

**BOOM OR BUST:
MINING
AND
THE OPENING
OF THE
AMERICAN WEST**



TEACHER'S GUIDE

***Boom or Bust:
Mining and the Opening
of the
American West***

catalog #2656

Teacher's Guide

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BOOM OR BUST:
MINING AND THE OPENING OF THE
AMERICAN WEST
Viewing Time 22:06

PROGRAM SUMMARY

This twenty-two minute program takes a look at mining and the important role it played in the opening of the American West.

The big migrations that led to the settlement of the American West in the mid-nineteenth century were essentially of two types. First, in importance, were the migrations motivated by agriculture, but second in importance were the migrations brought about by the search for gold--first in California in 1849, then in Colorado in 1859, and finally in Alaska in 1897. And besides these three states, the early histories of many other western states are inexorably intertwined with the search for mineral wealth.

The topics presented in order of appearance are:

- The Mexican War ending in 1848
- The California Gold Rush of 1849
- The Pikes Peak Gold Rush of 1859
- Trails to the West and important forts along these trails
- Details of Colorado's first big gold strike
- Some techniques of placer mining
- Some techniques of hard-rock mining
- The role of railroads and economic growth
- The growth of towns in support of mining operations
- Silver Mining: The Rags to Riches to Rags story of Horace Tabor and his wife, Baby Doe
- Arizona Copper Mining
- The Mining Labor Movement
- The Alaska Gold Rush of 1897

STUDENT OBJECTIVES After viewing this program and participating in the lesson activities, students should be able to...

- Identify the present day states that obtained some land from Mexico following the war that ended in 1848.
- List the three major gold rushes in the United States and describe how gold rushes led to the settlement in the sparsely populated American West.
- Trace the principle routes from St. Louis to the west coast before 1865.
- Contrast placer mining and hard-rock mining.
- Explain how towns and cities developed as a result of mining operations.
- Discuss some of the purposes of, and obstacles to, the mining labor movement.

Before presenting this video to your students, we suggest you view the video and review this guide and accompanying blackline masters in order to become knowledgeable about their content. You may decide to duplicate some of the blackline masters so the students can reference them during the video presentation.

As you review the instructional material outlined in this guide, and the blackline masters that accompany it, you may find it necessary to make some changes, deletions, or additions to fit the specific needs of your class or geographical location. We encourage you to do so, for only by tailoring this program to your students will they obtain the maximum instructional benefits afforded by the materials.

INTRODUCING THE VIDEO

Briefly contrast the westward migrations based on agriculture and those based on mining. Using a large map, point out the location of the three major gold rushes in the western United States. Trace the typical routes taken (by ship, by wagon, or by stagecoach) and major centers of civilization along the way. Point out the route of the first transcontinental railroad. Distribute the backline masters you've chosen to have students use as reference and present the video. Viewing time is 22:06 minutes.

BLACKLINE MASTERS/ANSWER KEY

- Blackline Master 1, **What Is Necessary For An Outfit**, is an information sheet showing the necessities for a trip across the plains.
- Blackline Master 2, **Information Map**, shows the area ceded to the U.S. as a result of the War with Mexico in 1848.
- Blackline Master 3, **Information Map**, shows the routes to the gold fields 1849-1898.
- Blackline Master 4, is the **Quiz** for this video presentation. The questions have been repeated here, along with the answers, for your convenience.

1. In 1848, following war with Mexico, land that today makes up seven different states was ceded to the United States. These states are: _____

_____.

A. California, Nevada, Utah, New Mexico, Arizona, Colorado and Wyoming.

2. The American West witnessed three great gold rushes. These were:

A. Gold Rush of 1849; Gold Rush of 1859; Gold Rush of 1897.

3. In the 1850s, two main wagon trails led west from the frontier towns near Independence, Mo. The main northern trail was called _____
main southern route was called _____.

A. The Oregon Trail; The Santa Fe Trail.

4. In the 1850s, some of the travelers on the northern trail were members of a new religious group called the _____, who sought freedom from persecution in their new capital of Salt Lake City.

A. Mormons

5. True or False: Gold panning and sluicing are both forms of placer mining.

A. True

6. True or False: In mining towns, more people worked as storekeepers, teachers, saloonkeepers, doctors, dentists, etc., than actually worked in the mines and mills.

A. True

7. In Colorado during the late 19th century, over 100 labor strikes occurred largely because the miners asked for shorter work days, better pay, safer working conditions and because they wanted to join _____.

A. Labor unions

8. Arizona, unlike Colorado and California, has several enormous pit mines where _____ ore is taken from the earth.

A. Copper

FOLLOW-UP ACTIVITIES

Discussion: Discuss the role of the United States in bringing about war with Mexico in the 1840s.

Contrast the motivations of prospectors and farmers. For example, is there any truth to the perception that prospectors tended to be more like gamblers, being inspired by the hopes of making one really big strike that would produce enormous wealth...whereas farmers were a more steadfast breed, depending for their success more on the outcome of many years of hard work?

Discuss the stories that surround mining ghost towns in your state, if any. Historically, what other factors besides mining have led to the creation of boom towns and ghost towns? (e.g. oil, steel mills, textile mills, war industries, logging mill towns, dustbowl farm towns, etc.)

Discuss the importance of railroads in opening up the west and describe some of the incentives the U.S. government gave the settlers.

Projects: Students could be assigned to write papers on the history of various mining centers (both past and present) in their home states.

Students could be assigned research papers on some of the factors that have historically led to the cycle of boom and bust; namely the factors that have resulted in large increases or decreases in the demand for gold, silver, copper, iron, coal, oil, etc.

SCRIPT OF VIDEO NARRATION

If the original inhabitants of the hundreds of mining ghost towns that dot the American West were still living today, they would have some amazing stories to tell—of good luck and bad luck, of hard work and courage, of deception and cruelty, of broken dreams and dreams come true.

Now let us find out how this fascinating chapter in the opening of the American West came to be.

The year is 1848 and the war between Mexico and the United States is ending, having been fought over the territories that today make up California, Nevada, Utah and large parts of Arizona, New Mexico, Colorado, and Wyoming. And for 15 million dollars, all these lands are ceded to the United States.

Earlier in this same year, gold was discovered, quite by accident, on the property of a man named John Augustus Sutter, who had come to California in 1839, not in search of gold, but to carve out an agricultural empire for himself on the banks of the Sacramento River.

This discovery quickly transformed the Mexican town of San Francisco from a sleepy fishing village of 900 souls into a bustling port of 25,000, as starry-eyed gold seekers arrived daily by ship from all around the world in the hopes of striking it rich in the California goldfields.

Just ten years later, in 1858, gold was discovered in the general vicinity of Pikes Peak, just a few miles east of the front range of the Colorado Rocky Mountains, and almost immediately the twin towns of Auraria and Denver City sprouted by nearby.

The discovery of the Pikes Peak goldfields not only attracted hoards of unsuccessful miners who hurried back from California, it also brought a wave of between 50 and 100,000 men and a handful of women and children out from the east. For in the late 1850s, times were hard, cash was scarce, and many people who would never have left their homes in more prosperous times decided to try to cure the ills created by economic depression by searching for Colorado gold.

Prospecting for gold was a fairly easy business to get into; beside some food and a pack animal, little more than a pick, a shovel, a gold pan, and a lot of determination were needed to get started.

Most new gold seekers, after having said goodbye to their friends and families, set out for St. Louis, a busy trading

and supply center where the Missouri and Mississippi Rivers meet. From St. Louis, goldseekers could catch a riverboat to the frontier towns near Independence Missouri that stood on the edge of what was then called The Great American Desert, land which, it was believed, could never be successfully farmed.

Just west of these towns, the main road branched. The main northern road was called the Oregon Trail and the main southern road was called the Santa Fe Trail.

The spring of 1859, the year that Oregon gained statehood, witnessed major westward migration—to the north wagon trains of farm families headed off on a three-month journey to Oregon and the one square mile of free land that awaited them there.

Besides these pioneers, a smaller number of a new religious group called the Mormons, in an attempt to escape persecution, set off for their remote new capital of Salt Lake City that had just recently been founded by Brigham Young.

Most of those who took the Santa Fe Trail were a different breed—traders and goldseekers who had little interest in tilling the soil.

In the late 1850s, besides Salt Lake City and Santa Fe, little in the way of civilization lay between eastern Kansas and the towns of Oregon and California. There were a few old fur trading outposts like this one in northwestern Nebraska, and there was Fort Laramie on the Oregon Trail, originally another fur trading post, but now a major military outpost where travelers on the Oregon Trail could rest up for a few days and purchase extra supplies at the Sutter's store, at greatly inflated prices.

And likewise, voyagers on the Santa Fe Trail could refresh themselves here at this fort on the Arkansas River. Originally called Bents Fort, the structure was leased to the U.S. government and re-named Fort Wise in 1859. It was here that some, who had already traveled quite far, decided to

give up on the idea of going on to California and chose to go to the much closer Pikes Peak goldfields instead.

William Bent, one of the original builders of the fort, had long been aware of the stories of gold in the mountains to the west. But because he was a friend to the local Indians, he tended to play down these stories for fear that settlement by whites would destroy the Indian hunting grounds and bring about the extermination of the tribes.

But Bent's good intentions did little to turn the tide of migration into Colorado. For most goldseekers preferred to believe the glowing tales of easy riches they had read about in pamphlets and newspaper stories back east, and, as it turned out, some of these exaggerated claims were actually proving to be true because promising amounts of gold were beginning to be found in many of the streambeds around the new town of Denver City.

Two of the first really substantial gold strikes were made independently by these two Georgia men—Green Russell, pictured on the left, and John Gregory, pictured on the right.

In 1858, John Gregory heard stories of gold in the Rockies while wintering over at Fort Laramie, and when the spring thaw made it possible to pan for gold, he rode south to the Pikes Peak goldfields.

Green Russell, who had had no success at all in the California gold rush and had returned to Georgia empty-handed in 1853, soon got tired of farming and decided to try his luck again, this time in Colorado.

In 1859, within just a few weeks of one another, first Gregory, and then Russell made major gold strikes near Clear Creek, about thirty-five miles from Denver City.

Soon the new towns of Blackhawk, Russells Gulch, Central City, Nevadaville and Idaho Springs were being nailed together, and over the decades that followed, this region yielded more than 85 million dollars in gold and boasted

being “the richest square mile on earth,” but in spite of the wealth produced here, John Gregory died a poor man.

Today, small time prospectors still pan for gold in Clear Creek, very near to these famous old boom towns.

During the Pikes Peak gold rush, a prospector working an average gold claim would wash about fifty pans of gravel in a day. And this amount of work could be expected to produce about one ounce of pure gold, worth at that time, about \$15.00, although really rich claims could easily yield over 100 times this much gold per day.

Mining in which the gold is separated out by washing is called placer mining, and besides gold pans, old time placer miners employed more elaborate devices for separating out the gold from the gravel.

The most common device was called a sluice box and employed similar principles to the modern one being used here—in this case, buckets of gravel collected from diggings along the creek bank are washed with running water from the creek and as a result, gold becomes concentrated behind ridges inside the box.

Here we see old time placer miners using a much larger wooden sluice box, and to this day we can still see the huge piles of rock left behind by these miners over one hundred years ago.

Even though placer mining occasionally produced a lot of wealth, it was still considered to be “poor man’s mining” because very little money was needed to separate the gold from the rock and usually these claims were “played out” in a relatively short period of time. Then the miners had to return to prospecting again.

Some of them sought to find the sources of the placer gold, the mother lodes of ore, which they knew must exist somewhere in the surrounding hills.

Once an outcropping of gold ore was found, a sample was taken to an assay office, and here chemists determined how much gold it contained. If the ore was good enough, the vein was followed into the earth. Near the surface, shafts and tunnels could be excavated simply by using picks and shovels, but as the hole got deeper, the rock generally became more solid. Then it had to be drilled, the holes filled with gunpowder or dynamite, and blasted apart.

In underground mines, it was necessary to brace the walls and ceiling of the tunnels to prevent them from collapsing, and as a result, the forests around the mining towns usually disappeared quite rapidly as trees were converted into mining beams.

Deep below ground, miners, working by candlelight or carbide lamp, hacked away at the gold-bearing vein of ore during the 12 hour shifts they were required to work.

Many of these miners were either poor immigrants or unsuccessful prospectors who earned between one and three dollars a day, plus their room and board.

In mines with vertical shafts, miners had to be lowered down into the ground on a platform that was attached to cables looped around a large overhead pulley. Once underground, miners loaded carts with ore. These carts were pushed along tracks to where they could be emptied into buckets, which were then hoisted to the surface.

Quite often steam engines were hauled in by mule caravans and were employed to lift both the ore and miners out of the ground.

Once the ore was above ground, it was hauled to a stamp mill where it was crushed into powder so that the gold could be chemically extracted from it.

The demand for gold ran high during the early part of the 1860s because the Civil War was raging back east and people sought a secure place to invest their money.

It was becoming apparent to many businessmen that in order to meet the increasing demand for Pikes Peak gold, a railroad needed to be built to replace the animal-powered caravans that provided transportation of freight into and out of the area.

In 1869, four years after the Civil War ended, a train from the east coast met a train from the west coast for the very first time, and a golden spike was driven into the track marking the completion of the first transcontinental railroad.

Unfortunately, the transcontinental tracks missed Colorado completely, passing to the north through Cheyenne, Wyoming and it wasn't until 1870 that the first locomotive rolled into Denver.

But, as a result of this new rail link, Denver soon became the principle supply center for the mining industry of the entire region, and as a result, also became the hub for all of the new railroads that served the mining towns in the nearby mountains. And during the 1870s, Denver was transformed from a dusty cow town into a rapidly growing city.

Just as was true of Denver, towns grew up near every successful discovery of gold, silver or any other mineral, and the opportunities these new towns offered attracted many people—people who had come west with no intentions of mining at all—those who hoped to make livings by providing necessary goods and services to the miners and their families.

It is estimated that for each man working in a mine or mill, five other people worked in the shops and other institutions that provided support to the mining community. Grocery stores, schools, hardware stores, saloons and churches all opened their doors as towns were established near the mines, and of course, all the new building meant work for loggers, sawmill workers and carpenters as well.

The story of Horace Tabor, a stone cutter from Vermont, demonstrates the extreme changes of lifestyle experienced

by one unsuccessful gold seeker.

Like thousands of others, Tabor was originally lured to the Pikes Peak goldfields in 1859, but after several failed attempts at prospecting, he decided to seek his fortune in the retail business instead, and for quite some time, he followed the gold strikes around Colorado, opening up stores in the new towns while at the same time his wife, Augusta, opened up boarding houses for the miners.

After following this wandering lifestyle for many years, the Tabors finally settled down and by 1878 he had become a prosperous store keeper and mayor of the town of Leadville, located high in the Rockies, over 10,000 feet above sea level.

Tabor got lucky when, for an investment of \$64.00 in provisions for a miner's grubstake, the miners he backed struck it rich, not in gold, but in silver. And the mine they discovered produced enough silver to net Tabor \$500,000 in just six months.

With this money he bought out his partners and purchased other silver interests and soon the landscape around Leadville became dotted with Tabor's mines.

Tabor built this opera house in Leadville. Here the townspeople could enjoy almost the same quality entertainment that was normally available only in the big cities.

Soon Tabor was appointed Lieutenant Governor of Colorado. He moved to the capital, Denver, where he built himself a new house, a block of buildings, as well as a much bigger opera house—the Tabor Grand.

With an income of \$100,000 a month, it seemed there was nothing that could stop him. He divorced his first wife and headed off to Washington D. C. to become a U.S. senator and here, in a ceremony attended by the president, he married a young divorcee whom he affectionately called Baby Doe, and later built her this mansion in Denver.

However, the great silver panic of 1893 put his miners out of work and closed down his mines. Horace Tabor was broke.

Shortly before he died, he pleaded with his wife Baby Doe to “Hang onto the Matchless,” which was the richest of his mines. She did, and here in this small cabin next to the abandoned mine, the destitute Baby Doe lived as a recluse until her death in 1935.

The territory of Arizona, just to the southwest of Colorado, also witnessed small gold and silver booms. And the old Vulcan gold mine, seen here, proved to be enormously productive for many years.

But it was the discovery of large copper deposits that made the character of mining in Arizona somewhat different from mining in Colorado and California.

The town of Jerome, seen here, was a typical copper mining town. Perched on a steep hillside, it was home to the thousands of miners who worked in the mills, smelters and huge open pit mine belonging to the United Verde Copper Company.

A seemingly endless river of copper flowed from the United Verde smelters during the long years of operation which extended from 1883-1953, shipping out 29 million dollars worth of copper in one year alone.

The owner of this mine, unlike most other wealthy mine owners who preferred to live in cities, built his vast “Arizona style” adobe mansion right in the middle of his copper producing operation. And from here he could observe his workers expand the size of his already enormous pit mine, as bucketsful of ore were hauled away and forced to yield the copper they contained.

As was true in Jerome, in Central City, in Leadville and elsewhere, even mines that had good supplies of ore would shut down when the price of metals dropped below a certain point, and then they would often reopen as soon as

the prices rose again.

Of course even the best mines didn't produce forever, which is the main reason so many ghost towns are found throughout the west, but when mines closed, the miners suffered nonetheless.

In the early days of western mining, the miners had very few labor rights. They had no influence over the number of hours they worked each day, how much they earned, or even the safety conditions of the mines where they risked their lives daily.

As the miners attempted to unionize, many bitter struggles ensued—in one five-year period during the 1880s, there were 109 labor strikes by miners in Colorado.

During those times, the law always seemed to favor those who owned the mines, not those who worked in them. Again and again, not just in the mining towns, but in the streets of Denver as well, the State Militia was called out to protect the interests of the wealthy mine owners. In response, the miners organized protest marches and the unions grew stronger.

As late as 1914, deadly military confrontations erupted that involved not just the miners, but their wives and their children as well, but eventually, their struggles paid off and the miners gained the right to join the labor unions.

After the big mining booms of 1849 and 1859, the west was to witness one more big surge of migration inspired by the discovery of gold. This time, in 1897, goldseekers steamed out from Seattle and headed north to Alaska. A true stampede resulted and in the winter of the next year, a seemingly endless chain of prospectors could be seen ascending the snowy slopes of Chilkoot Pass.

For those who made it to the top, there were hopes of instant riches, but as was true of the gold rushes in California and Colorado, wealth came to only a few.

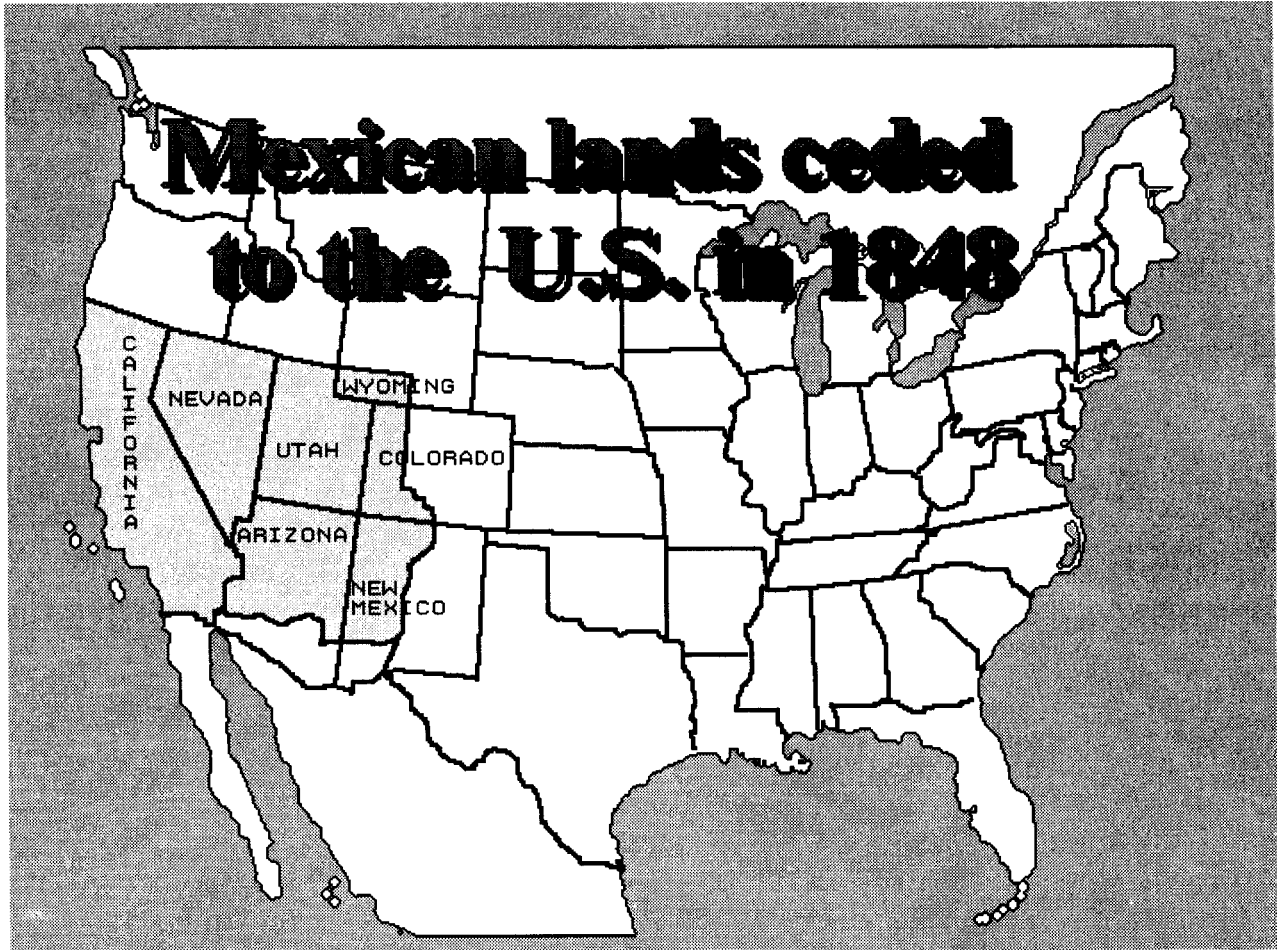
But simply as a result of their coming, it was certain that railroads, growing cities and eventually statehood would soon come to the wilderness of the Alaska Territory.

BOOM OR BUST**What Is Necessary For An Outfit****(reprinted from a 19th century pamphlet Guide to the Goldfields)**

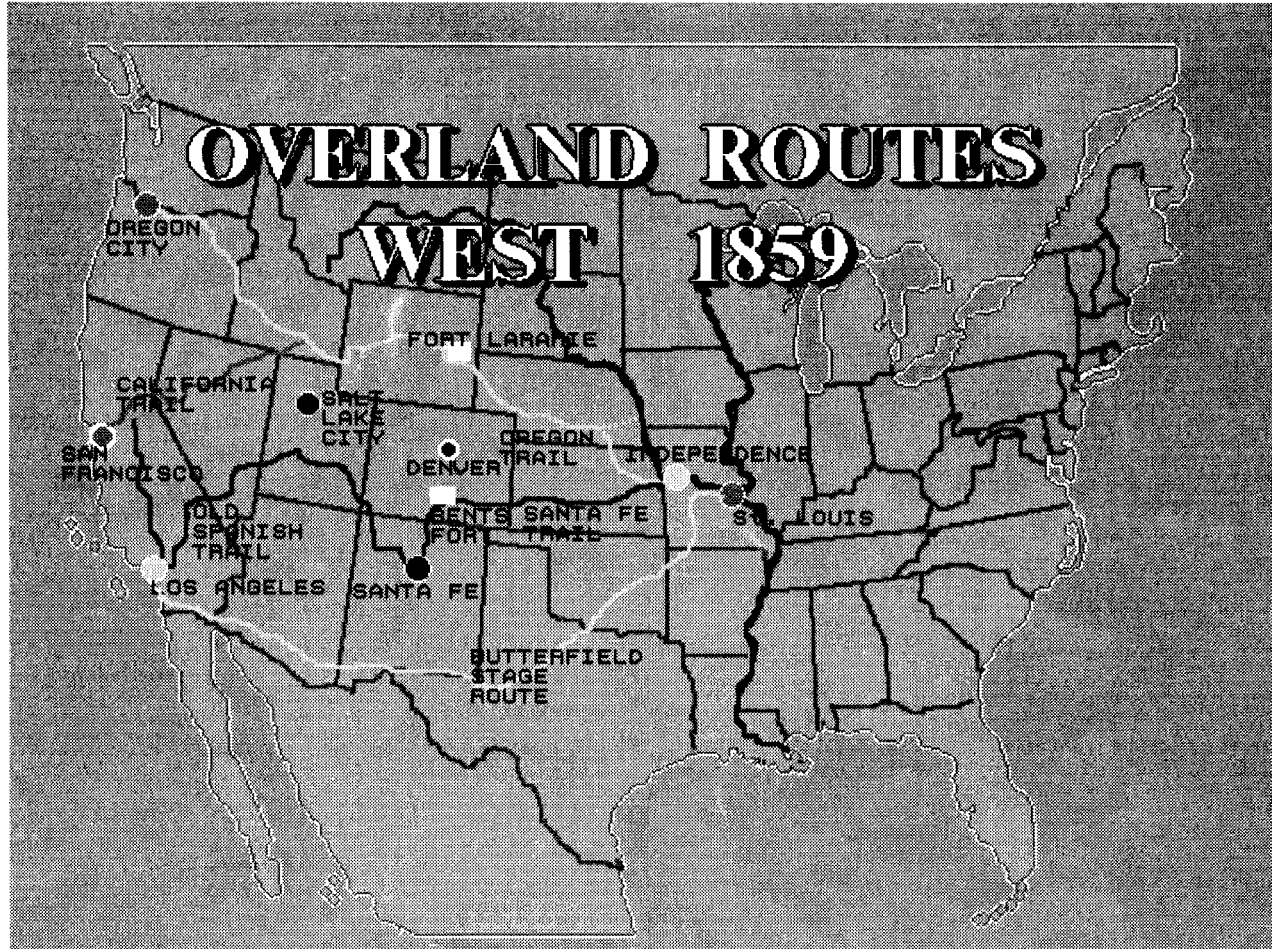
The following table comprises the "necessities" for a trip across the plains. There are a great many other articles that could be enumerated under the head of "luxuries," which we do not deem necessary to publish. The following is intended for a six-month outfit for four men.

3 yoke of oxen @\$75.....	\$225.00	1 skillet.....	\$ 1.50
1 Wagon and Cover.....	\$100.00	8 pairs Blankets.....	\$24.00
3 Yoke and 3 chains.....	\$ 18.00	4 water buckets.....	\$ 1.00
1 whip.....	\$ 1.00	2 small tin buckets.....	\$ 1.25
1 tent.....	\$ 15.00	75 feet rope.....	\$ 2.00
10 sacks flour@\$3.....	\$ 30.00	6 tablespoons.....	\$ 0.40
500 lbs. bacon.....	\$ 50.00	1 camp kettle.....	\$ 1.25
80 lbs. coffee.....	\$ 12.00	3 sheets iron, long ton.....	\$ 5.00
30 lbs. star candles.....	\$ 7.00	4 gold pans.....	\$ 3.00
10 lbs. tea.....	\$ 5.00	4 picks.....	\$ 4.00
Yeast powders.....	\$ 4.00	4 shovels.....	\$ 5.00
80 lbs. salt.....	\$ 1.50	3 axes.....	\$ 3.00
5 lbs. pepper.....	\$ 1.00	2 bread pans.....	\$ 0.75
4 bushels beans.....	\$ 8.00	1 wagon bucket.....	\$ 1.00
10 gals. vinegar.....	\$ 3.00	hand saw, drawing knife.....	\$ 3.00
25 lbs. bar soap.....	\$ 2.00	2 chisels & augers.....	\$ 3.00
25 lbs. gunpowder.....	\$ 7.50	1 dutch oven for baking	
100 lbs. lead.....	\$ 10.00	bread.....	\$ 1.25
Gun Caps, Waterproof.....	\$ 1.25	1 pair gold scales.....	\$ 1.50
1 gross matches.....	\$ 1.00	1 12-inch file.....	\$ 0.40
1-10 gal. water keg.....	\$ 1.25	1 shingling hatchet.....	\$ 0.75
1 coffee mill.....	\$ 0.75	1 crowbar.....	\$ 1.50
2 coffee pots.....	\$ 1.50	2 gimlets.....	\$ 0.15
8 tin plates.....	\$ 0.50	10 yds cotton drilling.....	\$ 1.20
8 tin cups.....	\$ 0.50	10 lbs. cut & wrought	
2 frying pans.....	\$ 1.50	nails.....	\$ 0.85
4 butcher knives.....	\$ 2.50	1 whetstone.....	\$ 0.20
		12 knives and forks.....	\$ 1.50

BOOM OR BUST Information Map



BOOM OR BUST Information Map



BOOM OR BUST Quiz

Directions: Fill in the blanks with the correct answer or circle True or False.

1. In 1848, following war with Mexico, land that today makes up seven different states was ceded to the United States. These seven states are: _____
_____.
2. The American West witnessed three great gold rushes. These were:
 - a. _____
 - b. _____
 - c. _____
3. In the 1850s, two main wagon trails led west from the frontier towns near Independence, Missouri. The main northern trail was called _____ and the main southern road was called _____.
4. In the 1850s, some of the travelers on the northern trail were members of a new religious group called _____ who sought freedom from persecution in their new capital of Salt Lake City.
5. True or False: Gold panning and sluicing are both forms of placer mining.
6. True or False: In mining towns, more people worked as storekeepers, teachers, saloonkeepers, doctors, dentists, etc., than actually worked in the mines and mills.
7. In Colorado during the late 19th century, over 100 labor strikes occurred largely because the miners asked for shorter work days, better pay, safer conditions and because they wanted to join _____.
8. Arizona, unlike Colorado and California, has several enormous pit mines where _____ ore is taken from the earth.