

Name \_\_\_\_\_

CP Biology

Chapters 12 & 13 Review Sheet

1. When you look at fossils of undisturbed sedimentary rock, what can you normally conclude?
2. What do homologous structures tell us about organisms?
3. How does selective breeding influence the process of evolution?
4. Describe the growth of penicillin-resistant bacteria when treated with antibiotics.
5. How is convergent evolution different from divergent evolution?
6. All adaptations first began as a \_\_\_\_\_.
7. Is DDT currently being used as a pesticide? Why or why not? What happened to the mosquitoes?
8. What information did geologists give to Darwin?
9. How does artificial selection differ from evolution?
10. What organisms exhibit rapid evolution?
11. Explain what comparative biochemistry is. Give an example.
12. What happens to the best adapted organisms in natural selection? What about their offspring?
13. Name 2 examples of vestigial organs. How do you know they are vestigial?
14. What happens during natural selection?
15. Why is evolution in bacteria rapid?

16. What is the difference between gradualism and punctuated equilibrium?
17. Explain how a gene pool changes using an example.
18. Are horses and donkeys the same species? How do you know?
19. If a parent plant produces several gametes that are diploid, what might happen if these gametes fuse?
20. Mammals have blood proteins that are very similar. What does this prove? What do we call this in terms of evolution?
21. What do we call the changes in the moth population after 1850?
22. What happened to the frequency of the dark colored allele in the population of moths?
23. Determine the kind of adaptation for each of the following examples:
  - a. The call a duck makes to attract a mate
  - b. Opposable thumbs
  - c. A snake's venom
24. How does geographic isolation affect speciation?
25. Describe how you compare the wings of butterflies and bees. Do their wings represent convergence or divergence?
26. Pick an organism that exhibits behavioral, physiological, and structural adaptations. Describe each adaptation clearly.
27. If geographical barriers divide a group of reproducing organisms, will the same mutations happen in each group? Why or why not?
28. How are variations different from adaptations?
29. What causes variation in a population?
30. What causes adaptations?