

Melting Sea Ice - Student Activity

There is a general misconception that any sea level rise resulting from an increased rate of global warming/the enhanced Greenhouse Effect, is due to melt water from ice shelves.

1. AIM To find if melting sea ice raises sea level

Materials per student or group

- Two large measuring cylinders
- A Pasteur or transfer pipette
- Water (and food colouring if desired)
- Ice cubes to represent sea ice.

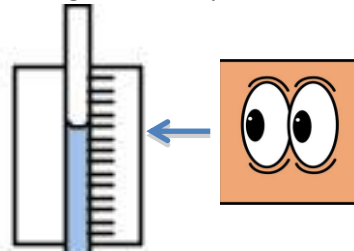
Method

1. Approximately two thirds fill both measuring cylinders with water
2. Add food colouring if desired
3. Place ice in one of the cylinders
4. Using the Pasteur pipette, adjust water levels in the two cylinders until both are identical
5. Note the level in the table below
6. Leave until ice has melted (about 5 minutes)



Hypothesis Write your hypothesis here. _____

What do you have to do to get an accurate reading and avoid parallax mistakes?

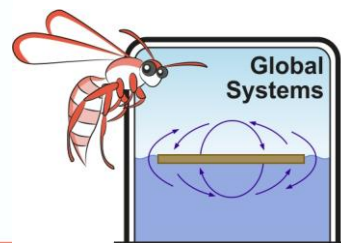


Observations/Results

	Volume of water	Volume of water + ice
Before melting (initial volume)		
After melting		

Conclusion _____

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Discussion

Why were two measuring cylinders used when only one had ice?



Why did we use measuring cylinders rather than beakers?

How could this experiment be improved?

Did this experiment support or not support your own hypothesis? Explain your answer.

Sea ice melting does not contribute to rising sea levels but melting land ice does.

Explain how melting land ice (ice cap and glaciers) can contribute to sea level rise.