$\begin{array}{c} {\rm ASTR} \ 220 \ {\rm Homework} \ \#2 \\ {\rm Fall} \ 2005 \end{array}$

Due Tuesday, February 15, 2005, at the beginning of lecture. Class will meet in CSS 1109 for the Cratering Experiment on February 15, 2005.

Please neatly write or type your homework.

Be aware of potential plagiarism: make sure to put the answer into your own words. Feel free to discuss the questions with your classmates, but write up the answers yourself - do not copy.

Make sure to show your work for any calculations - answers that appear like magic will receive no credit.

- 1. ECP: Ch. 6, Review Questions, #11.
- 2. ECP: Ch. 6, Surprising Discoveries, #18.
- 3. ECP: Ch. 6, Surprising Discoveries, #19.
- 4. ECP: Ch. 6, Problems, #25.
- 5. ECP: Ch. 9, Surprising Discoveries, #16.
- 6. ECP: Ch. 9, Surprising Discoveries, #17.
- 7. NCC: What were the craters on the Moon and the Earth originally thought to be?
- 8. NCC: Explain why a good scientific theory must be able to be disproven.
- 9. NCC: In Ch. 4, why did the author split the Alvarez theory into two separate hypotheses, and what were those hypotheses?
- 10. NCC: In Ch. 4, six basic predictions were made (the seventh is about "unanticipated discoveries", so we won't consider that one).
 - (a) Which two predictions do you think were best supported by subsequent scientific discoveries and analyses? Why?
 - (b) Which two predictions do you think were the least supported? Why?