

## **Lesson Plans: When Floating Ice Melts in the Sea**

### **Objective**

The objective is to investigate the effect on sea level due to the melting of floating ice due to global warming.

### **Materials**

Each student or group of students will need the following:

- Container
- Water
- Ice cubes

### **Important Points to Understand**

As global warming heats up the upper layers of the ocean, it will cause the melting of the large amount of ice that floats in the water near Arctic and Antarctica. We may think that, with the melting of these icebergs, even more water will enter the oceans and cause an additional rise in sea level. However, it is true that floating ice in the ocean does not raise the sea level when it melts.

### **Procedure**

1. Place the ice cubes in the container.
2. Gently fill the container with water until it is almost overflowing.
3. Watch the water level as the ice melts.

### **Questions**

1. Does the water overflow when ice melts?
2. Do you think that melting icebergs will make the sea level rise?
3. Do you have any reason to support your answer in question (2)?

"Courtesy: U.S. Department of Energy's Atmospheric Radiation Measurement Program."