1. For folks new to the class, this is the first of a collection of random that I put out each Thursday to keep you abreast of what is going on in class. Specific questions about quizzes and exams, including content and format, are provided in the musings. Remember, it is your responsibility to read the musings even if you cannot come to class (they will be posted on the web.) I take a dim view of students asking me questions that I previously answered in this forum.

2. Everybody has a preference about people, and for my money nothing beats hanging out with children. I have made a bunch of them including a few your age, but there is a new crop coming along.. Here are Sam and Maddie, age 3 and 1, experimenting with green food coloring and shaving cream in the bath tub while there mother was out of the house.

3. Your first quiz is next Thursday. The quiz will include 8 multiple-choice questions worth 5 points each. I will provide you all necessary equations and constants for the exam. The types of questions included on the quiz are:
   - Thermodynamics foundation (system and universe, state functions, laws)
   - Bomb calorimetry calculation
   - Hess’ Law calculation using \( \Delta H^\circ \) constants from Appendix K.
   - Hess’ Law calculation using bond energy values
   - Work calculation from \( n_{\text{gas}} \)
   - A question about signs and energy flow
   - Identifying entropy increases and decreases
   - The temperature dependence of \( \Delta G \)

4. For those of you thinking, what have I gotten myself into, the good news is that on Tuesday I will give a practice quiz at the end of class that will look decidedly like the first quiz on Thursday. This will be standard practice throughout the semester: I tell you what is on the quiz on Thursday, I do a practice quiz in class the next Tuesday and then you take a quiz on Thursday.

5. Many of you come from classes where homework problems were made available and were worth extra credit. I don’t do that, Instead I ask you to work a variety of different types of problems in preparation for the quizzes and exams. You can work problems in the back of Davis, you can work my old quizzes and exams which are exactly the same format as the new quizzes and exams, and you can work the worksheets I provide. Best of all, you can create your own problems to prove to yourself you know the material.

6. My advice in preparing for the upcoming quiz is that you do the following. Learn what is on my handout entitled “Thoughts on Thermo”. It is a two page overview of everything I will cover in thermodynamics (including everything on the quiz) and if I stopped you on the street and you could tell me what is on that handout, using all the right words, I can guarantee you will ace the thermo quiz and test. I would also recommend the worksheet on thermo problems I provide. There are about 100 different thermo calculations and theory-type questions built into that worksheet and if you can do it, you are in great shape. I will be spending much of next Thursday working through that handout in class so you can see how powerful thermodynamics is and how much you have learned so quickly in CH302.

7. As I told you in an e-mail, I messed up in giving you the instructions for signing up for the HW Service and told you last semester’s unique number. The correct one to use is the one on the first page of the syllabus, 48975. Sorry for the inconvenience. Also, some of you did not follow the procedure of using your first two initials of your names and then three numbers to create an i.d. for yourself, but rather just typed in your first name. Don’t worry about it. Until the end of the semester this doesn’t matter at all. The only time you will use that i.d. is when I start posting grades and cutoffs on
my web site and instead of seeing MA145 you will see Mary. If you are concerned about privacy, let me know at that time and I will change your i.d.

8. As I mentioned on Tuesday, there is a service learning course called UTeach Outreach that allows you to earn graded college chemistry credit while teaching science in elementary schools around Austin. Basically you go with a partner twice a week for an hour to an elementary school and teach a science lesson. You are provided with the materials for the lessons and taught what to do. It is a fine program. If you are interested, come to one of the following orientation sessions to learn more:
   - Thursday, January 22 at either 2 to 3 pm or 3 to 4 pm in WEL 2.312
   - Friday, January 23 at either 10 to 11 am or 2 to 3 pm in WEL 2.312
   - Monday, January 26 from 3 to 4 pm in WEL 2.304
   - Tuesday, January 27 from 2 to 3 pm or 3 to 4 pm in WEL 2.312.

Seats are limited so I wouldn’t wait till the last sessions to find out about the program.

9. I provide a service to students by allowing them to advertise reasonable student organizations and activities in the musings (this means I have to draw the line at debaucherous frat parties and raves). Just e-mail me before Wednesday at midnight and I will add it. Here is the first.

The girl's club water polo team is looking for more players! They require that you have swimming experience, but will teach everything else. Practices are 8-10 pm Monday-Thursday at the Texas Swim Center on Trinity and Red River by MLK. Please contact Debbie McMillan at utbubbleb@hotmail.com if you are interested.

10. Poetry Corner. For those of you new to the class, a poem or two is read every week for the culturally challenged. Personally I prefer dark, brooding angry male poetry. So if you want cheeriness and love, like on Valentine's Day, you'll need to forward suggestions. For right now, it is winter and the new year so here is an appropriate poem. Actually it describes something pretty profound, the clash of old and new knowledge--new knowledge being that gained from science and exploring. Notice Tennyson is unimpressed with it all. I thought you would appreciate that Tennyson questions whether anything about science is worth knowing. By the way, translate "aught" as "anything" here.

   **I stood on a Tower**  
   Alfred, Lord Tennyson (1865)

   I stood on a tower in the wet,  
   And New Year and Old Year met,  
   And winds were roaring and blowing;  
   And I said, "O years, that meet in tears,  
   Have ye aught that is worth the knowing?  
   Science enough and exploring,  
   Wanderers coming and going,  
   Matter enough for deploring,  
   But aught that is worth the knowing?  
   Seas at my feet were flowing,  
   Waves on the shingle pouring,  
   Old Year roaring and blowing,  
   And New Year blowing and roaring.

And here is another favorite—actually an old song that hippies from another time used to sing. Surely you know it, if only because someone sampled it for a rap song. This song is appropriate as you will come to see because of how often signs matter in Thermodynamics.

   **Signs**  
   Les Emmerson

   Signs say long-haired freaky people need not apply.  
   So, I tucked my hair up under my hat and I went in to ask him why.  
   He said, "You look like a fine upstanding young man, I think you do."  
   So I took off my hat and said, "Imagine that, me working for you."  
   **CHORUS:**
Signs, signs, everywhere there's signs
Blockin' out the scenery, breakin' my mind.
Do this, don't do that. Can't you read the signs.

Well the sign says, "Anybody caught trespassing will be shot on sight."
So, I jumped on the fence and I yelled at the house,
"Hey, what gives you the right
To put up this fence to keep me out or to keep mother nature in.
If God was here, he'd tell you to your face,
"Man, you're some kind of sinner."

CHORUS
"Hey now, mister, can't you read?
You've got to have a shirt and tie to get a seat.
You can't watch here, you can't eat.
You ain't supposed to be here."

Sign says, "You got to have a membership card to get inside."

Sign says, "Everybody welcome. Come in, kneel down and pray."
And when they passed around the plate at the end of it all,
I didn't have a penny to pay.
So, I got me a pen and a paper and I made up my own little sign.
I said, "Thank you Lord for thinkin' 'bout me. I'm alive and doin' fine."