## Colorado Teacher Authored Sample Instructional Unit

<table>
<thead>
<tr>
<th>Content Area</th>
<th>Course Name/Course Code</th>
<th>Grade Level</th>
<th>4th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Studies</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Standard

<table>
<thead>
<tr>
<th>Number</th>
<th>Content Area</th>
<th>Grade Level Expectations (GLE)</th>
<th>GLE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>History</td>
<td>1. Organize a sequence of events to understand the concepts of chronology and cause and effect in the history of Colorado</td>
<td>SS09-GR.4-S.1-GLE.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. The historical eras, individuals, groups, ideas, and themes in Colorado history and their relationships to key events in the United States</td>
<td>SS09-GR.4-S.1-GLE.2</td>
</tr>
<tr>
<td>2.</td>
<td>Geography</td>
<td>1. Use several types of geographic tools to answer questions about the geography of Colorado</td>
<td>SS09-GR.4-S.2-GLE.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Connections within and across human and physical systems are developed</td>
<td>SS09-GR.4-S.2-GLE.2</td>
</tr>
<tr>
<td>3.</td>
<td>Economics</td>
<td>1. People responded to positive and negative incentives</td>
<td>SS09-GR.4-S.3-GLE.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. The relationship between choice and opportunity cost (PFL)</td>
<td>SS09-GR.4-S.3-GLE.2</td>
</tr>
<tr>
<td>4.</td>
<td>Civics</td>
<td>1. Analyze and debate multiple perspectives on an issue</td>
<td>SS09-GR.4-S.4-GLE.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. The origins, structure, and functions of the Colorado government</td>
<td>SS09-GR.4-S.4-GLE.2</td>
</tr>
</tbody>
</table>

### Colorado 21st Century Skills

**Critical Thinking and Reasoning:** Thinking Deeply, Thinking Differently

**Information Literacy:** Untangling the Web

**Collaboration:** Working Together, Learning Together

**Self-DIRECTION:** Own Your Learning

**Invention:** Creating Solutions

### Unit Titles

<table>
<thead>
<tr>
<th>Unit Title</th>
<th>Length of Unit/Contact Hours</th>
<th>Unit Number/Sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom and Bust</td>
<td>4-5 weeks</td>
<td>4</td>
</tr>
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</table>

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4th Grade, Social Studies  
Unit Title: Boom and Bust  
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# Colorado Teacher Authored Sample Instructional Unit

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<tr>
<th>Unit Title</th>
<th>Boom and Bust</th>
<th>Length of Unit</th>
<th>4-5 weeks</th>
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</thead>
<tbody>
<tr>
<td><strong>Focusing Lens(es)</strong></td>
<td>(State) Cycles</td>
<td><strong>Standards and Grade Level Expectations Addressed in this Unit</strong></td>
<td>SS09-GR.4-S.1-GLE.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SS09-GR.4-S.1-GLE.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SS09-GR.4-S.2-GLE.1</td>
</tr>
<tr>
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<td></td>
<td>SS09-GR.4-S.2-GLE.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SS09-GR.4-S.3-GLE.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SS09-GR.4-S.3-GLE.2</td>
</tr>
<tr>
<td><strong>Inquiry Questions (Engaging-Debatable):</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• How do the decisions we make and the values we hold affect people around us and the state in which we live? (Or, <em>Who wore their Beaver Hat to school today?</em>) (SS09-GR.4-S.3-GLE.1-EO.c, S.3-GLE.1-IQ.1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Why are some demands “passing fads” while others remain constant? (SS09-GR.4-S.3-GLE.1-EO.b)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• What examples of these demands are we currently experiencing? How are they connected to the unique resources of our region/state? What are their (potential) effects/impacts?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Unit Strands</strong></td>
<td>History, Geography, and Economics</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Concepts</strong></td>
<td>Mining, natural resources, supply and demand, opportunity cost (risks and benefits), boom and bust, regions, primary and secondary sources, cycles, culture, economy, ideas, cause and effect, space, maps, physical and geographic location, human activity, place</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Generalizations</strong></td>
<td><strong>My students will Understand that...</strong></td>
<td><strong>Factual</strong></td>
<td><strong>Guiding Questions</strong></td>
</tr>
<tr>
<td>Changing (or constant) values often bring about boom and bust economic cycles that shape/determine the future and direction of a state’s growth (SS09-GR.4-S.1-GLE.1-EO.b,c)</td>
<td>What were the major cycles of Boom and Bust in Colorado over the past 150 years? (SS09-GR.4-S.1-GLE.2-RA.2)</td>
<td>How are personal or social values represented by the economic choices we make in our daily lives?</td>
<td></td>
</tr>
<tr>
<td>Humans alter and adapt to existing natural resources to meet personal, cultural, and economic needs (SS09-GR.4-S.2-GLE.2-EO.a)</td>
<td>Which natural resources are typically associated with the distinct physical regions of Colorado?</td>
<td>How do cultural beliefs, economic forces and physical resources impact land-use decisions?</td>
<td></td>
</tr>
<tr>
<td>Every economic decision involves both potential risks and benefits (SS09-GR.4-S.3-GLE.2-EO.a,b,c,d,e)*</td>
<td>What examples from Colorado history illustrate the social and personal components of economic risk/reward decision-making? (SS09-GR.4-S.3-GLE.2-EO.a,b) and (SS09-GR.4-S.3-GLE.2-N.1)*</td>
<td>Which factors are most significant in determining the right risk-benefit balance in economic decision-making?</td>
<td></td>
</tr>
<tr>
<td>Physical characteristics and human activity (availability and allocation of resources) within different regions and locations contribute to the sustainability of “booms” (SS09-GR.4-S.2-GLE.1-EO.a,d) and (SS90-GR.4-S.1-GLE.2-RA.2)</td>
<td>What specific resources are distinctly tied to particular regions and economic “booms” in Colorado? (SS09-GR.4-S.2-GLE.1-EO.a,c)</td>
<td>Who decides the best ways to manage resources to the benefit of local communities and larger state or national interests?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Critical Content:</th>
<th>Key Skills:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>My students will Know...</strong></td>
<td><strong>My students will be able to (Do)...</strong></td>
</tr>
<tr>
<td>• The realities and impact of the Colorado Fur Trade and the Colorado Mining Industry (SS09-GR.4-S.1-GLE.1-EO.c,d; RA.1) and (SS09-GR.4-S.3-GLE.1-EO.b)</td>
<td>• Analyze cause and effect relationships between societal values/needs and individual lives, the physical environment, and the economy (SS09-GR.4-S.1-GLE.1-EO.c) and (SS09-GR.4-S.2-GLE.1-EO.d)</td>
</tr>
<tr>
<td>• The definition of natural resources and its specific application to the physical regions and associated populations in Colorado and neighboring states (SS09-GR.4-S.2-GLE.1-EO.a,c)</td>
<td>• Define positive/negative economic incentives (SS09-GR.4-S.3-GLE.1-EO.a)</td>
</tr>
<tr>
<td>• The opportunity-cost relationship that exists in any economic decision (SS09-GR.4-S.3-GLE.2-EO.a,b; N.1) *</td>
<td>• Use maps to locate resources and regions (SS09-GR.4-S.2-GLE.1-EO.a,b,c)</td>
</tr>
<tr>
<td></td>
<td>• Analyze primary and secondary sources to place significant events in historical sequence (SS09-GR.4-S.1-GLE.1-IQ.3)</td>
</tr>
</tbody>
</table>

**Critical Language:** includes the Academic and Technical vocabulary, semantics, and discourse which are particular to and necessary for accessing a given discipline.

EXAMPLE: A student in Language Arts can demonstrate the ability to apply and comprehend critical language through the following statement: “Mark Twain exposes the hypocrisy of slavery through the use of satire.”

A student in ______________ can demonstrate the ability to apply and comprehend critical language through the following statement(s):

Using diaries and other primary sources from the era of the mountain men, the cause and effect relationship of the fur trade boom is easy to see.

**Academic Vocabulary:** Cause and effect, relationships, resources

**Technical Vocabulary:** Primary and secondary sources, boom, bust, regions

*Denotes a connection to Personal Financial Literacy (PFL)
## Unit Description:
This unit focuses on the human and social phenomenon of cycles of boom and bust. Colorado’s dynamic history, unique physical geography, and diverse natural and human resources provide the content and context for the unit. Across the unit’s 4-6 week duration, students will consider the social/cultural forces and resources that drive and/or sustain particular economic “booms.” Likewise they will examine the factors (including limitations of physical resources/geography and the effects of human activity) that can facilitate economic “busts.”

## Considerations:
This unit starts with the clearest (and most concrete) example of a delineated major boom and bust –the fur trapping/trade industry (mountain men). From there, the unit moves on to mining and the gold/silver booms of the 1850s, which allows students to consider demand that is based on status (and scarcity). Consideration of the energy production/fuel extraction booms, up next in the unit, helps students understand how practices and products of our daily lives provide a continual demand for energy supply and new sources of fuel. The unit concludes with learning experiences that focus on the recreation/tourism boom in order to have students consider a boom obvious in their lifetime and to contemplate potential threats to its sustainability and factors that could contribute to its bust.

## Unit Generalizations

### Key Generalization:
Changing (or constant) values often bring about boom and bust economic cycles that shape/determine the future and direction of a state’s growth

### Supporting Generalizations:
Humans alter and adapt to existing natural resources to meet personal, cultural, and economic needs  
Every economic decision involves both potential risks and benefits  
Physical characteristics and human activity (availability and allocation of resources) within different regions and locations contribute to the sustainability of “booms”

## Performance Assessment: The capstone/summative assessment for this unit.

### Claims:
(Stimulus Material)
As a newly hired/newly arrived worker in Colorado’s mining, fur trade, energy, or tourism industry you will be corresponding with people “back home” to let them know about your new life and career in Colorado. In your correspondence you will be documenting your reasons for relocating (the “boom” that brought you to Colorado), your concerns (or lack of concerns) for the security of your job, and your thoughts on alternative work/jobs which you could pursue if you choose to remain in the state/territory.

### Product/Evidence:
(Students will produce correspondence in forms that match the time period of their chosen occupation/field. They must justify their chosen medium! The correspondence will convey the industries/jobs that have brought people to Colorado as well as the stability/maintenance of these industries/jobs.)

### Differentiation:
(The correspondence may take the form of:)
- Written letters
- Dictated telegrams http://www.telegramsworldwide.com/send.php (Create and send, via e-mail, authentic looking telegrams)
- A video/iMovie
- A series of e-mails
- An audio recording
**Texts for independent reading or for class read aloud to support the content**

<table>
<thead>
<tr>
<th>Informational/Non-Fiction</th>
<th>Fiction</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Birchbark Brigade: A fur trade history</em> - Cris Peterson (1250 Lexile level)</td>
<td><em>Gold! Gold from the American river</em> - Don Brown (1010 Lexile level)</td>
</tr>
<tr>
<td><em>When the Beaver was King</em> - Doug Golden</td>
<td><em>Gold Rush Fever</em> - Barbara Greenwood (840 Lexile level)</td>
</tr>
<tr>
<td><em>Oil and Gas (Rocks, Minerals, and Resources)</em> - John Paul Zronik (1100 Lexile level)</td>
<td><em>The Gold Rush Kid</em> - Mary Waldorf (1010 Lexile level)</td>
</tr>
<tr>
<td><em>Generating Wind Power</em> - Niki Walker (1070 Lexile level)</td>
<td></td>
</tr>
</tbody>
</table>

**Ongoing Discipline-Specific Learning Experiences**

<table>
<thead>
<tr>
<th>Description</th>
<th>Teacher Resources</th>
<th>Student Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Skills:</strong> Analyze primary and secondary sources to place significant events in historical sequence</td>
<td><strong>Assessment:</strong> Historical Sources Wall Students will add resources to the wall according to their category (primary or secondary) and defend their categorization of the resource.</td>
<td></td>
</tr>
<tr>
<td>2. Think/work like a historian- Creating whole-class and individual timelines</td>
<td><a href="http://www.colorado.gov/dpa/doit/archives/history/histchron.htm">http://www.colorado.gov/dpa/doit/archives/history/histchron.htm</a> (Broad timeline of significant events in CO History)</td>
<td><a href="http://www.softschools.com/teacher_resources/timeline_maker/">http://www.softschools.com/teacher_resources/timeline_maker/</a> (Open-ended program for creating individual timelines) <a href="http://www.timetoast.com/">http://www.timetoast.com/</a> (Free, web-based timeline program that is user friendly)</td>
</tr>
<tr>
<td><strong>Skills:</strong> Analyze primary and secondary sources to place significant events in historical sequence</td>
<td><strong>Assessment:</strong> Individual Colorado History Timelines Students will update their individual (online or physical) timelines daily/weekly. Class can also keep a larger visual timeline, with students adding (significant) events on a regular basis</td>
<td></td>
</tr>
<tr>
<td>3. Think/work like a geographer- Creating various maps to document resources, routes, and residences</td>
<td>N/A</td>
<td><a href="http://www.enchantedlearning.com/usa/label/states/colorado/">http://www.enchantedlearning.com/usa/label/states/colorado/</a> (Open-ended program for creating individual Colorado maps)</td>
</tr>
<tr>
<td><strong>Skills:</strong> Use maps to locate resources and regions</td>
<td><strong>Assessment:</strong> Colorado Resource Maps Using blank Colorado maps, students will create maps at strategic points in the unit (Fur trade, gold mining, energy resources, tourism sites, energy resources, etc.).</td>
<td></td>
</tr>
</tbody>
</table>
## Prior Knowledge and Experiences

These ongoing learning experiences build upon a presumed (student) working knowledge of the basic components and purposes of maps and an understanding of the key differences between primary and secondary sources. Thus, there are no learning experiences that introduce this knowledge or these definitions. Teachers may, however, wish to revisit/reinforce these understandings at the beginning of the unit.

## Learning Experience #1

The teacher may have students brainstorm things/products that are currently in “fashion” for 4th graders so that students can begin thinking about social/cultural trends and the demand for and production of particular goods. (This experience segues to the examination of the demand that brought trappers/traders to Colorado).

<table>
<thead>
<tr>
<th>Generalization Connection(s):</th>
<th>Changing (or constant) values often bring about boom and bust economic cycles that shape/determine the future and direction of a state’s growth</th>
</tr>
</thead>
</table>
| Teacher Resources:            | http://www.crazylads.com/ (Images and descriptions of “modern day” fads/trends)  
                              | http://www.badfads.com/ (Images and descriptions of “modern day” fads/trends) |
| Student Resources:            | N/A |
| Assessment:                   | Students generate a classroom definition of a “fad,” considering what distinguishes a fad from basic necessities and/or longstanding social traditions or “staples” |

### Differentiation:
(Multiple means for students to access content and multiple modes for student to express understanding.)

<table>
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<th>Access (Resources and/or Process)</th>
<th>Expression (Products and/or Performance)</th>
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</table>
| Photos and/or pictorial representations of fads/trends particularly relevant to students today  
Students may work with a partner or in small groups to determine/select visuals | Students may create (and orally defend) a visual mosaic that presents the differences between social fads/trends and staples |

### Extensions for depth and complexity:

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<tr>
<td><a href="http://www.softschools.com/teacher_resources/timeline_maker/">http://www.softschools.com/teacher_resources/timeline_maker/</a> (Open-ended program for creating individual timelines)</td>
<td>Students may create an individual timeline of a fad or several fads they have experienced</td>
</tr>
</tbody>
</table>

### Critical Content:
- N/A

### Key Skills:
- Analyze cause and effect relationships between societal values/needs and individual lives

### Critical Language:
- Cause and effect, values, demand
## Learning Experience # 2

The teacher may bring in (trapping/trading) artifacts and primary and secondary sources (letters, advertisements, etc.) so that students may consider the “demands” and social trends that brought traders and trappers (mountain men) to Colorado and the natural resources that facilitated their work in the state.

### Generalization Connection(s):

- Changing (or constant) values often bring about boom and bust economic cycles that shape/determine the future and direction of a state’s growth
- Humans alter and adapt to existing natural resources to meet personal, cultural, and economic needs
- Physical characteristics and human activity (availability and allocation of resources) within different regions and locations contribute to the sustainability of “booms”

### Teacher Resources:

- [http://www.historycolorado.org/educators/mountain-man-artifact-kit](http://www.historycolorado.org/educators/mountain-man-artifact-kit) (Colorado’s fur trade comes to life in this kit that includes artifacts, photos, activities, and much more)
- *Historical Atlas of Colorado* by T. Noel, P. Mahoney & R. Stevens
- *Atlas of the New West* by W. Riebsame

### Student Resources:

- [http://hewit.unco.edu/dohist/trappers/themes.htm](http://hewit.unco.edu/dohist/trappers/themes.htm) (A journey into Colorado’s trapping/trading history in the company of people who made that history)
- [http://coloradomountainman.us/mountainman.php](http://coloradomountainman.us/mountainman.php) (Names and bios of significant mountain men)
- [http://www.youtube.com/watch?v=1cejak9BF0](http://www.youtube.com/watch?v=1cejak9BF0) (Short video on beaver top hats with transcription)
- *Colorado: Crossroads of the west* by F. Metcalf and M. Downey
- *A Rendezvous with Colorado History* by D. Dutton and C. Humphries
- *A Kids Look at Colorado* by P. Perry

### Assessment:

Students will begin mapping activities to document the locations for the work of the mountain men (including trapping and trading). In addition, students will begin the creation of individual timelines for Colorado history. See “Ongoing” experiences for description of tech tools to facilitate the mapping and timeline work.

### Differentiation:

(Multiple means for students to access content and multiple modes for student to express understanding.)

#### Access (Resources and/or Process)

- Students may work in pairs or in groups to generate examples and to locate mapping sites

#### Expression (Products and/or Performance)

- Students may order or sequence information on trade routes using visual or graphic organizers
- Students may give examples of the lives of explorers using illustrated and/or pictorial scenes
- Students may (orally) provide locations for map creation

### Extensions for depth and complexity:

#### Access (Resources and/or Process)

- [http://coloradomountainman.us/mountainman.php](http://coloradomountainman.us/mountainman.php) (Names and bios of significant mountain men)

#### Expression (Products and/or Performance)

- Students may create timelines and/or maps related to the lives of significant historical actors in the mountain man era
- [http://www.timetoast.com/](http://www.timetoast.com/) (Free, web-based timeline program that is user friendly)
## Critical Content:
- Colorado Mountain Men and the lives of fur traders/trappers (e.g., Jim Beckwourth, William Bent, Charles Bent, Kit Carson)
- Use of beaver fur
- Colorado’s natural/physical resources
- Events/details of Colorado rendezvous

## Key Skills:
- Define positive/negative economic incentives
- Use maps to locate resources and regions
- Analyze primary and secondary sources to place significant events in historical sequence

## Critical Language:
- Incentives, rendezvous, traders, trapper, physical resources, natural resources, economic incentive, regions

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### Learning Experience # 3

The teacher may use sources (letters, journals of mountain men) and data about the fur trade economy (trading forts, rendezvous) to have students document the effects of trapping on the landscape and resources of Colorado and the sustainability of this “boom”.

**Generalization Connection(s):**
- Humans alter and adapt to existing natural resources to meet personal, cultural, and economic needs
- Physical characteristics and human activity (availability and allocation of resources) within different regions and locations contribute to the sustainability of “booms”

**Teacher Resources:**
- [http://www.historycolorado.org/educators/mountain-man-artifact-kit](http://www.historycolorado.org/educators/mountain-man-artifact-kit) (Colorado’s fur trade comes to life in this kit that includes artifacts, photos, activities, and much more)
- [http://coloradomountainman.us/](http://coloradomountainman.us/) (Details of the lives and work of Colorado mountain men)
- [http://coloradoforts.weebly.com/](http://coloradoforts.weebly.com/) (Locations and description of the trading activities in and around Colorado forts)
- *Historical Atlas of Colorado* by T. Noel, P. Mahoney & R. Stevens
- *Atlas of the New West* by W. Riebsame

**Student Resources:**
- *Colorado: Crossroads of the west* by F. Metcalf and M. Downey
- *A Rendezvous with Colorado History* by D. Dutton and C. Humphries
- *A Kids Look at Colorado* by P. Perry

**Assessment:**
- Students will use primary sources and maps to create visual representations of the success and/or decline of the fort/rendezvous trading economy. Students could also synthesize the historical arguments for trapping regulations/laws in relation to the over-trapping of beavers (see various state websites for discussions of laws instituted in the early 20th century-

**Differentiation:**
- **Access (Resources and/or Process)**
  - *Colorado* (Rookie Read-About Geography) by C. Walker
  - *A Rendezvous with Colorado History* by D. Dutton and C. Humphries
  - *A Kids Look at Colorado* by P. Perry
- **Expression (Products and/or Performance)**
  - Students may describe (orally or in writing) the activities and appearances of communities and regions depicted in pictures and maps of the mountain man era

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4th Grade, Social Studies

Unit Title: Boom and Bust
### Colorado Teacher-Authorized Sample Instructional Unit

#### Extensions for depth and complexity:

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<tr>
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<th>Expression (Products and/or Performance)</th>
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</thead>
<tbody>
<tr>
<td><a href="http://bewit.unco.edu/dohist/trappers/trappers/beaver/six.htm">http://bewit.unco.edu/dohist/trappers/trappers/beaver/six.htm</a> (A starting point for researching visuals related to Colorado beaver trapping and habitats)</td>
<td>Students may create visual representations (pictographs, bar graphs, etc.) of the changes to beaver population in Colorado that resulted from trapping/trade</td>
</tr>
</tbody>
</table>

#### Critical Content:

- Productive resource (natural, human, capital) allocation in Colorado history
- Regional development in Colorado
- Human interaction with the environment
- Resource depletion as a result of use/misuse
- Colorado Mountain Men and the lives of fur traders/trappers (e.g., Jim Beckwourth, William Bent, Charles Bent, Kit Carson)
- Use of beaver fur
- Colorado’s natural/physical resources
- Events/details of Colorado rendezvous

#### Key Skills:

- Use maps to locate resources and regions
- Analyze primary and secondary sources to place significant events in historical sequence

#### Critical Language:

Natural and physical resources, regions, sustainability, depletion

### Learning Experience # 4

The teacher may use documentation of the lives of mountain men and traders to have students examine the opportunities and risks associated with economic decision-making in light of a “boom” that may or may not be sustainable.

#### Generalization Connection(s):

Changing (or constant) values often bring about boom and bust economic cycles that shape/determine the future and direction of a state’s growth
Every economic decision involves both potential risks and benefits

#### Teacher Resources:

- [http://www.historycolorado.org/educators/mountain-man-artifact-kit](http://www.historycolorado.org/educators/mountain-man-artifact-kit) (Colorado's fur trade comes to life in this kit that includes artifacts, photos, activities, and much more)
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#### Student Resources:

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- [http://coloradomountainman.us/mountainman.php](http://coloradomountainman.us/mountainman.php) (Names and bios of significant mountain men)
- [http://www.socialstudiesforkids.com/articles/economics/supplyanddemand1.htm](http://www.socialstudiesforkids.com/articles/economics/supplyanddemand1.htm) (General/basic overview of the concepts of supply and demand)
- [http://www.youtube.com/watch?v=XNftlG6HsIE](http://www.youtube.com/watch?v=XNftlG6HsIE) (Short video-with transcription-that describes demand for and over-trapping of beavers)
- *Colorado: Crossroads of the west* by F. Metcalf and M. Downey
- *A Rendezvous with Colorado History* by D. Dutton and C. Humphries
- *A Kids Look at Colorado* by P. Perry
Colorado Teacher-Authored Sample Instructional Unit

| Assessment: | Students will construct a diary entry as a “Mountain Man” describing/analyzing the changes to and decline of their trade. They may choose to describe the lack of beavers (due to over trapping) OR they may choose to describe the diminished demand for beaver top hats (i.e. the growth in the ‘silk top hat’ trend) |
| Differentiation: | **Access (Resources and/or Process)** |
| | [http://www.telegramsworldwide.com/send.php](http://www.telegramsworldwide.com/send.php) (Create and send, via e-mail, authentic looking telegrams) |
| | Students may “dictate” to a fellow student or to the teacher |
| Extensions for depth and complexity: | **Expression (Products and/or Performance)** |
| | Students may use the graphic organizers and maps created so far to document cause and effect relationships in the beaver trade |
| | Students may “dictate” a telegram home about the changes to their work as either a result of the lack of beaver (over trapping) or lack of demand for beaver top hats |
| | **Access (Resources and/or Process)** |
| | [http://www.unexpectedwildliferefuge.org/Waterways.htm](http://www.unexpectedwildliferefuge.org/Waterways.htm) (Arguments for sustaining beaver habitats and populations) |
| Critical Content: | **Expression (Products and/or Performance)** |
| | Students may construct a written argument for sustaining the beaver population in an alternative history where the demand for beaver fur continues and threatens beaver populations |
| | • Productive resource (natural, human, capital) allocation in Colorado history |
| | • Regional development in Colorado |
| | • Human interaction with the environment |
| | • Resource depletion as a result of use/misuse |
| | • Colorado Mountain Men and the lives of fur traders/trappers (e.g., Jim Beckwourth, William Bent, Charles Bent, Kit Carson) |
| | • Use of beaver fur |
| | • Colorado’s natural/physical resources |
| | • Events/details of Colorado rendezvous |
| Key Skills: | • Analyze cause and effect relationships between societal values/needs and individual lives, the physical environment, and the economy |
| | • Define positive/negative economic incentives |
| | • Use maps to locate resources and regions |
| | • Analyze primary and secondary sources to place significant events in historical sequence |
| Critical Language: | Incentives, rendezvous, traders, trapper, economic incentive, supply and demand, opportunity costs |

Learning Experience # 5

The teacher may brainstorm with students the connections between scarcity and value, possibly using terms like “limited/special edition” to guide students’ thinking about the status that restricted supply can confer on products or resources (This experience is the segue to the examination of the Colorado Gold Rush).

Generalization Connection(s): Changing (or constant) values often bring about boom and bust economic cycles that shape/determine the future and direction of a state’s growth
### Colorado Teacher-Authored Sample Instructional Unit

<table>
<thead>
<tr>
<th>Teacher Resources:</th>
<th><a href="http://en.wikipedia.org/wiki/Special_edition">http://en.wikipedia.org/wiki/Special_edition</a> (Definition statements for special and limited edition)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Resources:</td>
<td>N/A</td>
</tr>
<tr>
<td>Assessment:</td>
<td>Students will generate a class statement about the ways in which scarcity relates the status, value, significance and/or desire for particular products or resources (statement may also include distinctions between wants and needs)</td>
</tr>
<tr>
<td>Differentiation:</td>
<td>(Multiple means for students to access content and multiple modes for student to express understanding.)</td>
</tr>
<tr>
<td></td>
<td><strong>Access (Resources and/or Process)</strong></td>
</tr>
<tr>
<td></td>
<td>Magazines and advertisements with examples of “scarce/limited” items and products</td>
</tr>
<tr>
<td></td>
<td>Students may work individually or with a partner to select appropriate visuals</td>
</tr>
<tr>
<td></td>
<td><strong>Expression (Products and/or Performance)</strong></td>
</tr>
<tr>
<td></td>
<td>Students may to create (and orally defend) a visual representation of contemporary products that are “limited” in availability and highly sought after</td>
</tr>
<tr>
<td>Extensions for depth and complexity:</td>
<td><strong>Access (Resources and/or Process)</strong></td>
</tr>
<tr>
<td></td>
<td><a href="http://www.eduplace.com/graphicorganizer/pdf/venn.pdf">http://www.eduplace.com/graphicorganizer/pdf/venn.pdf</a> (Printable template for documenting Venn diagrams)</td>
</tr>
<tr>
<td></td>
<td><strong>Expression (Products and/or Performance)</strong></td>
</tr>
<tr>
<td></td>
<td>Students may create a Venn diagram of items with imposed limitations (e.g., limited editions) vs. resources/products that are inherently limited in nature</td>
</tr>
<tr>
<td>Critical Content:</td>
<td>N/A</td>
</tr>
<tr>
<td>Key Skills:</td>
<td>• Analyze cause and effect relationships between societal values/needs and individual lives</td>
</tr>
<tr>
<td>Critical Language:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Learning Experience # 6

The teacher may bring in (mining) artifacts and primary and secondary sources (newspaper articles, personal journals, etc.) to help students examine the demands (and dreams) that brought prospective miners to Colorado and the natural resources that facilitated initial mining efforts in the state.

**Generalization Connection(s):**
- Changing (or constant) values often bring about boom and bust economic cycles that shape/determine the future and direction of a state’s growth
- Humans alter and adapt to existing natural resources to meet personal, cultural, and economic needs
- Physical characteristics and human activity (availability and allocation of resources) within different regions and locations contribute to the sustainability of “booms”

**Teacher Resources:**
- http://memory.loc.gov/cgi-bin/query/r?ammem/calbk:@field%28DOCID+@lit%28calbk096div7%29%29 (Primary source material—miner letters from Colorado)
- http://www.westernmininghistory.com/articles/11/page1/ (General and background information on the Colorado gold and silver rush)
- http://www.historycolorado.org/educators/check-out-artifact-kits (Like the Mountain Man Kit, this kit contains artifacts, photos, and activities oriented around Colorado mining)
- http://www.mininghalloffame.org/ (Nation Mining Museum- Leadville)
### Student Resources:
- [http://www.youtube.com/watch?v=dVpoURZxCus](http://www.youtube.com/watch?v=dVpoURZxCus) (General Colorado Gold Rush movie-with transcription)
- [http://hewit.unco.edu/dohist/mining/themes.htm](http://hewit.unco.edu/dohist/mining/themes.htm) (A journey into Colorado's mining history in the company of people who made that history)
- *Colorado: Crossroads of the west* by F. Metcalf and M. Downey
- *A Rendezvous with Colorado History* by D. Dutton and C. Humphries
- *A Kids Look at Colorado* by P. Perry

### Assessment:
Students will continue mapping activities to document the locations of the mines and mining towns (including placer and hard rock locations). In addition, students will continue individual timelines for Colorado history. See “Ongoing” experiences for description of tech tools to facilitate the mapping and timeline work.

### Differentiation:
(Multiple means for students to access content and multiple modes for student to express understanding.)

<table>
<thead>
<tr>
<th>Access (Resources and/or Process)</th>
<th>Expression (Products and/or Performance)</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.eduplace.com/graphicorganizer/pdf/timeline.pdf">http://www.eduplace.com/graphicorganizer/pdf/timeline.pdf</a> (Open-ended program for creating individual timelines)</td>
<td>Students may order or sequence information on gold and silver discoveries using visual or graphic organizers</td>
</tr>
<tr>
<td><a href="http://www.miningbureau.com/">http://www.miningbureau.com/</a> (Colorado mining history in text, photographs and images)</td>
<td>Students may give (oral or written) examples of the lives of miners using illustrated and/or pictorial scenes</td>
</tr>
<tr>
<td><em>Colorado</em> (Rookie Read-About Geography) by C. Walker</td>
<td>Students may provide (orally) locations for maps</td>
</tr>
</tbody>
</table>

### Extensions for depth and complexity:

<table>
<thead>
<tr>
<th>Access (Resources and/or Process)</th>
<th>Expression (Products and/or Performance)</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.miningbureau.com/">http://www.miningbureau.com/</a> (Colorado mining history in text, photographs and images)</td>
<td>Students may create timelines and/or maps related to the lives of significant historical actors in Colorado's gold and silver mining booms</td>
</tr>
<tr>
<td><a href="http://www.mininghalloffame.org/inductee.asp?i=185&amp;b=inductees%2Easp&amp;t=n&amp;p=H&amp;s=">http://www.mininghalloffame.org/inductee.asp?i=185&amp;b=inductees%2Easp&amp;t=n&amp;p=H&amp;s=</a> (Example biography of Nathaniel Hill - prominent Colorado miner. One of many Colorado inductees in the Mining Hall of Fame)</td>
<td>Students may give (oral or written) examples of the lives of miners using illustrated and/or pictorial scenes</td>
</tr>
<tr>
<td><a href="http://www.timetoast.com/">http://www.timetoast.com/</a> (Free, web-based timeline program that is user friendly)</td>
<td>Students may provide (orally) locations for maps</td>
</tr>
</tbody>
</table>

### Critical Content:
- Placer mining work
- Hard-rock mining work
- Major Gold Mines in Colorado: Cripple Creek, Cherry Creek, Idaho Springs
- Rush slogans: “Pikes Peak or Bust”

### Key Skills:
- Define positive/negative economic incentives
- Use maps to locate resources and regions
- Analyze primary and secondary sources to place significant events in historical sequence

### Critical Language:
- Incentives, supply, demand, mining, regions, human activity, natural resources, physical resources, prospectors
# Colorado Teacher Authored Sample Instructional Unit

## Learning Experience # 7

The teacher may use maps and demographic data to help students analyze the effects of the gold/silver “boom” on the resources and landscape of Colorado and to consider the sustainability of early mining (and latter mining efforts) in the state.

### Generalization Connection(s):

Humans alter and adapt to existing natural resources to meet personal, cultural, and economic needs. Physical characteristics and human activity (availability and allocation of resources) within different regions and locations contribute to the sustainability of “booms”

### Teacher Resources:

- [http://www.historycolorado.org/educators/check-out-artifact-kits](http://www.historycolorado.org/educators/check-out-artifact-kits) (Like the Mountain Man Kit, this kit contains artifacts, photos, and activities oriented around Colorado mining)
- [http://hhengineering.com/COLORADOGOLD.htm](http://hhengineering.com/COLORADOGOLD.htm) (Maps of contemporary gold mining in Colorado)
- *Historical Atlas of Colorado* by T. Noel, P. Mahoney & R. Stevens

### Student Resources:

- [http://www.youtube.com/watch?v=txUjNxLUY20](http://www.youtube.com/watch?v=txUjNxLUY20) (Colorado Gold Rush movie with maps/locations and names of important miners-with transcription)
- *Colorado: Crossroads of the west* by F. Metcalf and M. Downey
- *A Rendezvous with Colorado History* by D. Dutton and C. Humphries
- *A Kids Look at Colorado* by P. Perry

### Assessment:

Students will create visual representations (pictographs, bar graphs, etc.) to analyze the changes to (and locations of) the population in Colorado that resulted from the gold and silver booms and/or the provide visual documentation of the consequences/side effects of the mining industry.

### Differentiation:

(Multiple means for students to access content and multiple modes for student to express understanding.)

<table>
<thead>
<tr>
<th>Access (Resources and/or Process)</th>
<th>Expression (Products and/or Performance)</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://hewit.unco.edu/dohist/mining/themes.htm">http://hewit.unco.edu/dohist/mining/themes.htm</a> (A journey into Colorado's mining history in the company of people who made that history)</td>
<td>Students may describe (orally or in written form) the activities and appearances of communities and regions depicted in pictures and maps</td>
</tr>
<tr>
<td>Students may work in pairs or in groups to generate/brainstorm descriptions</td>
<td></td>
</tr>
</tbody>
</table>

### Extensions for depth and complexity:

<table>
<thead>
<tr>
<th>Access (Resources and/or Process)</th>
<th>Expression (Products and/or Performance)</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.westernmininghistory.com/state/colorado/">http://www.westernmininghistory.com/state/colorado/</a> (Maps and visuals of Colorado mining towns)</td>
<td>Students may document the growth (and demise) of a selected town that resulted from either the gold and silver booms and busts</td>
</tr>
</tbody>
</table>

### Critical Content:

- Placer mining work
- Hard-rock mining work
- Hydraulic mining work
Colorado Teacher-Authored Sample Instructional Unit

Key Skills:
- Major Gold Mines in Colorado: Cripple Creek, Cherry Creek, Idaho Springs
- Rush slogans: “Pikes Peak or Bust”
- Productive resource (natural, human, capital) allocation in Colorado history
- Regional development in Colorado
- Human interaction with the environment
- Resource depletion as a result of use/misuse

Critical Language:
- Use maps to locate resources and regions
- Analyze primary and secondary sources to place significant events in historical sequence

Learning Experience # 8

The teacher may use historical and contemporary sources to document the lives of Colorado miners and their experiences with mining so that students can compare the economic opportunities/risks of miners and fur traders.

Generalization Connection(s):
- Changing (or constant) values often bring about boom and bust economic cycles that shape/determine the future and direction of a state’s growth
- Every economic decision involves both potential risks and benefits

Teacher Resources:
- http://www.coloradomining.org/mc_miningfacts.php (Facts and statistics on Colorado mining)
- Historical Atlas of Colorado by T. Noel, P. Mahoney & R. Stevens

Student Resources:
- http://www.coloradomining.org/mc_miningfacts.php (Facts and statistics on Colorado mining)
- Colorado: Crossroads of the west by F. Metcalf and M. Downey
- A Rendezvous with Colorado History by D. Dutton and C. Humphries
- A Kids Look at Colorado by P. Perry

Assessment:
- Students will construct two Venn diagrams to critically examine and defend answers to the following questions: What are the similarities and differences between the fur trade/trapping boom and the gold and silver booms in Colorado? And, what are the similarities and differences between the risks associated with the fur trade/trapping and gold and silver mining in Colorado?

Differentiation:
(Forms of support for students who require additional assistance)
- Access (Resources and/or Process)
  - http://www.telegramsworldwide.com/send.php (Create and send, via e-mail, authentic looking telegrams)
- Expression (Products and/or Performance)
  - Students may use the graphic organizers and maps created so far to document cause and effect relationships in the mining booms (e.g., the growth of mining towns, tourism)
  - Students may “dictate” a telegram describing life as a miner and in a mining town
### Extensions for depth and complexity:

<table>
<thead>
<tr>
<th>Access (Resources and/or Process)</th>
<th>Expression (Products and/or Performance)</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://pbskids.org/dontbuyit/advertisingtricks/createyourownad_flash.html">http://pbskids.org/dontbuyit/advertisingtricks/createyourownad_flash.html</a> (Program that scaffolds the creation of an advertising campaign)</td>
<td>Students may create an advertising campaign (associated with a particular Colorado mining town) designed to attract miners (historical or contemporary)</td>
</tr>
</tbody>
</table>

### Critical Content:

- Supply and demand (mining in Colorado)
- Placer mining work
- Hard-rock mining work
- Hydraulic mining work
- Major Gold Mines in Colorado: Cripple Creek, Cherry Creek, Idaho Springs
- Rush slogans: “Pikes Peak or Bust”
- Productive resource (natural, human, capital) allocation in Colorado history
- Regional development in Colorado
- Human interaction with the environment
- Resource depletion as a result of use/misuse

### Key Skills:

- Analyze cause and effect relationships between societal values/needs and individual lives, the physical environment, and the economy
- Define positive/negative economic incentives
- Use maps to locate resources and regions
- Analyze primary and secondary sources to place significant events in historical sequence

### Critical Language:

Incentives, rendezvous, miners, economic incentive, supply and demand, opportunity costs

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### Learning Experience # 9

The teacher may brainstorm with students the natural/physical resources that Coloradoans depend on to sustain lifestyles today (This brainstorm session will include many topics but it will ultimately provide the segue to the examination of Colorado’s energy production and the state’s gas and oil industry).

### Generalization Connection(s):

Changing (or constant) values often bring about boom and bust economic cycles that shape/determine the future and direction of a state’s growth

### Teacher Resources:

- [http://www.ecokids.ca/pub/eco_info/topics/energy/ecostats/](http://www.ecokids.ca/pub/eco_info/topics/energy/ecostats/) (General, kid-friendly site for explaining energy sources)

### Student Resources:

N/A

### Assessment:

Students will create a classroom visual depiction/mural of the ways in which energy production connects with various aspects of our daily lives and existence (teacher may choose to have students designate energy sources as renewable or non-renewable)
**Differentiation:**
(Multiple means for students to access content and multiple modes for student to express understanding.)

<table>
<thead>
<tr>
<th>Access (Resources and/or Process)</th>
<th>Expression (Products and/or Performance)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magazines and advertisements with depictions of different types of fuels/energy and of every day contemporary American life</td>
<td>Students select a particular aspect of the mural for which they will contribute pictorial representations (e.g., the need for and type of energy/fuel necessary for transportation)</td>
</tr>
<tr>
<td>Students may work in pairs or groups to locate appropriate pictorial representations</td>
<td></td>
</tr>
</tbody>
</table>

**Extensions for depth and complexity:**

<table>
<thead>
<tr>
<th>Access (Resources and/or Process)</th>
<th>Expression (Products and/or Performance)</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.ehow.com/about_5374489_fuels-used-daily-life.html">http://www.ehow.com/about_5374489_fuels-used-daily-life.html</a></td>
<td>Students may analyze and document the kind and/or amount of energy needed to produce a common item or fuel an activity</td>
</tr>
<tr>
<td>(Background on different fuel sources and their usage)</td>
<td></td>
</tr>
</tbody>
</table>

**Critical Content:**
- N/A

**Key Skills:**
- Analyze cause and effect relationships between societal values/needs and individual lives

**Critical Language:**
- N/A

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**Learning Experience # 10**

The teacher may bring in artifacts and sources (news clips, articles, etc.) so that students can consider the different fuel sources located in and/or produced in Colorado.

**Generalization Connection(s):**
Changing (or constant) values often bring about boom and bust economic cycles that shape/determine the future and direction of a state’s growth
Humans alter and adapt to existing natural resources to meet personal, cultural, and economic needs
Physical characteristics and human activity (availability and allocation of resources) within different regions and locations contribute to the sustainability of “booms”

**Teacher Resources:**
- http://video.rmpbs.org/video/2324870241/ (Teacher background on natural gas extraction and issues)
- http://www.eia.gov/state/?sid=CO (Facts on fuel extraction and consumption in Colorado)
- Historical Atlas of Colorado by T. Noel, P. Mahoney & R. Stevens

**Student Resources:**
- http://www.scholastic.com/browse/article.jsp?id=3753647 (Article on wind energy in Colorado)
- Colorado: Crossroads of the west by F. Metcalf and M. Downey
- A Rendezvous with Colorado History by D. Dutton and C. Humphries
- A Kids Look at Colorado by P. Perry
## Colorado Teacher-Authored Sample Instructional Unit

| Assessment: | Students will continue mapping activities to document the locations of fossil fuels (extraction and mining locations) in Colorado which could, again, emphasize or delineate renewable and non-renewable forms. In addition, students will continue individual timelines for Colorado history. See “Ongoing” experiences for description of tech tools to facilitate the mapping and timeline work. |
| Differentiation: (Multiple means for students to access content and multiple modes for student to express understanding.) | **Access (Resources and/or Process)** | **Expression (Products and/or Performance)** |
| | [http://www.eduplace.com/ graphicorganizer/pdf/timeline.pdf](http://www.eduplace.com/ graphicorganizer/pdf/timeline.pdf) (Open-ended program for creating individual timelines) | Students may order or sequence information on Colorado fuel production/exploration using visual or graphic organizers |
| | Students may work with partners or in small to determine locations | Students may (orally) provide energy production/fuel extraction locations for map creation |
| Extensions for depth and complexity: | **Access (Resources and/or Process)** | **Expression (Products and/or Performance)** |
| | [http://www.denverpost.com/opinion/ci_16711142](http://www.denverpost.com/opinion/ci_16711142) (editorial on the history of the potential boom and eventual bust of Colorado’s shale oil exploration) | Students may create a timeline of the historic (shale oil) energy boom and bust in Colorado |
| | [http://www.timetoast.com/](http://www.timetoast.com/) (Free, web-based timeline program that is user friendly) | |
| Critical Content: | • Colorado fuel sources  
• Oil extraction processes  
• Natural gas (hydraulic fracturing) processes |
| Key Skills: | • Define positive/negative economic incentives  
• Use maps to locate resources and regions  
• Analyze primary and secondary sources |
| Critical Language: | Incentives, supply, demand, mining, regions, human activity, natural resources, physical resources |

### Learning Experience # 11

The teacher may use contemporary maps and visuals to help students document and analyze the effects of the search for fuel/energy sources on the landscape and resources of Colorado.

**Generalization Connection(s):**
Humans alter and adapt to existing natural resources to meet personal, cultural, and economic needs. Physical characteristics and human activity (availability and allocation of resources) within different regions and locations contribute to the sustainability of “booms”

**Teacher Resources:**
- [http://www.eia.gov/state/?sid=CO](http://www.eia.gov/state/?sid=CO) (Facts on fuel extraction and consumption in Colorado)
- [http://geosurvey.state.co.us/energy/Pages/Energy%20Welcome.aspx](http://geosurvey.state.co.us/energy/Pages/Energy%20Welcome.aspx) (Data and quick facts on energy resources in Colorado)
### Student Resources:
- [http://geosurvey.state.co.us/energy/Pages/Energy%20Welcome.aspx](http://geosurvey.state.co.us/energy/Pages/Energy%20Welcome.aspx) (Data and quick facts on energy resources in Colorado)
- [http://www.scholastic.com/browse/article.jsp?id=3753647](http://www.scholastic.com/browse/article.jsp?id=3753647) (Article on wind energy in Colorado)
- *Colorado: Crossroads of the west* by F. Metcalf and M. Downey
- *A Rendezvous with Colorado History* by D. Dutton and C. Humphries
- *A Kids Look at Colorado* by P. Perry

### Assessment:
Students will create visual representations (pictographs, bar graphs, etc.) of the different types and amounts of fuel extracted and/or produced in Colorado (wind farms, natural gas drilling, coal mining, etc.) and/or provide visual representation of the downsides (cautions/threats, limitations, etc.) to the extraction or production of various resources

### Differentiation:
(Multiple means for students to access content and multiple modes for student to express understanding.)

<table>
<thead>
<tr>
<th>Access (Resources and/or Process)</th>
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</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.coopext.colostate.edu/WR/windbooklet.pdf">http://www.coopext.colostate.edu/WR/windbooklet.pdf</a> (Wind energy images)</td>
<td>Students may describe (orally or in written form) the activities and appearances of communities and regions depicted in pictures and maps</td>
</tr>
<tr>
<td>Students may work in pairs or in groups to generate/brainstorm descriptions</td>
<td></td>
</tr>
</tbody>
</table>

### Extensions for depth and complexity:

<table>
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<tr>
<th>Access (Resources and/or Process)</th>
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</tr>
</thead>
<tbody>
<tr>
<td><a href="http://blog.skytruth.org/2008/06/colorado-all-natural-gas-and-oil-wells.html">http://blog.skytruth.org/2008/06/colorado-all-natural-gas-and-oil-wells.html</a> (Data on Colorado natural gas and drilling)</td>
<td>Students may document (map, visually depict, etc) the growth of natural gas extraction in Colorado (and/or in their community) over the past decade</td>
</tr>
</tbody>
</table>

### Critical Content:
- Colorado fuel sources
- Oil extraction processes
- Natural gas (hydraulic fracturing) processes
- Colorado regions
- Productive resource (natural, human, capital) allocation in Colorado history
- Regional development in Colorado
- Human interaction with the environment
- Resource depletion as a result of use/misuse

### Key Skills:
- Use maps to locate resources and regions
- Analyze primary and secondary sources to place significant events in historical sequence

### Critical Language:
Natural and physical resources, regions, sustainability, depletion
# Learning Experience # 12

The teacher may use various historical and contemporary sources (including guest speakers) to illuminate the lives of energy workers so that students can compare the economic opportunities/risks of miners, fur traders, and people working in the energy industry in Colorado.

| Generalization Connection(s): | Changing (or constant) values often bring about boom and bust economic cycles that shape/determine the future and direction of a state’s growth  
Every economic decision involves both potential risks and benefits |
|---|---|
| Teacher Resources: | http://www.rockymountainenergyforum.com/topics/colorado-revenue (Data on state revenue generated by energy in Colorado)  
http://www.xcelenergy.com/Safety_&_Education/Educational_Resources/Classroom_Resources/Speakers_Bureau (Guest speakers on energy topics, listed under classroom resources)  
Historical Atlas of Colorado by T. Noel, P. Mahoney & R. Stevens |
| Student Resources: | http://www.scholastic.com/browse/article.jsp?id=3753647 (Article on wind energy in Colorado)  
| Assessment: | Students will construct two Venn diagrams to critically examine and defend answers to the following questions: What are the similarities and differences between the fur trade/trapping boom, the gold and silver booms, and the energy boom in Colorado? And, what are the similarities and differences between the risks associated with the fur trade/trapping, gold and silver mining, and energy exploration in Colorado? http://www.eduplace.com/graphicorganizer/pdf/venn.pdf (Printable template for documenting Venn diagrams) |
| Differentiation: | (Multiple means for students to access content and multiple modes for student to express understanding.)  
Access (Resources and/or Process)  
Expression (Products and/or Performance)  
Students may use the graphic organizers and maps created so far to document the difference between past Colorado booms and the energy boom |
| Extensions for depth and complexity: | Access (Resources and/or Process)  
Expression (Products and/or Performance)  
Students construct T charts that detail the advantages/disadvantages of renewable and non-renewable energy sources in Colorado |
| Critical Content: | • Supply and demand of fuels and energy resources in Colorado  
• Colorado fuel sources  
• Oil extraction processes  
• Natural gas (hydraulic fracturing) processes  
• Colorado regions  
• Productive resource (natural, human, capital) allocation in Colorado history  
• Regional development in Colorado  
• Human interaction with the environment  
• Resource depletion as a result of use/misuse |
### Colorado Teacher-Authored Sample Instructional Unit

<table>
<thead>
<tr>
<th>Key Skills</th>
<th>Critical Language:</th>
</tr>
</thead>
</table>
| • Analyze cause and effect relationships between societal values/needs and individual lives, the physical environment, and the economy  
• Define positive/negative economic incentives  
• Use maps to locate resources and regions | Natural and physical resources, regions, sustainability, depletion, opportunity costs |

### Learning Experience # 13

The teacher may brainstorm with students the things people in Colorado like to do for recreation and sport (this brainstorm session will provide the segue to the examination of Colorado’s tourism booms).

<table>
<thead>
<tr>
<th>Generalization Connection(s):</th>
<th>Changing (or constant) values often bring about boom and bust economic cycles that shape/determine the future and direction of a state’s growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Resources:</td>
<td><a href="http://www.colorado.com/">http://www.colorado.com/</a> (Data, graphics, and visuals on Colorado lifestyles, activities, events, etc.)</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.colorado.gov/play/indoors-outdoors/index.html">http://www.colorado.gov/play/indoors-outdoors/index.html</a> (Data, graphics, and visuals on Colorado recreational activities)</td>
</tr>
<tr>
<td>Student Resources:</td>
<td><a href="http://www.youtube.com/user/VisitColorado/videos">http://www.youtube.com/user/VisitColorado/videos</a> (Channel with multiple videos-with transcription- dedicated to Colorado lifestyles/activities)</td>
</tr>
</tbody>
</table>

#### Critical Language:

- Natural and physical resources, regions, sustainability, depletion, opportunity costs

#### Learning Experience # 13

<table>
<thead>
<tr>
<th>Assessment:</th>
<th>Students will create a classroom visual depiction/mural of the ways in which Coloradoans (and visitors) utilize the state’s natural resources for recreational/sporting activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differentiation:</td>
<td>(Multiple means for students to access content and multiple modes for student to express understanding.)</td>
</tr>
<tr>
<td>Access (Resources and/or Process)</td>
<td><a href="http://www.coloradolifemagazine.com/">http://www.coloradolifemagazine.com/</a> Visuals of different Colorado lifestyles</td>
</tr>
<tr>
<td>Expression (Products and/or Performance)</td>
<td>Students may select a particular aspect of the mural for which they will contribute pictorial representations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Extensions for depth and complexity:</th>
<th>Access (Resources and/or Process)</th>
<th>Expression (Products and/or Performance)</th>
</tr>
</thead>
</table>

| Critical Content: | N/A |
| Key Skills:       | • Analyze cause and effect relationships between societal values/needs and individual lives |
| Critical Language:| N/A |
### Learning Experience # 14

The teacher may bring in artifacts (e.g., antique and modern ski equipment) and primary and secondary sources (advertising, letters, etc.) so that students can consider the historical roots (and “booms”) of Colorado’s tourism and the natural and physical resources that continue to support/sustain this industry.

| Generalization Connection(s): | Changing (or constant) values often bring about boom and bust economic cycles that shape/determine the future and direction of a state’s growth  
Humans alter and adapt to existing natural resources to meet personal, cultural, and economic needs  
Physical characteristics and human activity (availability and allocation of resources) within different regions and locations contribute to the sustainability of “booms” |
| Teacher Resources: |  
http://www.coloradoskihistory.com/history/timelines/1900.html (Colorado ski history facts, pictures, and timeline)  
http://www.coloradoinfo.com/wintervacationplanner/history-of-skiing (Evolution of skiing in Colorado)  
http://www.historycoloradocenter.org/families/coloradostories (Colorado History museum- exhibits on the history of lifestyles and activities in Colorado)  
http://www.nytimes.com/2006/03/10/travel/escapes/10ski.html?_r=0 (Background of the U.S. Army’s 10th Mountain Division, and its relationship to the post-World War II skiing boom) |
| Student Resources: |  
http://www.colorado.gov/dpa/doit/archives/tour/ (The Tourism Collection at the Colorado State Archives is an assemblage of yearbooks, documents, photographs, and postcards from the various state agencies that dealt with the tourist industry in Colorado from 1872-1993)  
*Colorado: Crossroads of the west* by F. Metcalf and M. Downey  
*A Rendezvous with Colorado History* by D. Dutton and C. Humphries  
*A Kids Look at Colorado* by P. Perry |
| Assessment: | Students will continue mapping activities to document the locations of tourism/recreational activity sites. In addition, students will continue individual timelines for Colorado history- See “Ongoing” experiences for description of tech tools to facilitate the mapping and timeline work |
| Differentiation: | Access (Resources and/or Process)  
Expression (Products and/or Performance) |
| Extensions for depth and complexity: |  
Access (Resources and/or Process)  
Expression (Products and/or Performance) |
Students may order or sequence information on Colorado tourism trends using visual or graphic organizers  
Students may work with partners or in small groups to provide popular tourism locations for maps  
Students may create a contemporary (or historic) slogan for Colorado, designed to spotlight a particular state feature/resource |
Critical Content:
- Colorado ski industry events and history
- Colorado tourism highlights and history
- 10th Mountain Division’s role in WWII

Key Skills:
- Define positive/negative economic incentives
- Use maps to locate resources and regions
- Analyze primary and secondary sources to place significant events in historical sequence

Critical Language:
Incentives, supply, demand, mining, regions, human activity, natural resources, physical resources

Learning Experience # 15

The teacher may have students map different locations of major tourist destinations in order to document and analyze the effects of tourism on different regions and/or towns of Colorado (e.g., population growth, infrastructure expansion, etc.).

Generalization Connection(s):
Humans alter and adapt to existing natural resources to meet personal, cultural, and economic needs. Physical characteristics and human activity (availability and allocation of resources) within different regions and locations contribute to the sustainability of “booms.”

Teacher Resources:
- [http://www.youtube.com/user/VisitColorado/videos](http://www.youtube.com/user/VisitColorado/videos) (Channel with multiple videos-with transcription-dedicated to Colorado lifestyles/activities)

Student Resources:
- *Colorado: Crossroads of the west* by F. Metcalf and M. Downey
- *A Rendezvous with Colorado History* by D. Dutton and C. Humphries
- *A Kids Look at Colorado* by P. Perry
- [http://pbskids.org/dontbuyit/advertisingtricks/createyourownad_flash.html](http://pbskids.org/dontbuyit/advertisingtricks/createyourownad_flash.html) (Interactive program that scaffolds the creation of an advertising campaign)

Assessment:
Students will choose a tourist location in Colorado and design an advertising campaign designed to attract new (and returning) tourists. The campaign will highlight specific attractions as well as the various amenities that enhance the location (travel ease, accommodations, costs, etc.).

Differentiation:
(Multiple means for students to access content and multiple modes for student to express understanding.)

Access (Resources and/or Process)
- [http://www.youtube.com/user/VisitColorado/videos](http://www.youtube.com/user/VisitColorado/videos) (Channel with multiple videos dedicated to Colorado lifestyles/activities)

Expression (Products and/or Performance)
- Students may compare and contrast the tourist offerings, infrastructure, and amenities of diverse communities/regions
- Students may work in pairs to determine visuals, documents, and websites to use for comparisons
## Extensions for depth and complexity:

<table>
<thead>
<tr>
<th>Access (Resources and/or Process)</th>
<th>Expression (Products and/or Performance)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong><a href="http://www.cobbk12.org/Cheathamhill/LFS%20Update/Graphic%20Organizers.htm">http://www.cobbk12.org/Cheathamhill/LFS%20Update/Graphic%20Organizers.htm</a></strong> (Template for question/prediction organizer)</td>
<td>Students may create a presentation to answer this question: Based on what you know about Colorado’s climate, geography, resources, etc., what do you predict, believe or wish the next big recreational activity in the state will be?</td>
</tr>
</tbody>
</table>

## Critical Content:
- Colorado ski industry events and history
- Colorado tourism highlights and history
- Colorado regions
- Productive resource (natural, human, capital) allocation in Colorado history
- Regional development in Colorado
- Human interaction with the environment

## Key Skills:
- Use maps to locate resources and regions
- Analyze primary and secondary sources to place significant events in historical sequence

## Critical Language:
Natural and physical resources, regions, sustainability, depletion

## Learning Experience # 16

The teacher may use various historical and contemporary sources (including guest speakers) to enable students to comprehend the economic opportunities/risks of the tourism industry and to consider threats to the sustainability of the current ‘boom’.

### Generalization Connection(s):
Changing (or constant) values often bring about boom and bust economic cycles that shape/determine the future and direction of a state’s growth
Every economic decision involves both potential risks and benefits

### Teacher Resources:
- **http://www.coloradoskihistory.com/history/timelines/1900.html** (Colorado ski history facts, pictures, and timeline)
- **http://www.coloradoinfo.com/wintervacationplanner/history-of-skiing** (Evolution of skiing in Colorado)
- **http://www.colorado.com/** (Guest Speakers-local welcome centers)

### Student Resources:
- **http://www.coloradoskihistory.com/history/timelines/1900.html** (Colorado ski history facts, pictures, and timeline)
*Colorado: Crossroads of the west* by F. Metcalf and M. Downey
*A Rendezvous with Colorado History* by D. Dutton and C. Humphries
*A Kids Look at Colorado* by P. Perry

### Assessment:
Students will create a visual representation (Voicethread **http://voicethread.com/**, collage, or pictograph) documenting and synthesizing the sustainability (opportunities and cautions/threats) of Colorado tourism and the ways in which the unique geography and physical resources help the state reap the economic benefits of this boom
## Differentiation:
(Multiple means for students to access content and multiple modes for student to express understanding.)

## Extensions for depth and complexity:

### Access (Resources and/or Process)

### Expression (Products and/or Performance)
Students may use the graphic organizers and maps created so far to document the difference between past Colorado booms and the tourism boom.

### Access (Resources and/or Process)
- [http://wiki.answers.com/Q/What_are_the_advantages_and_disadvantages_of_tourism](http://wiki.answers.com/Q/What_are_the_advantages_and_disadvantages_of_tourism)

### Expression (Products and/or Performance)
Students may construct a T chart that delineates the advantages/disadvantages of tourism and create a class presentation on defending the need to increase or decrease tourism in Colorado.

## Critical Content:
- Colorado ski industry events and history
- Colorado tourism highlights and history
- Colorado regions
- Productive resource (natural, human, capital) allocation in Colorado history
- Regional development in Colorado
- Human interaction with the environment

## Key Skills:
- Analyze cause and effect relationships between societal values/needs and individual lives, the physical environment, and the economy
- Define positive/negative economic incentives
- Use maps to locate resources and regions

## Critical Language:
- Natural and physical resources, regions, sustainability, depletion, opportunity costs