

Gold Panning

During the Gold Panning Program, students learn how to pan for gold, differentiate real gold from fool's gold, and identify other minerals that were found in rivers during the Gold Rush Era.



CORRELATION WITH CALIFORNIA H.S.S. CONTENT STANDARDS

- ❖ 4.4.2 Explain how the Gold Rush transformed the economy of California, including the types of products produced and consumed, changes in towns and economic conflicts between diverse groups of people.

CORRELATION WITH CALIFORNIA SCIENCE CONTENT STANDARDS

- ❖ K. 1. a. Students know objects can be described in terms of the materials they are made of (e.g., clay, cloth, paper) and their physical properties (e.g., color, size, shape, weight, texture, flexibility, attraction to magnets, floating, sinking).
- ❖ K. 3. c. Students know how to identify resources from Earth that are used in everyday life and understand that many resources can be conserved.
- ❖ 2. 3. a. Students know how to compare the physical properties of different kinds of rocks and know that rock is composed of different combinations of minerals.
- ❖ 2. 3. b. Students know smaller rocks come from the breakage and weathering of larger rocks.
- ❖ 4.4.b. Students know how to identify common rock-forming minerals (including quartz, calcite, feldspar, mica, and hornblende) and ore minerals by using a table of diagnostic properties.

What Can You Find?



These are the minerals that students can find during the gold panning program. While each student will be able to find something while gold panning, there is no guarantee that the students will find every mineral, just like the Gold Rush. Each student will be given one clear vial to keep anything they find.

Word Scramble

Unscramble the Gold Panning key terms using the clues.

1. TAOECANSRM _____ The capital of California.
2. RPTEYI _____ "Fools Gold" is the nickname for this mineral
3. LSTI _____ Fine clay or sand that collects at the edge of a river.
4. OGLD _____ Metal that caused a great migration to California.
5. BOCESLXIU _____ Long trough like tool used to find gold in rivers.
6. FOIHOTSLL _____ Low hills at the bottom of mountain ranges.
7. AZRTQU _____ Clear or white stone.
8. CMERAANI _____ River that flows through the capital of California.
9. GTRANE _____ A red ruby like stone
10. DIOSIABN _____ Rock used to make arrowheads.

Types of Mining

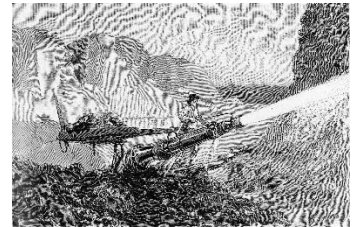
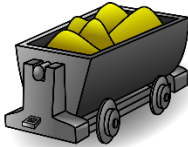
Placer Mining Vs Hard Rock Mining

Placer Mining is mining directly at the River. Typically miners would work at the side of the river or directly in the river to find gold. They used shovels, pans, and rockers for this type of mining.

Hard Rock Mining was used later when most of the gold had been found in the river. Hard Rock mining looks for gold underneath the ground. One method was hydraulic mining which used a large water cannon to wash away hillsides. Another method was to make mines underground to look for Gold.

Matching Activity

Based on the description of the different types of mining, match the items that are used for each type of mining with a line.



Placer Mining



Hard Rock Mining



Timeline of Gold Mining

Directions

1. Cut out each event box below
2. Organize your events in chronological order.
3. Paste each event box into the appropriate box on the timeline below.

<u>1860s</u> Hydraulic Mining used high pressure jets of water to blast away rock and gravel.	<u>January 24, 1848</u> James Marshall finds gold in the American River.	<u>Late 1857</u> The sluice box is used by Gold Miners at rivers to help with gold panning.	<u>1849</u> Nearly 100,000 people come to California in search of Gold
<u>1848</u> Miners begin the Rocker which was more effective, and saved time and energy.	<u>1852</u> Large groups of miners begin damming rivers. Dry river beds made it easier to find the gold.	<u>1848</u> First gold miners use spoons, Shovels and pans to mine for gold.	

