



**Chemistry Content Standards:**

**Chemical equilibrium is a dynamic process at the molecular level.**

Standard 9a: Students know how to use LeChatelier's principle to predict the effect of changes in concentration, temperature, and pressure.

Standard 9b: Students know equilibrium is established when forward and reverse reaction rates are equal.

Standard 9c: Students know how to write and calculate an equilibrium constant expression for a reaction.

**Stamp:**

**Lab: Ice Cream Lab # 18 or Freezing Point Depression**  
Equilibrium and Solutions **Page 65 in NB**

- Students will follow instructions to produce frozen mixture, while reducing freezing point depression of solution
- They will complete each step upon receiving materials for ice cream solution, placing solution in baggie, sealing, then placing that small baggie, in large zip lock bag with two cups of ice and  $\frac{1}{2}$  cup rock salt.
- Students will shake bag until ice cream reaches the consistency they wish.
- They will dispose of salt water, zip lock bag in trash, cut corner of small baggie with scissors, then squeeze ice cream into bowl.
- They can add toppings and enjoy
- Students must also complete work sheet to receive points for the food lab.



**Class work:**

Students should:

1. Complete lab on freezing point depression
  - Students will follow the instructions for completing freezing point depression lab
  - They will write up the lab for 50 points extra credit
  - Students must give a full response to freezing point depression, why the cream freezes

**Home Work:**

**None**

