

Biology Chapter 17 Study Guide

- 1a – 1f: Define paleontologist, fossil record, extinct, relative dating, index fossil, half-life, radioactive dating, geologic time scale, era, period
2. Describe how fossils form.
3. Draw the graph of radioactive decay on page 420.
4. Draw the Geologic Time Scale on page 421.
5. How long did each of the eras last?
6. In what era and period do we live?
7. List the steps of the formation of the Earth.
8. Draw the Miller and Urey experiment on page 424.
9. Describe how life MIGHT have begun as described on page 425.
10. How did RNA and DNA evolve?
11. Describe how free oxygen formed.
12. Tell how eukaryotic cells might have come about.
13. Explain how sexual reproduction sped up the evolutionary process.
14. Describe at LEAST one thing (the most important) that occurred in each of the following periods: Cambrian, Ordovician, Silurian, Devonian, Carboniferous, Permian, Triassic, Jurassic, Cretaceous, Tertiary, and Quaternary.
15. Tell how mass extinctions happen.
16. Define: Adaptive Radiation, Convergent Evolution, Coevolution, Punctuated Equilibrium