1. Define: (3 pts each)
   A. method of intuition
   B. law of parsimony
   C. allele
   D. translocation
   E. disruptive selection
   F. pleiotropy
   G. canalized trait
   H. uniformitarianism

2. Creationist efforts in the 1980’s to have creationism taught in the science classroom alongside evolution relied in part on the following argument (also stated in the handout you read): --Evolution relies as much on faith as creationism since it cannot be scientifically proven.-- Given what you know about methods of science would you agree with that statement? Why or why not? Even if it were true that evolution could not be proved, what is it about creationism (besides religious connotations) that would lead most scientists to still argue that it doesn’t belong in the science classroom? (16 pts)

3. In science, distinguish between a hypothesis and a theory. Which one is the truth? (10 pts)

4. Describe the main ideas that Malthus put forth in his “Essay on Population”. How did Darwin and Wallace use Malthus to devise their concept of natural selection? What was the major scientific argument that precluded acceptance of natural selection as an evolutionary mechanism in the late 1800s? Given current genetic knowledge, why is that argument no longer considered a problem today? (30 pts)

5. What are acquired characteristics? What data would be necessary in order to show that such characters could be inherited? What were Lamarck’s 3 other tenets in his description of the process of evolutionary change in organisms? Which, if any of them, are considered valid today? (20 pts)