



BACKGROUND:

There are a variety of dissolved minerals and other substances in every glass of drinking water. Although these substances are not visible, they affect the water's taste. If there is a high level of dissolved minerals, we say the water is "hard." Many Californians choose to drink bottled water rather than tap water. Does bottled water really taste better than tap water?

QUESTION:

What kind of water do you think tastes best?

OBJECTIVES:

To help youth:

- Understand that water from different sources may taste quite different because of the variations in dissolved minerals and other substances in the water.
- Understand that certain qualities such as taste are called "subjective" because they depend on people's impressions and cannot be measured exactly.
- Understand that, in a test to measure a subjective quality such as taste, a procedure called "blind" sampling by a panel of judges working independently can be used to reduce the possibility of bias effecting judgment.
- Practice observing and recording the results of a test in a manner that would allow conclusions to be drawn.

TIME: 1 hour

MATERIALS:

- A variety of different types of non-flavored, non-carbonated, chilled, drinking water (look at the grocery store for various brands and use tap water as one source)
- Cups with masking tape for labels
- Soda crackers to eat between taste tests
- Score Card (included) and pencils

Taste Test: Is Bottled Better?

Grades K – 12

PROCEDURE:

- 1) Discuss why people drink bottled water (taste, healthier, etc...)
- 2) Explain that this will be a "blind" taste test. Blind tests are used so the results will not be affected by people's expectations.
- 3) Have several students set up the taste test for the other students. The tasters should not watch the set up. Remind those setting up to label each cup with a letter and then write down the water samples that went into each cup.
- 4) All students should use the Score Card to record their own results, and use the "key" to assign each water sample a score. When the tasting is finished, they should then rank each of the samples from 1 (best) to 5 (worst).
- 5) Average the classroom results for each type of water. Discuss the taste test results. Discuss the results related to costs.

Taste Test: Is Bottled Better?

SCORE CARD

WATER SAMPLE	SCORE	RANK
A		
B		
C		
D		
E		
My comments:		

Key
1 = great tasting
2 = very good
3 = passable
4 = not good
5 = really awful

Adapted from *Water Inspectors: Examining H2O* by J. Shinkle

