

## Study Questions for Lecture on 4/8

1. What are four reasons why studying biodiversity is important? Give examples.
2. What is the term used to describe human's innate connection to the natural world, and who came up with the term?
3. For how long did prokaryotes exist before eukaryotes evolved, and what are the leading hypotheses for the origin of eukaryotes?
4. How many mass extinctions have occurred, and how do we define a mass extinction? What is a leading hypothesis for the mass extinction at the end of the Permian era? What about the mass extinction that wiped out most of the dinosaurs?
5. I make my own glucose by using the energy provided by the sun, and grow to huge sizes in the ocean. I also have organelles in my cells. What am I?
6. I love really, really salty water, reproduce through binary fission, and have a single, circular chromosome. What am I?
7. Imagine you had a strain of bacteria that was well-adapted to its environment and released a protein that killed other cells in its path. If bacteria reproduce asexually, what could possibly keep that strain of bacteria in check?
8. True/false: All algae are single-celled protists. Explain.