3/16/13 - Free Response Questions

During class: Outline these with the help of classmates, notes and book. Do not look up anything on the internet. You should have everything you need here.

Homework: Take both outlines and write them up in paragraph form. Time yourself and write down how long it took to write each one. They are due tomorrow.

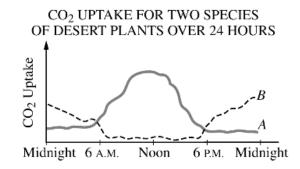
Free Response #1

2007

Compared with other terrestrial biomes, deserts have extremely low productivity.

- (a) **Discuss** how temperature, soil composition, and annual precipitation limit productivity in deserts.
- (b) **Describe** a four-organism food chain that might characterize a desert community, and **identify** the trophic level of each organism.
- (c) Describe the results depicted in the graph **Explain** one anatomical difference and one physiological difference between species A and B that account for the CO₂

 Uptake patterns shown. Discuss the evolutionary significance of each difference.



Free Response #2

2004

.Many populations exhibit the following growth curve:

- (a) Describe what is occurring in the population during phase A.
- (b) Discuss THREE factors that might cause the fluctuations shown in phase B.
- (c) Organisms demonstrate exponential (*r*) or logistic (K) reproductive strategies. Explain these two strategies and discuss how they affect population size over time.

