# 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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1. Have you heard of melting of ice caps?

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

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1. 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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1. Which ice cube took more time to melt?

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1. 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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1. 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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1. **What** role does the surrounding environment play in the melting process?

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

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

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

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