

**Title:** How should water be shared?

**Grade Level:** 5-8

**Time Frame:** two 55 minute class periods

**Standards Connection:**

- National Geography Standard 16: Evaluate the policy decisions regarding the use of resources in different regions of the world.
- Colorado Geography Standard 5.3.4: Describe why people have different viewpoints with respect to resource use.

**Expectations:**

- Students will be able to decide how to distribute a finite amount of water to their community.
- Students will be able to justify their distribution of water to their community.

**Inquiry Questions:**

- How should water be distributed in a community?
- What factors should be used to determine how water should be distributed in a community?

**Materials:**

- One candy bar
- Whiteboard or chalkboard with corresponding writing utensils
- Internet access
- Poster paper
- Markers

**Websites:**

[www.census.gov](http://www.census.gov)

[www.agcensus.usda.gov](http://www.agcensus.usda.gov)

**Teacher Background/Student Preparation:**

This lesson requires students to decide for themselves how water should be distributed in a community. This lesson could be used as an introduction in a unit on Colorado water to get students thinking about the importance of water in the state. Additionally, this lesson could be used in a unit on the usage and distribution of natural resources.

Students should have experience with finding and processing census data before beginning this lesson.

Teachers need to know how much water the community has available to it each year. Talk to your water commission for this information.

**Warm-Up:**

Present the class with the candy bar. Inform students that you have only the one candy bar to share with the class. It is up to the students to determine how the candy bar is distributed to the class. Give the students 5-7 minutes to accomplish this task. While the candy bar is being consumed process the activity with the class: Did everyone get a piece of the candy bar? How did you decide who would get the candy bar? What could be done differently to make sure everyone received a piece of the candy bar? Should everyone get a piece? If you only get a sliver of the candy bar, is it really even worth it?

What resources in everyday life have a finite amount and have to be distributed among a large number of people? Write student answers on the board. Make sure students list water as one of the resources.

**Activities:**

1. Have students call out all the uses of water in their community as you write them on the board. Make sure students list all practical uses of water. Answers will probably fall into these categories: agriculture, household, landscaping, mining, and recreation.
2. Present students with the question: How should water be distributed in our community? Tell students they will be deciding which of the water uses on the board should get water and how much water.
3. Share with students how much water their community receives a year. Depending on grade level you may want to give students the water quantity in a drought year.
4. Explain to students that they will be creating a poster to share with the class how much water each water use receives. When students present their water divisions they will be justifying how they distributed the water when they present to the class.
5. Present the students with the question: What factors should be used to determine how water should be distributed in our community? Give students one minute to think of an answer before students are allowed to share.
6. Allow students to share their ideas and write the ideas on the board. Show students the websites they can use to find the information they will need to support their decisions.
7. Collaborative teams should be formed. Include a variety of viewpoints in each team; have each water usage category be represented by a different student.
8. Give the students time to conduct research and create their poster. Have students present their posters to the class and allow time for questions.

**Closure:** Have students respond to the two inquiry questions.

**Assessment:**

Assess students' ability to show they met the expectations during the poster presentation. If they were lacking in an expectation on their poster look to see that they demonstrated mastery upon independently responding to the inquiry questions.

**Extending the Lesson:**

1. Have students contact the water commission to see how water is actually distributed in their community.
2. Have students interview a Water Attorney to see why water is distributed the way it is in the community.