

1. Emailed to pshaw@email.arizona.edu
2. I would have to disagree with Felleisen et al.'s opinion. Computers can do no more or less than they are programmed to do. A surprising result from a computer is due to error on the part of the programmer. An unexpected result from a student, however, can be the result of any of a number of things, ranging from student innovation to error on the part of either the teacher or the student.
3. In writing chemical speciation models, and in Excel, too, I found the following were the most useful guidelines.
 - ✓ a. Simple is better to start. If the program works with the most important things, it can be refined by adding additional steps or complications.
 - b. If there is any question about why something is done, notate the file.
 - c. Save everything – at least until done with the project – sometimes what I thought was a mistake in the first model run, wasn't actually a mistake. It can also be helpful to compare the results from different commands.
 - d. Keep a written log. It was really helpful have a notebook with short notes that I wouldn't have bothered putting into file comments.

✓
Good!