

Arizona

Alliance Created State Giant Traveling Map Lesson

Title: Arizona Mining Towns: Boom (Balloon) to Bust

Recommended Grades: 3

Time Needed: 30 minutes

Objectives:

Students will be able to:

1. Locate on the giant floor map various Arizona mining towns and the minerals that were mined at this location.
2. Explain how mining has contributed to Arizona's past and present.

Materials:

- Arizona Mining Towns map
https://geoalliance.asu.edu/sites/default/files/maps/AZ_Mining_Towns2.pdf
- Projection device
- Balloons
 - Orange (for copper)
 - Yellow (for gold)
 - Gray or silver (silver)
 - Turquoise (turquoise)
- Pennies (to weight down the balloons)(optional)
- Mining Town Information Cards (laminated)
- Giant Arizona Floor map

Preparation:

Prior to using the map, print the Mining Town Information Cards, laminate (if possible) and cut apart. You may want to partner poor readers with better readers or sort the Mining Town Information Cards into easy and difficult. Some of the Mining Town Information Cards may challenge the reading skills of poor readers.

Students will be required to blow up at least one balloon and tie it off. It might be nice to have a parent volunteer in the classroom to help students with the balloons. Also blowing up the balloon and putting a small disk (like a penny) in the tied-off section help weight the balloons so they "stay put" on the giant map.

If you do not have a computer and projector in the room where the giant map will be used, you can print 4 copies of the Arizona Mining Towns map and laminate. Give a copy to each base camp for reference on finding the AZ towns.

Arizona

Alliance Created State Giant Traveling Map Lesson

If you allow students to pop the balloons, make sure everyone near your location knows it is balloons popping not some kind of violent activity.

Rules:

- Shoes are not allowed on the map. Please have students remove shoes before walking on the map. Students must wear socks. No bare feet.
- No writing utensils on the map. Keep all writing utensils and other sharp objects 12 inches from the edge of the map.

Directions:

1. Have students stand or sit at the edge of the giant Arizona floor map.
2. Project the Arizona Mining Towns map on a screen.
3. Explain the term **boom** (to get bigger or doing great) and make an analogy to boom is like a balloon—gets bigger. Then explain **bust** (no longer getting bigger and in fact might shrink to nothing).
4. Using the Vocabulary Cards, introduce the students to words such as extracted, ore, smelter, and ghost town that they may encounter as they learn about mining in Arizona. If possible, post the Vocabulary Cards in the room.
5. Explain that throughout Arizona history, mining has been an important industry. The minerals that come from mines are used for making many objects that people use daily. Working in a mine was a huge reason for some people to move to Arizona. Some of the workers just wanted a steady job so they could provide for their families. Some of the people planned to make enough money so they could settle somewhere else and find a job they liked better than the hard task of mining. And some miners thought they might “strike it rich” by finding their own gold or silver mine and becoming a millionaire.
6. What do we use minerals for? (metals for building houses, cars, machines; electric wiring; components in computers and cell phones; for our health; to make other materials like brass, iron, bronze; etc.
7. So, having minerals is important. Let’s look at some mining towns in Arizona and what they were mining?
8. Each of you will receive a card with a name of a town. Read the card and learn what minerals were mostly mined in that town. Get the colors of balloon that matches the minerals mined in your town.
 - a. Orange (for copper)
 - b. Yellow (for gold)
 - c. Gray or silver (silver)
 - d. Turquoise (turquoise)
9. Blow up your balloon. Look at the map projected on the screen or given to your base camp. Find your town on the projected map. Then walk onto the giant map and put your balloon in that spot.

Arizona

Alliance Created State Giant Traveling Map Lesson

10. Return to the edge of the map and wait until it is time to discuss what the mining map shows.
11. Once all of the students have placed their balloons, have students see what patterns they observe. More gold or silver in an area? More mining in south or north? In general, AZ has lots of mines? Etc.
12. Return to the terms Boom and Bust. Have students now read their Mining Town Information Card and decide if mining is still very important in this town **today**.
13. Use the Boom or Bust Answer key and call out the towns one by one. If the town is “bust,” have the student take their balloon off the map.
14. Now have students focus on how few balloons/towns are in the “boom” category. While mining brought many people to Arizona and it is still an important part of our economy, mining is not all over Arizona. It is mainly focused in in southern Arizona in a couple of locations.
15. Once all of the students have retrieved their balloons, allow students to pop their balloon(s). Or if this is too distracting, have them place the balloons in a trash receptacle. *Note: If you have multiple classes, you could recycle the blown-up balloons and save time with additional classes. The students will get a blown-up balloon to put on the map.*

STANDARDS

Arizona Geography Standards

The use of geographic representations and tools helps individuals understand their world.

3.G1.1 Use and construct maps and graphs to represent changes in Arizona over time.

Human-environment interactions are essential aspects of human life in all societies.

3.G2.1 Explain how people modify and adapt to the Arizona environment.

Examining human population and movement helps individuals understand past, present, and future conditions on Earth’s surface.

3.G3.1 Describe the movement of people in and out of Arizona over time.

Global interconnections and spatial patterns are a necessary part of geographical reasoning.

3.G4.1 Describe how Arizona has changed over time.

Reading

Key Ideas and Details

3.RI.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.

National Geography Standards

Element 1: The World in Spatial Terms

Arizona

Alliance Created State Giant Traveling Map Lesson

1. How to use maps and other geographic representations, geospatial technologies, and spatial thinking to understand and communicate information
2. How to analyze the spatial organization of people, places, and environments on Earth's surface

Element 2: Places and Regions

4. The physical and human characteristics of places

Element 5: Environment and Society

14. How human actions modify the physical environment
16. The changes that occur in the meaning, use, distribution, and importance of resources

Element 6: The Uses of Geography

17. How to apply geography to interpret the past

Vocabulary:

ghost town: a deserted town, a town with no people or businesses still there

ore: rock from which gold, silver, copper, or other minerals is extracted

extracted: taken out

smelter: place where metals are taken out from ore

References:

<https://westernmininghistory.com/towns/arizona/chloride/>

<http://www.gokingman.com/blog-Mining-History>

https://tucson.com/news/state-and-regional/mine-ales-town-of-chloride-was-centerpiece-of-a-mining/article_40b3b8b2-6cf3-5a59-a761-0c73dafd838c.html

<https://www.werewoofs.com/ghost-towns/gila-city-arizona/>

<https://en.wikipedia.org>

<http://goldfieldghosttown.com/>

https://tucson.com/news/local/mine-ales-activity-intensified-around-mammoth-in-the-late-s/article_0903f087-fe57-5413-8971-3959b8ebf29d.html

<http://www.library.arizona.edu/exhibits/swetc/hav1/body.1 div.17.html>