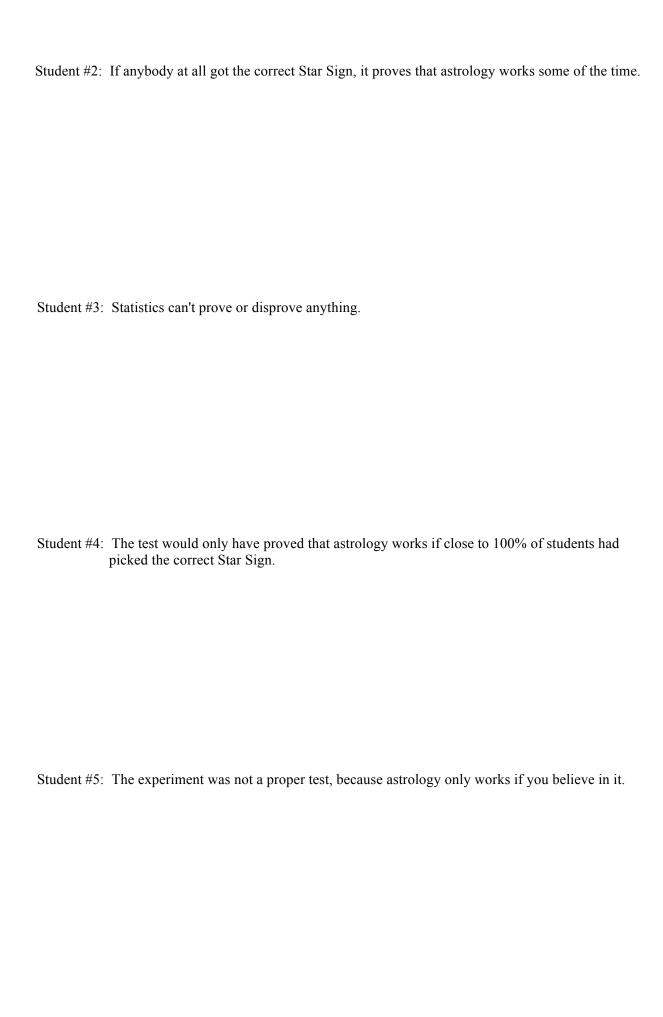
ASTR 202 - EXAM 1 (10 Question, 6 pages)
Please write short answers in complete sentences directly below each question where applicable.
You may use the back of the page if necessary (please indicate if you do so).
No notes or electronic devices are allowed.

Printed Name:	Student ID:
This class is based on the subject of astrobiology.	
2. What is one of the principles (or hallmarks) of scie from faith or other ways of thinking)?	nce (i.e. something that distinguishes science

3. Explain why the study of an extraterrestrial origin of crop circles is pseudo-science. What reference/story can you cite?
4. Imagine that you overheard the following student comments during our in-class Astrology activity. Are any of the following statements valid? Critique each of them from the point of view of the application of statistics and the scientific method.
Student #1: If astrology does not work at all, then nobody should have picked the correct Star Sign.
(Question 4 continued on next page)



5.	What did Copernicus do ar	nd why was it revo	olutionary?		
6. he	Give one example of an obeliped prove/disprove.	servation Galileo	made with his tel	lescope and what l	his observations

7. Assume the scale model of the solar system we made in class where the Earth was a 6cm ball and the distance between the Earth and the Sun was roughly the length of the UofA mall. Approximately how long would it take you to walk to the nearest star if you were walking at the pace of the speed of light in the model (Proxima Centauri, the nearest star, is located 4.2 lightyears away from the Sun)? (Note: you do not need a calculator to do this problem!)
8. Put the following in increasing order of size, from smallest to largest – Virgo Cluster, Sun, Local Group, Milky Way, Earth, Jupiter, the Moon, our Solar System, Mars, you.
9. In a time scale model where the Big Bang to present day is one calendar year and the Big Bang was on Jan 1, on what day of the calendar year do humans (homo sapiens) first appear?

10. Describe and explain in complete sentences two pieces of scientific evidence that the Universe existed in a hot, dense state (The Big Band Theory) early in its history.				