October 20, 2014 AST 1078 topics

- Test #1 review
- Life! Review: the 6-prong test
 - structure/order
 - reproduction (but what about viruses and prions?)
 - growth/development (but what about crystals?)
 - energy utilization to maintain structure and battle entropy
 - response to the environment (but what about thermostats?)
 - evolutionary adaptation
- Species: classical and modern definition
- Naming species: *Genus + species* (generic + specific) i.e. *Homo sapiens, E. coli, Equus caballus, Equus asinus*
- Theory of Evolution the beginnings
 - Anaximander: everything changes with time
 - Heraclitus: Panta Rhei
 - Empedocles: poorly adapted creatures would perish
 - Aristotle: species fixed and unchanging
 - Lamarck: fossils vs. living organisms "Inheritance of acquired characteristics"