

Dear Family,

In my class today I experimented with different things to find out how to melt ice.

Did You Know?

- The word *water* usually refers to water in its liquid state. Water in its solid state is frozen and is more commonly known as ice. Water can also be a gas in the form of steam or water vapor. Water freezes at temperatures below 32 degrees Fahrenheit. Ice begins to melt when the temperature around it begins to rise above 32 degrees Fahrenheit. Unlike most substances, water expands when it freezes. This is why an ice cube will take up more space than it did as the liquid water it was made from.
- In winter, many regions experience very cold temperatures. Any water on surfaces such as roads and sidewalks will freeze and become hazardous to drive or walk on. In some of these regions, salt is frequently used to help melt the ice. When salt is added to a block of ice, the area of ice immediately surrounding the grain of salt begins to melt. The melting process spreads out from that point. This is because salt lowers the freezing point of water.

Ask Your Child:

- What did you use for your experiment?
- Tell me what happened to the water.
- Explain which was most helpful with melting the ice: cold water, warm water, or salt.

Activities To Do With Your Child:

- Let your child conduct the experiment with you by using three ice cubes, a spoon, and a shaker of salt. Place the ice cubes on a plate or shallow bowl. Give your child a small bowl of cold water, a small bowl of warm water, and a salt shaker. Have them drip cold water on one ice cube, warm water on another, and salt on the third ice cube. Experiment to see which cube melts faster.
- Maybe it is cold outside where you live. Take a walk and look for ice on the road or sidewalk, frozen ponds, streams, puddles, and bird baths. Talk about why the water froze and what will need to happen for the ice to melt.

Vocabulary To Use With Your Child: salt, warm, ice, melt, freeze, liquid, solid