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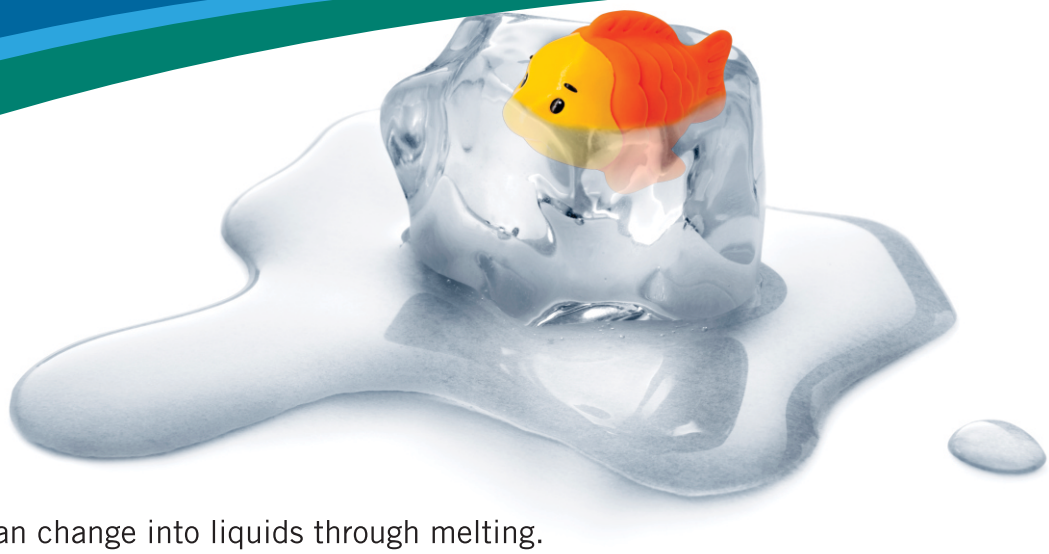

Ice Fishing

Have you ever watched ice melt on a warm day? In this activity, students will explore how solids can change into liquids through melting. Using frozen toy-filled ice cubes, students will observe, investigate, and experiment with ways to melt ice while learning about the states of matter.

Fun Facts/Information:

- Matter exists in three main states: solid, liquid, and gas.
- Ice is a solid form of water.
- Solids keep their shape, while liquids can flow and change shape.
- When ice warms up, it melts and changes into liquid water.
- Heat helps ice (a solid) melt faster.

Learning Objectives:

- Students will identify solids and liquids and observe how heat changes a solid into a liquid through melting.

Materials:

- Muffin tin or small containers
- Small plastic toys or fish toys
- Warm water
- Freezer
- Metal Spoon
- Medicine dropper or turkey baster (optional)
- Salt
- Towels or paper towels



(cont'd)

Safety Considerations:

- Adult supervision is recommended during the activity.
- Do not put ice or small toys in your mouth.
- Wipe up water spills quickly to prevent slipping.

Procedure:

1. **Prepare the Ice Cubes (night before)**
   - Place one small toy in each section of a muffin tin or container.
   - Fill each section with water.
   - Freeze overnight.
2. **Explore the Ice**
   - Remove the ice cubes and place them on a clean flat surface, dish towel, or paper towels.
   - Observe and touch the ice carefully and describe how it feels.
   - Is the ice a solid, liquid, or gas?
3. **Ice Fishing Challenge**
   - Use a metal spoon to carefully dig and "fish" the toys out of the ice.
   - You can also use a droppers to place small amounts of warm water onto the ice cubes to help them melt.
4. **Observe the Changes**
   - Watch what happens to the ice over time.
   - Discuss how the ice changes from a solid into liquid water.

Discussion Questions:

- What did the ice feel like?
- Was the ice a solid, liquid, or gas?
- Why do you think the ice melted?
- What did the melted ice become?
- Which method melted the ice fastest?

Extensions:

- Salt vs. Warm Water Test
  - Try adding salt to one ice cube and warm water to another. Which melts faster?
- Freeze and Melt Again
  - Freeze water again after the activity and observe how liquid water changes back into a solid.