



## Backyard and Beyond

### Icy Investigations

Children of all ages will enjoy experimenting with ice. Try this experiment at the kitchen table or in the great outdoors to encourage budding scientists to experiment with ice!

#### What you need:

- Ice: Use ice cubes from your freezer, or freeze water in large plastic containers with round, square, rectangular, or unusual shapes. Fill a balloon with water and then freeze. If you're lucky enough to have snow or ice outside, collect some for this experiment. **\*Note: Freeze water in plastic containers. Glass containers can expand as it freezes and may break.\***
- Table salt, small pieces of sodium chloride or NaCl
- Rock salt, large pieces of sodium chloride or NaCl
- Sand
- Sugar
- Food coloring or colored water
- Tray or bowl
- Towel

Optional materials: tongs, tweezers, eye dropper, or spoon

#### What you do:

- Place ice on a tray or in a bowl.
- Sprinkle different types of materials (salts, sugar, sand) on top of the ice. Make observations about what you notice. What do the different materials do to the ice?
- Experiment with one or more tools. Can you make channels, tunnels or holes in the ice? What happens if you add colored water?

#### Things to try:

Older children can challenge themselves, and their previous knowledge about ice, by seeing which materials melt ice the fastest and recording their observations.

Encourage younger children to use their senses. How does the ice feel? What does it sound like if it cracks or breaks? What do they see happen to the ice the longer they play with it?

Build a creation out of ice! Try stacking ice pieces, or even breaking ice for different shapes.

