

5.1.3 Sea Level Activity

Sea Level Rise Investigation: Sea Ice and Land Ice Melting

MATERIALS

Two 2-Liter Beakers

Two 250-mL (milliliter) Beakers

Crushed Ice

Saran Wrap

Sand

Water

Graduated Cylinder or beaker for measuring out 600 mL of water

Ruler

METHOD

1. Label the one 2L beaker "Sea Ice" and a second 2L beaker "Land Ice"
2. Fill each of the 250 mL beakers with equal amount of sand
3. Cover each sand filled beaker with saran wrap. Tape the bottom of the saran wrap to secure in place.
4. Place a sand filled beaker in each 2L beaker
5. Next, pour 600 mL of water in each of the 2L beakers
6. Measure and record this original level (depth) of water in each beaker and record on table
5. In "Sea Ice" beaker, add crushed ice cubes to the water around the 250 mL beaker. This represents Floating (Sea) Ice
6. In "Land Ice" beaker, place the same amount of crushed ice on top of the saran wrap. This represents Land Ice
7. Place both 2L beakers outside or under a lamp
8. Check the water level and ice every ten minutes throughout the session and record your observations on the data table



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DATA TABLE

Time	Sea Ice (Iceberg) BEAKER 1		Land Ice (Antarctica) BEAKER 2	
	Water Level	Remaining Ice	Water Level	Remaining Ice
0 min				
10 min				
20 min				
30 min				

Discussion Questions:

1. What happened? Did the water level in either bowl change as the ice melted?
2. What is different between the two conditions?
3. How does climate change impact the melting of ice?
4. Which type of ice would impact sea level?
5. During ice ages when the Earth was much colder, do you think sea level was higher or lower than current sea level?