

Name: _____ Date: _____ Period: _____

Biology Chapter 16 Cumulative Review Sheet

1. To what amount do the relative gene pool frequencies always add?
2. What type of selection is represented if every baby born weighed less than 5 pounds and more than 10 pounds?
3. What can vary because each has a unique number and sequence of amino acids?
4. Which type of genetic drift occurs from small groups inhabiting a new habitat?
5. Name the three parts of a DNA nucleotide.
6. Which part of the cell contains coded instructions for making proteins?
7. What are the building blocks of RNA molecules?
8. Which type of cell contains a nucleus?
9. When Mendel crossed true-breeding tall with true-breeding short, why were all of the offspring tall?
10. According to Darwin's theory of evolution, those that survive are what?
11. What are the two sources of genetic variation?
12. What does natural selection affect?
13. What is the separation of populations by a physical barrier called?
14. What is the final step in the formation of a new species?
15. What is it called when alleles change by chance?
16. What was the driving force behind the evolution of the Galapagos finches?
17. How does a lethal recessive allele remain in a population?
18. Where does meiosis occur?
19. Which organelle is found in plants but not animal cells?
20. If a new trait such as skin color is introduced into a population, what determines whether that trait remains?
21. According to Darwin's theory of natural selection, organisms must survive and _____?
22. If an organism's diploid number is 10, what is its haploid number?
23. If you cross the following, how many different phenotypes will be found in the offspring: RrYY x RrYy? What are they?
24. Two tall heterozygotes produce a short offspring. Which of Mendel's laws explains how this happens?
25. Where are proteins assembled?
26. Why does a virus need a host to survive?
27. What is the most common cause of genetic variation?
28. What is the most important characteristic of a population that will ensure its survival during episodic speciation?
29. Identify the mRNA produced from the following DNA: GACTTGAC
30. Identify the replicated DNA that results from the following DNA strand: GACTTGAC