

WHAT SHOULD I KNOW ABOUT EVOLUTION
(Chapter 15)

Who is Charles Darwin and what happened on his voyage on the H.M.S. Beagle that led to his ideas about biodiversity and how species change?

To what place did the Beagle travel that most influenced Darwin's ideas?

Who are the following and what role did each play in Darwin's Theory of Evolution?
James Hutton-

Thomas Malthus-

Jean-Baptiste Lamarck-

Charles Lyell-

Alfred Wallace-

What ideas about competition and resources in human populations did Malthus propose?

What theories about the age of the earth and how it is formed did Lyell and Hutton propose that influenced Darwin's thinking?

How did Lamarck's ideas about selective use or disuse of organs, inheritance of acquired traits, and evolution of species influence Darwin?

What was Lamarck right about?

What was incorrect about Lamarck's hypothesis?

How did Wallace's ideas about evolution influence Darwin's feelings about publishing his own theory?

What book did Darwin publish that explained his ideas and proposed a mechanism for evolution?

What kinds of evidence support Darwin's theory?
(Artificial selection, Fossil records, geographic distribution, homologous structures & vestigial organs, embryology, DNA; natural selection in today)

What does the fossil record tell us about the history of life?