Week 3 Review Questions:

Speciation:

1. What is a species?

2. Name the two types of barriers that block hybridization, and give examples of each.

3. What is the difference between allopatric and sympatric speciation?

4. Compare evolutionary stasis and gradualism. Which one is more common?

5. The recent adaptation of smaller tusks in male elephants, due to hunting, is an example of what type of evolutionary rate?

6. Discuss the importance of genetic isolation with regards to speciation.

T/F:

1. T F It is possible for hybrids to reproduce.
2. T F Mechanical isolation is an important hybridization block for broadcast spawners.
3. T F It is relatively easy to recognize the differences between species.
4. T F The coelacanth is an extant species that typifies punctuated equilibrium.
5. T F The fossil record shows gradual change in foraminiferan evolution.
6. T F Rapid evolutionary change can result from hard selection.
Lab:

1. What types of environmental factors affect finch evolution in the Galapagos? What about factors other than environment?

2. What will happen if the variance of inherited traits in increased?

3. A year of drought in the Galapagos makes plants grow larger seeds, which in turn leads to finches with larger beaks. What type of selection is this an example of?

4. How would you determine the original carrier of a strain of contagious bacteria?

5. What determines the branch length of a Cladogram?