**Chapter 25 Active Reading Guide: The Origin and Diversification of Eukaryotes**

***Section 1***

1. What was the earliest form of life on the planet? How long ago did this life-form first occur?
2. What unique ability was originated with cyanobacteria? How did this alter life on Earth and lead to a wave of mass extinctions?
3. The first eukaryotes did not appear until approximately 2.1 billion years ago. Explain the evolution of eukaryotes by endosymbiosis.
4. Summarize four lines of evidence that support the model of endosymbiosis.
5. Endosymbiosis is a key component of eukaryotic evolution. Many protists are also the result of secondary endosymbiosis. What is secondary endosymbiosis?