

LIFE OVER TIME

Reading Study Guide – Textbook Answer Guides

Sections 1.1 – 1.3

SECTION 1.1	SECTION 1.2	SECTION 1.3
<p>READING STUDY GUIDE B</p> <ol style="list-style-type: none"> 1. Fossils help us to see what life was like at earlier times on Earth. 2. 1.B. Sometimes minerals replace the remains of organisms or parts of organisms; 1.C. Fossils also include prints made by organisms; 2. A. In relative-age dating, the age of one fossil is compared to another. 3. single-celled 4. unicellular organisms: organisms made of a single cell; found in the ocean 3.8 billion years ago; cells have become more complex over the years; multicellular organisms: a sketch of a multicellular organism such as a plant or animal; organisms made of many cells; began living in the ocean about 1.2 billion years ago 5. A. occur when huge numbers of species become extinct nearly at once; B. occurred about 250 million years ago; 95 percent of species in the ocean and on land became extinct. C. occurred about 65 million years ago; dinosaurs became extinct during this event. 6. Mammals may not have evolved along the path that they did. 	<p>READING STUDY GUIDE B</p> <ol style="list-style-type: none"> 1. process through which species develop new traits; can involve changes in behavior; one species can develop into a completely new species 2. 1.A. Lamarck thought that an individual could acquire a new trait that could be passed on to offspring; 2.A. Darwin compared the animals he saw with one another and the animals from his own country. 3. the worm on the far right; They will resemble the worm on the far right. 4. any inherited trait that gives an organism an advantage in its environment; yes; The ridges on its body make it difficult for a predator to pull it from the ground. 5. the evolution of new species from existing species; may occur when environment changes dramatically or gradually; the birds showed evidence of speciation; cichlids in Lake Tanganyika grew to be separate species after they had been separated 6. For a species to separate, two populations must be prevented from reproducing. The mutations in one isolated group may differ from those of another. 	<p>READING STUDY GUIDE B</p> <ol style="list-style-type: none"> 1. 1.B. Darwin did not publish his book explaining his theory until 1859; 2. A. A theory becomes widely accepted if continued observation and testing support the statement; 2. B. A widely accepted theory is used to explain and predict natural phenomena. 2. the housecat and the tiger; They are more similar to each other than either is to the tree. 3. Both help scientists understand the relationships among organisms that exist today. 4. 1.A. physical structures that were developed in earlier organisms but are reduced and unused in later species; 2.B. The process of natural selection caused variations in form and use. 2.C. Organisms living in different environments were under different environmental pressures. 3.A. Early life stages of some species do resemble each other. 3.B. As embryos develop, they look less and less alike. 5. a small bit of nucleic acid found in the nuclei of all living cells; has huge effects on living organisms; carries information that cells of organisms use to produce traits

