



## Science Toolkit: Grade 5 Objective 1.C.1.d

Student Handout: Science: Grade 5 Objective 1.C.1.d

Standard 1.0 Skills and Processes

Topic C. Communicating Scientific Information

Indicator 1. Recognize that clear communication is an essential part of doing science because it enables scientists to inform others about their work, expose their ideas to criticism by other scientists, and stay informed about scientific discoveries around the world.

Objective d. Construct and share reasonable explanations for questions asked.

Selected Response (SR) Item

Question

Use the passage '[Glaciers and People](#)' and the picture to answer the following question.

Some researchers think using icebergs as a source of fresh water is not a good idea.

Why are these researchers most likely against moving the icebergs?

- A. Using boats to haul glaciers is a waste of fuel.
- B. The natural environment of glacier areas is changed.
- C. The water in glaciers is so old it would not taste good.
- D. People should not live in places where there is not enough water.

Correct Answer

B. The natural environment of glacier areas is changed.

Question

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## Handouts

## Glaciers and People

The frozen majesties of Greenland, Alaska, Switzerland and other areas of the world are popular tourist attractions. They're also important natural resources for drinking water, for irrigation of crops, and for generation of electricity.

### Drinking Water

Glaciers contain 75 percent of the world's fresh water supply. Arapaho Glacier in the Rocky Mountains, a small glacier with a length and width of about  $\frac{3}{4}$  mile (1.2 km), supplies water for more than 75,000 people who live in the town of Boulder, Colorado. To survive during the dry spells that hit the region of La Paz, Bolivia, the people rely on fresh streams from a nearby mountain glacier.

Scientists are studying ways to move icebergs from the cold northern Atlantic Ocean to coastal cities where the icebergs could be used for drinking water. Tugged by boats and helicopters, a berg could be wrapped in plastic to insulate it and prevent it from melting too quickly. Pipes connecting the iceberg to nearby land would allow the fresh water to get to people and crops.

### Crops Irrigation

For hundreds of years, farmers in Switzerland's Rhône Valley have watered their crops with meltwater from glaciers.

### Electricity Generation

In Norway, Canada, New Zealand, and the Alps, glaciologists and engineers have produced electrical power from melting glacial ice. By building a dam to control the meltwater, they harness the energy of the water as it moves over the dam and through turbines, to turn the energy into electricity.

### Resource Image

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