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SP.287 / 5.S15 / ESG.SP287 Kitchen Chemistry Spring 2009

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Kitchen Chemistry Homework #2

Homework Questions:

Chocolate specific:

- 1. Do you enjoy chocolate? Is there a biochemical reason for it?
- 2. What are some of the chemicals that contribute to the chocolate taste?
- 3. Can we become addicted to chocolate?
- 4. What is common to both marijuana and chocolate?
- 5. Even though it is unhealthy, can we justify from a health perspective eating chocolate in moderation?
- 6. What is the ingredient in chocolate that makes our hearts pound?
- 7. Should you feed your cat or dog chocolate? Why or why not?

Ingredient specific questions:

- 1. What is the chemistry behind baking powder? At what temperature does this process become spontaneous (remember Gibb's free energy equations from thermodynamics?)
- 2. What does double acting baking powder really mean?
- 3. Why add eggs to the recipe?
- 4. What is the difference between brown sugar and white sugar?
- 5. Where does vanilla come from and how is the extract made?
- 6. What modifications did you make to the recipe?