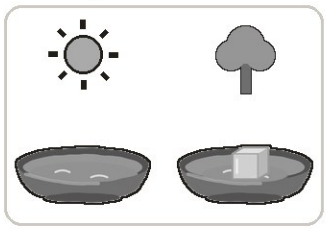
Did the ice cube disappear? Helping your child see it turned into water

Parent page · ages 4–5 · goes with the video "Understand the concept"

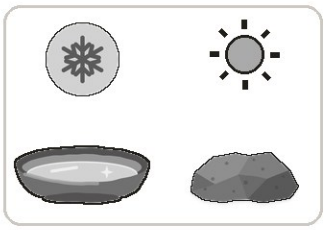
A logical idea

Does your child say "my ice cube disappeared"? An ice cube is hard and has a shape; water flows. When it melts, your child sees the cube fade away and may not connect the water to the ice cube: they trust what they can see. It isn't inattention.

The key idea



ice cube in the sun: turns into water
ice cube in the shade: melts more slowly



water in the freezer, overnight: turns back into ice
rock in the sun: doesn't change

The ice cube didn't disappear: it turned into water. When it's warm, ice turns into water. When it's very cold, water turns back into ice, in the shape of its bowl. In the sun, an ice cube melts faster than in the shade. We don't compare the amount of ice and water here, and "everything melts in the sun" is wrong: a rock doesn't melt.

Questions instead of corrections

- "What do you think: what's going to happen?"
- "What do you see in the bowl?"
- "What if we put the bowl in the freezer?"

After the try: "What did you see?" Use the right words, without making a big deal of it: "melt," "freeze," "it turned into water."

Safety

An adult stays right there from start to finish. Never hot water, and nothing on a radiator or a heater (they can burn): the sun and the shade are enough. Small plastic bowls with flat bottoms; never glass in the freezer. Only the adult opens the freezer and takes out the ice cubes and the bowl. Straight from the freezer, ice can stick to wet skin: hold it with a cloth; if the cold starts to hurt, put it down. Ice cubes and ice don't go in the mouth; water that sat out isn't for drinking. For the challenge, a big smooth rock, never a small stone.

Page 2, to do together (no reading needed)

- Show the two pictures: ice (an ice cube) or water (a puddle and a drop). Then say: "Lili thinks the ice cube disappeared when it melted. What do you think?"
- Before each try, your child circles or points to one picture under the question mark. After the try, they circle one under the eye, without erasing their first choice. They can also point, and you circle for them.
- 1. Two ice cubes: one in the sun, one in the shade, in two identical small plastic bowls. Your child predicts which will melt first, then looks every so often. Times depend on the room: try it first. No sun? A single ice cube on the table is enough.
- 2. The water: keep a bowl where an ice cube melted, with its water; your child predicts what will be in it tomorrow (row 1), then only you open the freezer. The next day, take out the bowl with a cloth and set it on the table: will the ice stay ice? Your child predicts (row 2), then checks every so often, without touching it.
- 3. The challenge: an ice cube and a big smooth rock, each in a bowl, on the table. 4. Your child draws what surprised them.

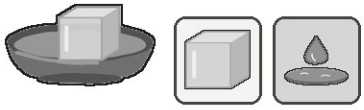
Before you play, try the ice cubes in the sun and in the shade, and the bowl in the freezer, yourself. Keep this page out of view until after the activity.

For you, after your child has watched (things you tried first)

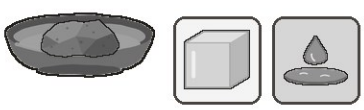
- Ice cube in the sun: most often, melts faster than in the shade; there's water left in the bowl.
- Ice cube in the shade: smaller, in a little water, later. Times depend on the warmth and the size of the ice cubes: often half an hour or more.
- Water in the freezer, overnight: a disc of ice, flat and round like the bowl. Back on the table, it turns into water again.
- Rock: it doesn't change, in the sun or on the table.

A good sign: they say the ice cube turned into water, or that the water can turn back into ice. If they still say "there's none left," do the activity again with other ice cubes: it often takes several tries.

A few days later, without making a big deal of it (adult cuts out)



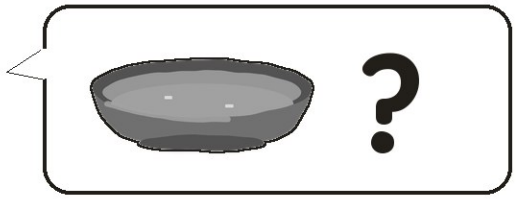
an ice cube in a small bowl

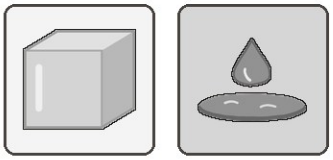


a big smooth rock in a small bowl

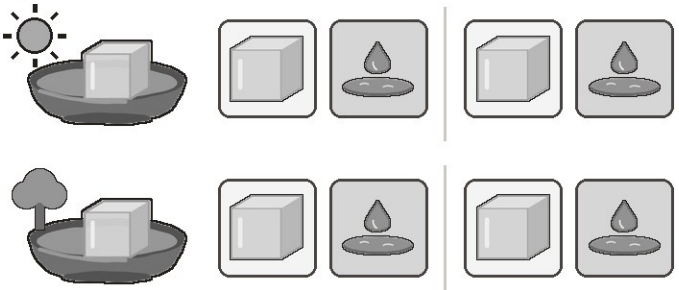
For each bowl, circle the picture of what you think will happen in a little while: water in the bowl, or nothing changes. Why? Then put the bowls on the table and watch together every so often, with an adult right there the whole time. The ice cube doesn't go in the mouth.



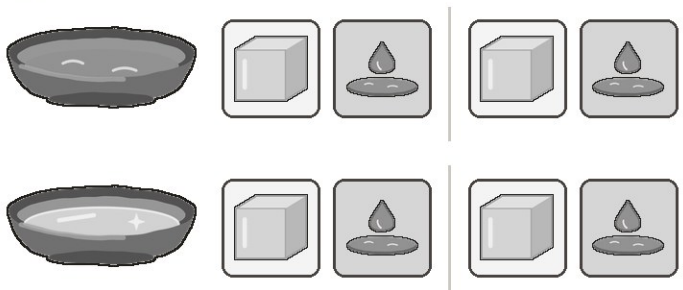




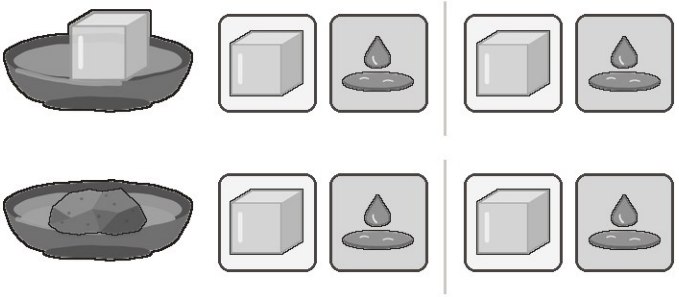
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