

Investigating Ice Cubes

Materials: ice cubes, containers or plates for your cubes, a watch or clock, paper to record your observations and data

Focus questions:

How long will it take an ice cube to melt in the air? Predict and make a plan to observe your ice cube and record data.

How long will an ice cube take to melt, if left in a plastic bag at room temperature?

Predict and make a plan to observe your ice cube and record data.

Will an ice cube last longer in a glass of water at room temperature or in the air on a plate? Record your observations. Make a table or chart showing how you collected your data and timed the melting.

What if you place a penny on an ice cube? What might happen? Observe your ice cube with a penny. No penny? Try another coin. Observe and record your observations is there a difference in melting time when you use a penny or a nickel or a quarter?

Try a paper clip on an ice cube. Predict and make a plan to observe your ice cube with the paper clip. No paper clip? Try a Lego, a thumb tack or something else small that will fit on your ice cube and record data.

FQ: Will an ice cube melt at the same rate as crushed ice? You will need two ice cubes, one whole cube and one that has been crushed into chips. Plan an investigation to determine the answer to the focus question. The Prediction:

The Plan:

The Results:

FQ: Does water temperature affect the rate of the ice cube melting? Materials: three ice cubes, watch or clock, plates or cups. One cup filled with cold water, one cup filled with water at room temperature and one cup with hot water. The Prediction:

The Plan:

The Results:

FQ: What happens to the speed of melting if you stir the ice cube in room temperature water? The Prediction:

The Plan:

The Results: