

Hot Water



■ **Grade Level:**
High School

■ **Subject Areas:**
Environmental Science,
Government, Language
Arts

■ **Duration:**
Preparation time: 30 minutes
Activity time: two 50-
minute periods

■ **Setting:** Classroom and
library

■ **Skills:**
Gathering information (re-
searching); Organizing;
Analyzing; Interpreting;
Applying (designing, com-
posing); Evaluating; Pre-
senting (debating)

■ **Charting the Course**
Students can investigate
the scope and duration
of water-related issues in
"Whose Problem Is It?"
Exploring water values and
dilemmas helps students
understand issues involving
water ("Choices and Prefer-
ences, Water Index," "Di-
lemma Derby," and "Per-
spectives"). In conjunction
with this activity, students
can participate in "Idea
Pools." Other forms of con-
flict resolution are presented
in "Water Court."

■ **Vocabulary**
debate

Have you ever had to talk your way out of hot water?

▼ Summary

Using debate strategies, students learn how to present a valid argument regarding a water-related issue.

Objectives

Students will:

- apply basic principles and strategies in debating water resource issues.
- recognize the effectiveness of reason-based versus emotion-based presentations.

Materials

- 4 x 6 inch (10 x 15 cm) note cards
- Copies of *Debate Ballots*
- Video of actual debate (optional)

Making Connections

Students will be able to recall at least one time when they had a disagreement with a friend, parent, or teacher. They may have been in conflict over a minor incident, yet found themselves determined to win the argument. Participating in a formal debate helps students practice skills—such as impromptu speaking, effective listening, critical thinking, and sound reasoning—that help them to express their point of view and support their side of an argument.

Background

Every day, thousands of debates occur on water issues around the world—debates on topics that range from personal concerns to major issues, such as the loss of wetlands. For every water resource issue, a variety of individual views exist regarding how to resolve a problem. Interested parties, such as resource managers, community mem-

bers, and business, or agricultural representatives, desire to have their solution enacted. However, if they cannot communicate their positions effectively, their views will not be well received and may not be taken seriously. Never in the history of resource management has communication been more important than it is today.

Debate provides an opportunity for individuals to present their respective views regarding an issue. Debate involves two kinds of speeches: constructive and rebuttal.

Constructive speeches support and defend a viewpoint, while rebuttal speeches refute an opposing one. In other words, during the constructive speeches, each debater presents arguments supported by evidence (acquired through research and written on note cards) in favor of his or her viewpoint; and during the rebuttal speeches, each presents arguments, supported by evidence, to disprove or discredit the opposing viewpoint.

Procedure

▼ Warm Up

Present and review with students a well-known issue, such as capital punishment or the reintroduction of wolves. Discuss different viewpoints people may have regarding these issues.

Have students brainstorm a list of controversial water topics that are characterized by two opposing viewpoints. Write the ideas on the board, presenting each issue in the form of a proposition. (For example, "There should be no further large-scale hydroelectric development in the United States.") Other examples of topics include: pros and cons of water storage, use of pesticides and herbicides, drought management, and water rights.



▼ The Activity

1. Inform students that they are going to conduct a debate about an issue. Review debating procedures and related terminology. (Refer to **Background** and the following steps.)
2. Explain that the purpose of a debate is to provide an opportunity for two opposing sides to defend or argue a given proposition (viewpoint). One side will present positive support, and the other will argue against the proposition. Whichever side presents the strongest evidence will influence the action taken regarding this particular proposal.
3. Have students pair up. Assign each pair of students the responsibility of representing a particular viewpoint (pro or con) of a specific issue. For example, you may assign two students to argue for hydroelectric development and two to argue against; two for recreational uses of streams and two against (perhaps favoring irrigation uses, etc.). An alternative is to organize students into groups and assign two groups to opposite sides of the same issue. Group members work together to research and prepare their position on the issue. One member of each group is appointed spokesperson. Be sure each issue has both affirmative and negative representation.
4. Have students research their assigned water issue and record pertinent information on note cards. The evidence they collect must either support the particular viewpoint they are representing or refute opposing arguments.
5. Two pairs of students assigned to opposite sides of an issue will sit at the front of the classroom; students should stand when speaking. The remaining students will act as judges, keeping score and deciding who wins. The debaters will

present their arguments in accordance with the following form (based on the *Oregon Style of Debate*):

SIMPLIFIED DEBATE SCHEDULE FOR 2 SPEAKERS <i>(based on the Oregon Style of Debate)</i>	MINUTES (MIDDLE SCHOOL)	MINUTES (HIGH SCHOOL)
Affirmative Constructive Speech	4*	8*
Cross-examined by the Negative	2	3
Negative Constructive Speech	4	8
Cross-examined by the Affirmative	2	3
Negative, Rebuttal	2	3
Affirmative, Rebuttal	2	3

* maximum time allowed in minutes

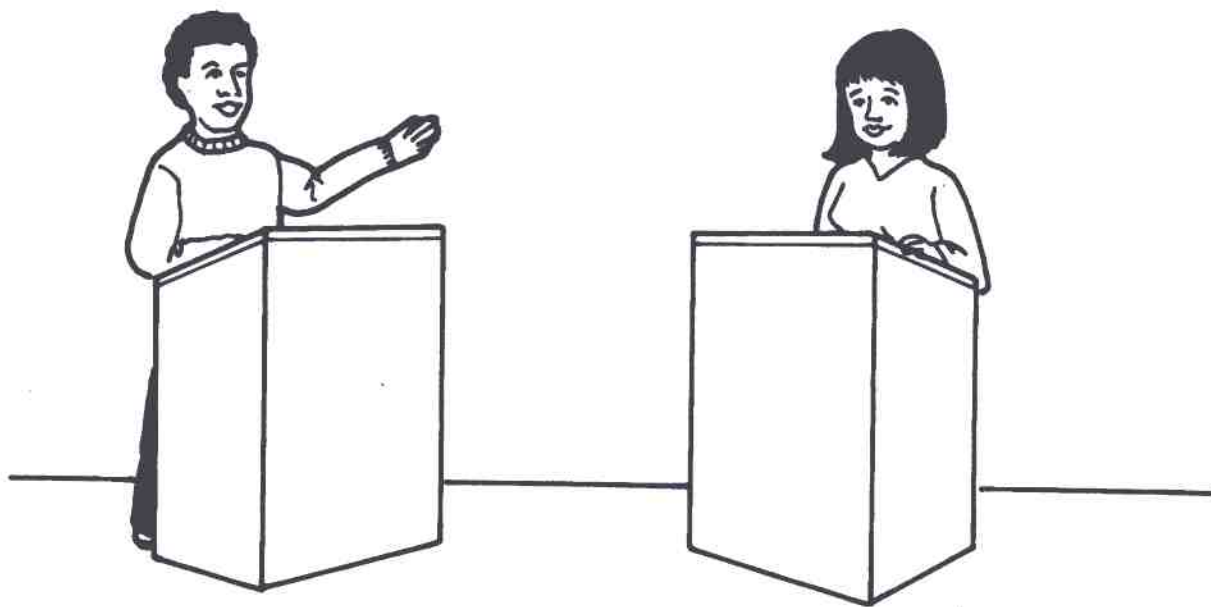
6. Toss a coin to determine who (affirmative or negative) gives their constructive speech first. Either speaker may give the first rebuttal. Preparation time for rebuttal may be allowed, but such time shall not exceed three minutes.

7. The judging will be done by assigning values from 1 to 4 (with 1 being the most convincing argument and 4 being the least convincing) for both the constructive and rebuttal sections. During the debate the judges will take notes on the arguments. At the end of the debate the results are tabulated, and the team with the lowest cumulative number of points wins.

In scoring, consider the following:

ANALYSIS:	getting to the heart of the question
PROOF:	supporting contentions with sufficient and convincing evidence
ARGUMENT:	sound reasoning; logical conclusions
ADAPTATION:	clashing with or responding to the opposition
REFUTATION:	destroying opponents contentions; reinforcing your own
ORGANIZATION:	clear, logical presentation of material
SPEAKING:	effective delivery; favorable impact on audience

NOTE: Remember that although one team has been determined the "winner," both teams have contributed to a deeper understanding and appreciation of water issues and the controversies involved.



▼ *Wrap Up*

Ask students how they felt about the outcome of each debate. Have them summarize which approach worked (and which did not work) in the debate. Discuss how strategies and skills acquired during the debate can be applied to other areas of students' lives.

Assessment

Have students:

- design an affirmative or negative constructive argument using well-reasoned evidence (step 4).
- present an affirmative or negative constructive argument and participate in cross-examination and rebuttal on a water-related issue (step 5).
- evaluate the proceedings of a debate (step 7 and *Wrap Up*).

Extensions

Have students apply their skills to write a constructive letter to the editor of a newspaper, expressing their views about a water issue. (Remind students that they will be submitting their work to the editor as individuals; they should not imply that their school supports their opinions, unless they receive permission to do so.)

Resources

Basic Debate: For the Novice Debater. Contact: National Textbook Company, 4255 W. Touhy Avenue, Lincolnwood, IL 60464-1975.

Debate video. 1986. Contact: Dale Publishing Company, P. O. Box 151, Grandview, MO, 64030. Topic: 1986; Resolved, that the federal government should establish a comprehensive

national policy to protect the quality of water in the United States.

An Introduction to Debate. Contact: National Federation of State High School Associations, 11724 Plaza Circle, P.O. Box 20626, Kansas City, MO 64195

Miller, G. Tyler, Jr. 1990. *Resource Conservation and Management.* Belmont, Calif.: Wadsworth Publishing Company.

Project WILD. 1992. Activities "To Dam or Not to Dam" and "Facts and Falsehoods." *Aquatic Project WILD.* Bethesda, Md.: Western Regional Environmental Education Council.

Graves, William, ed. 1993. "Water: The Power, Promise, and Turmoil of North America's Fresh Water." *National Geographic Special Edition* (November).

Debate Ballot

Team's Name: _____ Judge's Name: _____

Affirmative Number _____ Negative Number _____ Round _____

DIRECTIONS: Circle the number that best describes the debater(s) you judged, and record your comments below. Remember, a score of 1 = the most convincing argument, and a score of 4 = the least convincing argument.

Overall Affirmative:	1	2	3	4	Overall Negative:	1	2	3	4
Constructive Speech:	1	2	3	4	Constructive Speech:	1	2	3	4
Cross Examination of Negative:	1	2	3	4	Cross Examination of Affirmative:	1	2	3	4
Rebuttal:	1	2	3	4	Rebuttal:	1	2	3	4
Comments:					Comments:				

I determine the debate to have been won by _____. Reasons for my decision are:

Judge's Signature

