

CLASSROOM ICE CREAM

★ GRADES 3-5 🍌 SCIENCE SKILLS: MAKING HYPOTHESES / PROBLEM SOLVING ★

What you need:

- 2 quart-size reclosable bags for each student or group
- Light brown sugar
- Measuring cups and spoons
- Large empty container with a lid (such as a lidded salad bowl)
- Ice
- Rock salt
- Vanilla extract
- Flavored coffee creamer

What to do:

1. Fill the large container about halfway with crushed ice and add about 6 tablespoons of rock salt to the ice. Seal the container and pass it around, having each student shake the ice and salt several times.
2. Have students mix the following ingredients into the quart-size ziplock bag: 1/2 cup of coffee creamer, 1/2 tablespoon brown sugar, 1 teaspoon vanilla extract (for flavor).
3. Seal the bag tightly, allowing as little air to remain in the bag as possible. (Too much air left inside may force the bag open during shaking.) Place the sealed bag inside a second bag, again leaving as little air inside as possible and sealing well. By double-bagging, the risk of salt and ice leaking into the ice cream is minimized.
4. Place the bags inside the icy container and seal the container.
5. Shake, rock, roll and mix that container! Your ice cream should be ready after about 15 to 20 minutes. Once mixed, remove the inner bags from the jar and rinse them well with water. You don't want any salt water accidentally getting into your ice cream.
6. Serve and enjoy!

How does it work?

Because ice cream contains fat, it has a lower freezing point than water, and so plain frozen water (ice) would not be cold enough to freeze ice cream. But salted ice is actually colder than regular ice. Why? The addition of salt gives it a lower freezing point, which causes the ice to melt. That melting requires energy. When the energy is spent, the result is loss of heat.

From www.stevespanglerscience.com

