

Instructional Procedures

Activity #1-'BING'-Melting Ice Using Conduction

Activity Time: 20 minutes

1. This is a short demonstration with room temperature water and ice. Using a thermometer, take the temperature of a glass of room temperature water. Add several ice cubes to it and let set for a few minutes. Take the temperature of the water after having ice added to it. Have a short discussion about the following question: When you add ice to warm water, does the warm water melt the ice or does the ice make the water colder?
2. Explain to students that they are going to see who can melt an ice cube the fastest using only their hands.
3. Give a container to each group of students filled with enough ice cubes for every student to have his/her own.
Option: Place each ice cube in a Ziploc bag.
4. Explain to students that they will all begin at the same time.
5. Give the signal to begin.
6. After the initial mayhem and students are complaining about their hands freezing, ask students why their hands are so cold? Ask if the ice made their hands cold or did the heat from their hands cause the ice to melt? Ask how this experience relates back to the initial question about the ice and water.
7. Ask students what would eventually happen to the temperature of the ice water if left alone for 24 hours.

Materials

For each group:

- Container
- Paper towels

For each student:

- Ice cube