What causes ice to melt?

version B

Required materials

- 3 transparent glass containers
- a thermometer
- a heat source (an infrared lamp, for example)
- ice cubes of the same size
- a timer/a stopwatch
- a fridge or a cool place

1. Questions before performing the experiment

1. When you hear the term climate change, what comes to your mind?

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2. Have you heard of melting of ice caps?

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3. What do you think causes ice caps to melt?

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4. When does it snow? And when does the snow start to melt?

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2. Watch the first video and perform the experiment

Follow the steps outlined in the tutorial video.

Draw a diagram of your experiment in the box below.

3. Record your measurements

Fill the table.

Glass	Time it takes the ice cubes to melt	Temperature at the end of the experiment
Room temperature		
Fridge		
Lamp		

4. Observations

Describe what happened during the experiment.

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5. Reflect and discuss

1. What did you observe? Which ice cube melted faster?

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2. Which ice cube took more time to melt?

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3. Make a hypothesis. Why did this happen?

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6. Watch the second video and answer the following questions

1. Did you get similar results?

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2. If not, what could be the cause(s)?

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7. Summary

Summarize the activity by answering the questions: why, what and how.

1. **Why** did the ice melt?

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2. **What** role does the surrounding environment play in the melting process?

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3. **How** does temperature affect how fast an ice cube melts?

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4. **Why** is it important to understand how ice melts and the factors that influence it?

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5. **Why** is it important to preserve ice in environments like the Arctic and Antarctic regions?

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