

Guiding Question 1	Guiding Question 2	Guiding Question 3
How did miners adapt to address the challenges of Colorado's geography?	What were the effects of mining in Colorado?	How did mining impact Indigenous nations in Colorado?

Activity	Notes	Answers (if any)
1 - KWL annotation	<p>You could have a whole class discussion with your students to get them thinking before asking them to write.</p> <p>*Students have the option to download their work to turn it in.</p>	None
2 - Gold! Gold!! Gold!!! Gold!!!! Narrative	<p>Discussion questions throughout;</p> <ol style="list-style-type: none"> 1. What do you know about the geography across the state of Colorado? 2. Where do you think gold and other minerals were found? 3. What do you notice about the location of the metal mines? 4. How did Colorado's geography create challenges for miners? 	<ol style="list-style-type: none"> 1. Mountains are the most important aspect 2. The mountains 3. The mountains! The blue dots are coal mines if you would like to discuss this as well.
3 - Engagement #1 Colorado's Physical Geography & Mining	<p>Mines were in the _____ of Colorado which would have been challenging because _____.</p> <p>*Students have the option to download their work to turn it in.</p>	<p><u>mountain ranges/mountains</u></p> <p>(possible answers include but not limited to;) <u>difficult to transport materials, difficult to access mines up steep mountainsides and weather.</u></p> <p>These answers are explicitly stated in the next Activity - Adapting to Overcome Challenges.</p> <p>Other possible answers that we will not address in this RK include; growing/transporting food, indigenous groups, sickness and access to help, etc.</p>

Activity	Notes	Answers (if any)
<p>4 - Adapting to Overcome Challenges Slideshow</p>	<p>What is the challenge? What is the adaptation?</p> <p>Slide 1: A miner and two burros loaded with supplies stand along a path</p> <p>Slide 2: Men pose by a Denver & Rio Grande engine and the Eagle River at the Belden Mine in Eagle County, Colorado</p> <p>Slide 3: Mount Shavano (over 14,000 ft) towers over the town of Monarch in Chaffee County, Colorado</p>	<p>Slide 4 has the answers the the first 3 slides, the idea is that kids go through one at a time and try to answer what the challenge would be based on the images.</p> <p>High altitudes and cold weather made life in mining towns difficult. It was also difficult to transport materials to and from mining towns due to steep mountainsides. To adapt to these conditions, miners often tried to establish their towns at the bases of mountains where it was often more flat and less exposed. Miners also used burros and eventually built railroads to navigate the steep mountain terrain.</p> <p>Slide 1: access to the mountains, burros for transportation</p> <p>Slide 2: access to the mountains, railroad built</p> <p>Slide 3: weather and steep mountainsides, built town below instead</p>
<p>5 - Engagement #2 Miner Adaptations</p>	<p>How did miners adapt in order to address the challenges of Colorado's geography? Choose the most important adaptation and circle it. Then use a text box to write one sentence about WHY that was the most important adaptation.</p> <p>*Students have the option to download their work to turn it in.</p>	<p>There is no correct answer. Encourage students to explain their thinking and give examples from the images in the previous activity or other information they have learned.</p>

Activity	Notes	Answers (if any)
<p>6 - Reporting! News From Pike's Peak Colorado (1860) Slideshow</p>	<p>These slides present an article from 1860 that details some of the events of mining in Colorado. How did Colorado change as a result of mining?</p> <p><i>Additional discussion questions you might ask;</i></p> <p>Slide 2 - Was there a lot of gold found in Colorado?</p> <p>Slide 3 - What does the word subsided mean? If it means "became less severe" - why do you think people still came to Colorado?</p> <p>Slide 4 - What happened to most people who came looking for gold?</p> <p>Slide 5 - What happened in Denver?</p> <p>Slide 6 - What did people start to discover as time went by?</p> <p>Slide 7 - How did Colorado change as a result of mining?</p>	<p>Slide 2 - No!</p> <p>Slide 3 - Became less severe; word traveled slowly, people may have been hopeful anyway, people may have been trying to further (like to California)</p> <p>Slide 4 - "they were doomed or disappointed"</p> <p>Slide 5 - It grew quickly!</p> <p>Slide 6 - Silver was more available.</p> <p><i>*You might need to point this out, students will learn more about silver mining in the next activity.</i></p> <p>Slide 7 - development of towns, building of permanent structures, increase in population and discovery of silver</p>
<p>7 - Types of Mining: Placer Mining and Hard-Rock Mining Narrative</p>	<p>What are the similarities and differences between placer mining and hard-rock mining?</p>	<p>Similar: Both are mining of mineral resources, both were valuable then and now</p> <p>Different: silver mining required more complex technology and mining companies, gold mining was simpler and done by individuals, gold was mined in the 1850s in Colorado and more silver was mined in the 1870s</p> <p><i>*Students might intuit that more permanent settlements/towns were connected to silver mining because of the complexities & the mining companies</i></p>

Activity	Notes	Answers (if any)
8 - Engagement #3 Mining's Impact on Colorado	<p>Pick one aspect of mining, explain why it would change the territory we now know as Colorado. Is it a POSITIVE change or a NEGATIVE change?</p> <p>*Students have the option to download their work to turn it in.</p>	<p>Open question, not one right answer. Possible ideas;</p> <ul style="list-style-type: none"> • Gold mining brought more people (positive for settlement, negative for indigenous groups) • Silver mining required dynamite and explosives (negative on the land, positive for making money for the territory) • Settlement and exploration (positive and negatives of westward expansion) • Building of permanent structures and towns (positive for territory, negatives for indigenous groups)
9 - Indigenous Land in the Mining Era	<p>How did mining impact Indigenous groups in Colorado?</p> <p>*Additional resource links included in the timeline to strengthen your students' understanding of the tribes and the treaties involved - use as needed.</p>	<p>Significant loss of land over time, disrespect for the land and indigenous peoples on the land.</p> <p><i>The impact varied depending on the tribes and where/how they lived. Make sure to establish an understanding of the differences between the Ute and the Cheyenne and Arapahoe.</i></p>
10 - Indigenous Perspectives Hotspot	<p>How did mining impact Indigenous nations in Colorado?</p>	<p>Loss of land, driving away game for hunting, killing bison, land spoiled and not caring about it (plants killed, wood burned, animals eating grass, streams polluted), brought diseases, white settlements crowding the land</p>
11 - Engagement #4 What is the Story?	<p>How did mining impact Indigenous nations in Colorado?</p> <p>Activity adapted from Project Zero - Stories</p> <p>*Students have the option to download their work to turn it in.</p>	<p>There is no right or wrong answer. This activity can lend itself well to discussion.</p>
Reflection Apples to Oranges	<p>Did mining have a positive or negative impact on the state of Colorado and that nation?</p>	<p>There are many answers to this question! Students should discuss the way that they organize the images as they award points.</p>