

Name _____

Investigating the States of Matter of Water

Objective:

Students will learn about the three states of matter—solid, liquid, and gas—by observing how water changes between these states.

Materials:

Ice cubes (solid water)
A clear cup
A pot or kettle
A stove or hot plate (for teacher use only)
A spoon
A thermometer (optional)
Notebook and pencil
Tray or plate

The Scientific Method Steps:

Ask a Question:

How can water change from one state of matter to another?

Make a Hypothesis: (What do you think will happen when ice is heated up or water is cooled down?)

Conduct the Experiment:

Part 1: Solid to Liquid

Observe the Ice Cube (Solid Water):

Place an ice cube on a plate or tray.

Touch the ice cube. What does it feel like?

Watch the Ice Melt:

Leave the ice cube out at room temperature and observe what happens over time.

What is happening to the ice cube?

Write down how long it took for the ice cube to melt. _____

What caused the ice to melt? _____

X

Analyze the Data:

After the experiment, look at the coffee filter. Do you see more colors than just green? These colors, like yellow and orange, were in the leaf all along but were hidden by the green chlorophyll.

Draw a Conclusion: (Was your hypothesis correct?)
