

AY 5, Summer Session I, 2008:
Quiz #2

Draft: July 5, 2008

1. What are the four fundamental forces in order of *decreasing* strength?

2. What was the chemical composition of the early Universe? Approximately, how much of each element was there by mass?

3. With a phrase each, describe the “observables” in Hubble’s Law $v = H_0 \cdot d$. (“Observables” are what we actually measure.)

In a sentence, describe how to measure one of the “observables.”

4. The Hertzsprung-Russell diagram was the only plot in “The Lives of Stars.” In a sentence, what information about a star (or stars) is given by the Hertzsprung-Russell diagram?

5. Which force plays the largest role in stellar formation and evolution?

What property of the star determines its evolution (*e.g.*, lifetime)?

6. In a sentence, how does a star form?

7. List three elements produced by nuclear fusion in stars.

8. What is the approximate chemical composition by mass of young (recently-formed) stars?