Final Study Guide: Bio 1A

1. What are the characteristics of living things?
2. Describe the steps in the scientific method? Additionally, what is an **inference**?
3. **Homeostasis** –
4. Place in order: Organ system, tissue, cell, organ, organism
5. Surface area –
6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - parts of DNA that code for traits
7. Perform your own punett square cross below, define terms like homozygous and heterozygous, dominant and recessive.
8. What is the difference between phenotype and genotype?
9. Describe what the difference between co-dominance and incomplete dominance is in your own words.
10. Be able to analyze a large dihybrid cross (big Punnett square)
11. How are natural selection and artificial selection different?
12. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - scientist that contributed most of our knowledge of evolution
13. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - a change In the sequence of DNA
14. **Genetic drift** –
15. **The founder effect** –
16. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ isolation – creation of new species because they are separated by lakes, rivers, etc
17. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ isolation – creation of new species because they act or behave differently
18. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ isolation – creation of new species because they reproduce at different times
19. What are fossils, and what does the fossil record tell us?
20. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ theory – the theory that eukaryotic cells (like you and I have) arose from prokaryotic cells (todays bacteria – the first organisms on Earth)
21. **Vestigial structures** –
22. **Homologous structures** –
23. What does **embryology** tell us?
24. **Ecology** –
25. Place in order: biome, community, population, biosphere, species(organism), ecosystem
26. What is the difference between a producer and consumer?
27. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - organisms that obtain energy by breaking down dead or decaying matter
28. Limiting factors –
29. Abiotic factors Biotic factors
30. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cycle -the repeated movement of water throughout the biosphere.
31. What three things are primarily recycled in the biosphere?
    1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
    2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
    3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
32. **Nitrogen** **fixation** –
33. **Denitrification** –
34. The series of predictable changes that occurs in a community over time is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
35. What is **global** **warming**?
36. What types of organisms carry out **nitrogen** **fixation** and **denitrification**?