

Equipment: 4 zip-lock baggies, two large and two small ice
 salt thermometer flavored drink solution

Procedure:

1. Place 1 cup of flavored drink solution in the small baggie.
BE SURE TO FIRMLY CLOSE THIS BAGGIE!
2. Place the small baggie of solution in another small baggie.
3. Place the small baggies of solution in a large baggie, then place the large baggie in another large baggie. (This is to protect against leaks!) At this point, it is best to share the one large baggie with a lab partner so that you can share the "kneading" process. Otherwise, your hands get really cold!
4. Surround the small baggie of solution with ice.
5. Add approximately 15 ml of water to the ice and record the temperature of the ice water mixture
6. Add approximately 70 grams of salt to the ice water.
7. FIRMLY close the large baggie and knead the mixture for about 5 minutes.
8. Open the inner LARGE baggie and record the temperature of the ice mixture, NOT the flavored drink solution! Record.
9. Again, firmly close the baggie, knead for another 5 minutes and again take the temperature of the ice mixture. Record.
10. Close the baggie and now knead until the flavored drink solution is the consistency you would like for your "slushy"!
11. Enjoy your "product" as you answer the questions below!

Data: initial temperature of ice water mixture: _____
 2nd temperature of ice/salt mixture: _____
 3rd temperature of ice/salt mixture: _____

Questions:

1. Melting is changing from a _____ to a _____.
2. The melting temperature is the same as the _____ temperature.
3. Define "colligative":
4. Adding salt to the ice _____ the freezing point of the water and _____ the melting point of the ice. This is one reason why we add _____ to our car's radiator water and why streets are _____ in the winter.