



# Mapping the Mountains

Comprehensive Write Up

Grade: 4

**Purpose:** This program tells the story of Colorado's first explorers, looking at the different people that travelled through here and the tools they utilized for orienteering. Different types of maps and their differing purposes will all be addressed, along with the purpose for these explorations and their associated dangers.

- Ages: 9-10
- Length: One hour and thirty minutes
- Minimum Staff: 2
- Capacity: 25 students

**Prep:** Grab the Mapping the Mountains education tote, the folding table, and the sheet from the EDU closet (in Jail building). Set up the folding table and lay the sheet on it, then place the artifacts and educational props on top of it. Print off an Adventure Times worksheet for each student and grab the pencils from the workspace closet. Make sure that there is enough faux aged paper in the bin to have one for each student (check as soon as the program is scheduled so there is time to obtain more if needed). Locate and bring out the accessioned maps from the Bill's Ranch archive in drawer FF-4 (listed below) and the easels in the Bill's Ranch closet. Place all maps in short term Mylar sleeve on a separate table.

- 2020.6.1 – Topographic map of Dillon Reservoir before construction
- 2009.10.28 – 1959 road map of Summit County
- 2009.10.15 – 1907 mining claim map of Masontown
- 2009.10.16 – Town Map, Master Plan for Frisco
- 2008.7.92 - Birds eye painting of the Historic Park
- 2009.10.22 – Railroad Map for the Colorado & Southern

## **1. Buffer/Introduction: 3 minutes**

- Gather the students and begin with a brief introduction of the Frisco Historic Park & Museum, and Frisco's history. Ask if it is any of their first time visiting, or for those returning, what their favorite building is.
  - Ask about what history they have talked about in class, and what they already know about Colorado's first explorers.

## **2. Explorers of Colorado: 10 minutes**

This section will address the who, what, where, and when of exploring and mapping the mountains in early Colorado history. If an item mentioned is on the hands-on artifact table, pick it up to show the students while talking about it. While explaining different types of maps, use the artifact maps on display as a visual aid.

- Who was exploring this area?
  - Colorado's first people were the Ute, who lived and hunted here for thousands of years before the arrival of Europeans.
  - European trappers, mainly French and Spanish, explored and trapped in the surrounding areas as early as the 1500s (Juan de Oñate was the first European here in 1598). Ute guides usually led them.
  - As Americans began moving further west, they started leading expeditions in this area and trading with the Ute.
  - Many places in Colorado were named after early explorers of the state.
    - Zebulon Pike – Pike's Peak
    - Stephen H. Long – Longs Peak
    - John W. Gunnison – Gunnison River, town, and county.
    - George Gore – Gore Range.
    - John C. Fremont – Fremont Pass and county.
- When were the first American explorers coming through Colorado?
  - America expanded into Colorado up to the Continental Divide, which was previously French Territory, following the Louisiana Purchase of 1803. In 1848, the treaty of Guadalupe Hidalgo, signed between Mexico and the United States, granted the United States the rest of Colorado and most of what we know of the American West.
  - Many people came out this way to trap and hunt (in the earlier years) and mine (later years). It also served as a through line to get to California and Oregon along wagon trails and railroads.
- What were they looking to learn?
  - Companies would send scouting parties out here to evaluate what they can invest in. If they saw a population of certain wildlife, they would send trappers. If they saw a flat through grade, they would send specialized railroad scouts. If they found gold, they would send in mining investors. Plenty others came to ranch.
- What ways did they chart what they saw?
  - Explorers would use a compass to tell them direction. If they lost their compass or broke it, they could use stars and the sun to help guide them.
  - They would often walk and count their paces to track the distance of something, or use a theodolite. Due to its bulkiness, a theodolite was often brought into the mountains on well-funded charting trips rather than on scouting trips.
  - Landmarks such as mountains, rock formations, canyons, or rivers, would be included in the maps to mark certain areas.

- What different types of maps did they use?
  - Topographical- These maps show the change in elevation of an area.
  - Claim Map- These maps can show mineral and land claims, and what resources they have within them.
  - Birds Eye- These were hand drawn or photographed maps of a town from a vantage point. They resembled more of a photograph than a map we are used to today.
  - Road Map- These maps show roads and landmarks to help travelers.
  - City Map- These maps show locations, property, roads, and other details of a concentrated area.
  - Almost all maps have scales, which show the representation of distance. Most maps have compasses that show what way is north facing on the map. They may also have a legend, which describes what certain markings mean.
- What dangers did they face?
  - While transporting all of their materials and themselves by water, they ran the risk of their canoe tipping and losing all their supplies or drowning. When transporting by wagon, they faced the risk of a pack animal dying or a wagon part breaking.
  - The risk of animal attack was present, as they were going into the animal's natural habitat long before major cities in the area.
  - If they lost supplies or did not have luck hunting, fishing, or trading, they ran the risk of starvation.
  - Natural disasters, such as flash floods, rock slides, avalanches, and forest fires surrounded these explorers.

### **3. Artifact Interaction: 7 minutes**

- The students can take turns coming up to the table and looking at/touching some of the hands-on artifacts and pelts that we have.
  - ACCESSIONED MAPS ARE NOT TO BE TOUCHED BY STUDENTS. If a student would like a closer look, you may hold it up and show them with gloves and proper supporting of the artifact.
  - Make sure that they stay above the table with touchable items so that they do not drop them.
  - Answer any questions that you can, and encourage them to think about what tools or map styles they still see in use today.

### **4. Adventure Times Handout: 10 minutes**

**Materials:** Pencils, Adventure Times worksheets.

**Prep:** Hand out one pencil and one worksheet (page 6) to each student.

- Begin a conversation about how news would travel at this time. Talk about how there was no instant news or information, and sometimes people would wait weeks to hear what had happened.

- Ask the students about newspapers and if anyone they know still gets their news from them. How would these stories make it to a printing press before the newspaper? If a traveler had to wait until the next outpost to relay information, the wait time would be much longer than if they lived in a city.
- If a traveler to a never before recorded world wrote a book, would the kids be interested in reading it? This is how many people viewed the American West, since most people had not been there and wondered what it would be like.
- Hand out the Adventure Times worksheet and a pencil to each student. Explain the general flow of a newspaper article to them (how headlines are catchy and quick, the body gives most details, and they end with a conclusion of how it was resolved). If they were a mountain explorer, what situation may they find themselves in? Whether it is one they hope they were in or one that they wish they would never experience, now is their time to write out their newspaper story. Did they discover a new mountain? Did they find gold? Were they attacked by wildlife? Did they fall into a river? Etc.
- If they do not finish the worksheet in the allotted time, they can finish it at home or in their classroom.

**Concluding:** Gather the pencils from each student and make sure that their names are on their worksheet before giving it to their teacher.

### **5. Getting to Know Your Compass: 10 minutes**

**Materials:** Necklace compasses.

**Prep:** Hand out one compass to each student.

- Ask if any of the students have used a compass before. Do they know what the four letters (N, E, S, W) on it stand for?
  - Make sure that they understand to hold the compass parallel with the ground, lying flat in their hands.
  - The red arrow will point North, with the grey side pointing south. They can then face north, aligning the “N” on their compass with that direction.
- Have the students all face north using their compass. Once again, go over North, South, East, and West, this time in terms of right, left, behind, or front. Begin to ask them what direction certain things in sight are from them.
- Now, mention steps. If they take 15 steps West and then 10 steps north, where do they think they would end up? After they answer, have them take those steps and see if they were correct.
- Repeat this activity until they are comfortable enough with the compass to make their own map.

## **6. Mapping the Park: 20 minutes**

**Materials:** Necklace compasses, pencil, faux aged paper.

**Prep:** Once the kids are comfortable with their compasses, gather their attention. Once you have explained the next activity, give one aged piece of paper and one pencil to each student.

- The next activity will be making a map of the park. What kind of map would be most useful here?
  - Depending on classroom size, you may break up the classroom into groups. Have one group make the front of the park as a map and the other make the back of the park.
- Go over the use of a drawn compass and a scale on a map. They should show on their map which way is north. They may include a scale if they want, or can write down “20 paces to the door”, or any other method to show distance. Landmarks such as “wagon”, “well”, or “outhouse” can be used to show proximity in their map.
- Once the activity is explained, hand out a pencil and piece of paper to each student.
- While they are charting their maps, walk around and help them with spelling or directional questions.

**Concluding:** Gather the pencils and compasses from each student and make sure that their names are on their map before giving it to their teacher.

## **7. Free Explore: 30 minutes**

- At this time, the students will now have a chance to explore the park on their own. Have them walk through the buildings in whatever fashion the teacher prefers.
  - Groups limited to 10 students are preferred for space and flexibility in the buildings.
- Prompt the students to look for items that we talked about throughout this program while touring the park. Also, ask them to look for technologies that are still used today or something that we no longer use.
- One employee will begin walking around the park, answering any questions that the class may have.
- The other employee will finish packing up all of the materials and return them to the EDU closet, in the Jail. All maps will be returned to their home location in the Bill’s Ranch Archive. After this, they can walk around the park answering questions.

## **8. Wrap-up: 2 minutes**

- Answer any remaining questions they may have. Thank them for coming and remind them that the museum is free to the public if they wish to bring others to visit the museum.
  - Inform the teacher of other educational programs we offer at the Museum.
  - By the end of that week, send a feedback survey (link in Educational Operations) to the teacher/teachers that were present for the field trip.

# Frisco Adventure Times

\_\_\_\_\_ Frisco, Colorado. \_\_\_\_\_

Headline

When: \_\_\_\_\_ Where: \_\_\_\_\_

What Happened?

Conclusion

Article Written By: \_\_\_\_\_

## **Colorado Academic Standards:**

### **Fourth Grade:**

- **SS.4.1.1:** Understand the nature of historical knowledge as a process of inquiry that examines and analyzes how history is viewed, constructed, and interpreted.
  - Draw inferences about Colorado history from primary sources such as journals, diaries, maps, etc.
  - Identify cause-and-effect relationships using primary sources to understand the history of Colorado's development.
  - Explain, through multiple perspectives, the cause-and-effect relationships in the human interactions among people and cultures that have lived in or migrated to Colorado. For example: American Indians, Spanish explorers, trappers/traders, and settlers after westward expansion.
- **SS.4.1.2:** Analyze historical time periods and patterns of continuity and change, through multiple perspectives, within and among cultures and societies.
  - Describe both past and present interactions among the people and cultures in Colorado. For example: American Indians, Spanish explorers, trappers/traders, and settlers after westward expansion.
  - Describe the impact of various technological developments. For example: changes in mining technologies, transportation, early 20th century industrial developments, and mid-to late-20th century nuclear, and computer technologies.
  - Recognize and describe cause-and-effect relationships within Colorado history and draw conclusions about how various events and people affected the development of the state. (Entrepreneurial Skills: Inquiry/Analysis)
  - Historical thinkers analyze patterns and themes across time periods
  - Historical thinkers compare life in specific historical time periods to life today.
  - Historical thinkers generate questions about individuals and groups who have shaped significant historical changes and continuities
- **SS.4.2.2:** Examine the characteristics of places and regions, and the changing nature among geographic and human interactions.
  - Describe how the physical environment provides opportunities for and places constraints on human activities.
  - Analyze how people use geographic factors in creating settlements and have adapted to and modified the local physical environment.
  - Describe how places in Colorado are connected by movement of goods, services, and technology.
  - Define the problems faced by people in Colorado because of the physical environment they encountered.
- **SS.4.3.1:** Understand the allocation of scarce resources in societies through analysis of individual choice, market interaction, and public policy.
  - In a given situation, create a plan of appropriate incentives to achieve a desired result.
  - Give examples of the kinds of goods and services produced in Colorado in different historical periods and their connection to economic incentives.
  - Explain how productive resources (natural, human, and capital) have influenced the types of goods produced and services provided in Colorado.