Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Chapter 16 Review Sheet

1. What is evolution?
2. What is a theory?
3. What was the name of the ship that took Darwin on his voyage?
4. During his travels, Darwin made numerous \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and evidence that led him to propose a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ about the way life \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ over time.
5. What are fossils?
6. True or False: All fossils look identical to organisms still alive today.
7. What chain of islands did Darwin make some of his most substantial observations?
8. Darwin observed that the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of many animals and plants \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ noticeably among the different \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the Galapagos.

Matching

1. Explained evolution by the theory called selective use and disuse
2. Proposed the Earth had to be much more than a few thousand years old.
3. Published a book about the increasing human population growth.
4. Explained how geological features could be built up or torn down over time
5. \_\_\_\_\_ Hutton
6. \_\_\_\_\_ Lyell
7. \_\_\_\_\_ Lamar ck
8. \_\_\_\_\_ Malthus
9. How did the understanding of geology influence Darwin? (2 major points)
10. Explain the theory of use and disuse (remember the crab claws)
11. Lamarck proposed that all organisms had an innate tendency toward \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
12. True or False: Lamarck correctly explained how evolution occurred.
13. True or False: Lamarck’s work was useless for other scientists.
14. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ reasoned that if the human population continued to grow unchecked, sooner or later there would be insufficient \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ space and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for everyone.
15. How did the work of Malthus influence Darwin?
16. True or False: Darwin published his book right away.
17. Explain how Alfred Wallace “helped” Darwin publish his work.
18. What was the title of Darwin’s book?
19. What 2 major points were made in Darwin’s book?
20. In Darwin’s day, variations were thought to be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. However, Darwin argued that this variation \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
21. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ selection is the selection by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for breeding of useful traits from the natural variation among different \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
22. What is the struggle for existence?
23. What is fitness? (in terms of evolution)
24. An \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is any inherited \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that increases an organism’s chance of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
25. What happens to organisms that aren’t well suited for their environment?
26. What is meant by survival of the fittest?
27. What is another term for survival of the fittest?

Matching

1. Similarities in early development
2. Each living species has descended, with changes, from other species over time
3. All living organisms are related to one another.
4. \_\_\_\_\_ Descent with modification
5. \_\_\_\_\_Common descent
6. \_\_\_\_\_ Embryology

1. How did Darwin use fossils to explain evolution?
2. Darwin decided that all Galapagos \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ could have descended with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from a common mainland \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. Explain why organisms on different continents evolved similar features.
4. What are homologous body structures?
5. What are vestigial organs?
6. Individual organisms \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and some of this \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is heritable.
7. What do all organisms compete for?
8. What does the process of natural selection caused organisms to do over time?
9. Species alive today are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from ancestral species that lived in the distant \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
10. This process, by which diverse species \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ancestors, unites all organisms on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ into a single tree of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
11. Evolutionary theory continues to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as new \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is gathered and new ways of thinking \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_