Sacramento Bee **Gold Rush** site at <http://www.calgoldrush.com>.

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