

# Heavy Water Goes Down

During World War II, Germany was making heavy water at a plant in a remote region of Norway, which Allied forces feared was going to be used for a nuclear bomb. In this activity, you will find out more about the mission to destroy German stores of heavy water.

## Procedure

- 1 Read your question set. As you watch the video, take notes on the questions you have been assigned.
- 2 After watching the program, meet with your team members who have been assigned the same questions. Together, come up with an answer you all agree on for each question. Write these answers down on a new sheet of paper. Work with your team members to answer all your assigned questions.
- 3 Work together as a team to divide the questions so that each team member is assigned at least one question to present to the class.
- 4 Share answers to your team's questions with the class.



## Questions

- 1 Why were the Germans interested in heavy water?
- 2 What was the name of the ferry used to transport passengers and heavy water? How many people died when the ferry went down, and who were they?
- 3 Why were historians interested in finding out what was on the *Hydro*?
- 4 Why was the Norsk Hydro plant built in the remote Rjukan Valley?
- 5 What was originally made at the Vemork factory? How was it made?
- 6 What by-product was created at the plant?
- 7 What did physicists come to realize about heavy water?
- 8 How much water does it take to make 1 kilogram of heavy water?
- 9 Once the Allies understood how heavy water could be used, what action did they take?
- 10 How did the Allies attempt to destroy the plant? What were the results of their efforts?
- 11 What did the Germans do to make even more heavy water?
- 12 What did the Allies and Resistance learn about the shipment of heavy water?
- 13 What was the ethical dilemma related to sinking the *Hydro*?
- 14 Describe the operation that sank the *Hydro*.
- 15 Why was it important to locate the *Hydro* and examine the contents of the heavy water barrels?
- 16 How would the investigators be able to tell if the barrel had lake water or heavy water in it?
- 17 Why did the investigators have to slowly maneuver the barrel as they lifted it from the water?
- 18 How did investigators know what percentage of heavy water the barrel was supposed to contain?
- 19 What were the results of the testing?
- 20 How did one of the saboteurs feel about the bombing when asked about it 60 years later?