

Biology Chapter 18: Homework

Hmwrk 18-1

1. What is the classification system used for?
2. What is taxonomy?
3. Who is Carolus Linnaeus and what did he do?
4. What does binomial nomenclature mean?
5. What are the seven levels of Linnaeus's system from smallest to largest?

Hmwrk 18-2

1. What is phylogeny? What is evolutionary classification?
2. What is a cladogram? How is it structured?
3. Describe how the following are used to determine evolutionary relationships?
 - A. similar genes
 - B. DNA evidence
4. What is a molecular clock and what is its importance?

Hmwrk 18-3

1. What are the six modern kingdoms?
2. What is a domain and what are the three domains?
3. Describe the organisms in the Bacteria Domain. Define bacteria.
4. Describe the organisms in the Archaea Domain. Define archaea.
5. Describe the organisms in the Eukarya Domain. Define eukarya.

Biology Chapter 18: Study Guide

Section 1

- Vocabulary

Taxonomy	Taxon	Class
Binomial nomenclature	Family	Phylum
Genus	Order	Kingdom

- Know why biologists use a classification
- Know why common names are not good to use in a classification system
- Know who Carolus Linnaeus was and what he did
- Know how scientific names are written
- Know the seven levels of the Linnaeus classification system in order

Section 2

- Vocabulary

Phylogeny	Derived character	Molecular clock
Evolutionary classification	Cladogram	

- Know how Linnaeus grouped species together
- Know how biologists now group organisms together
- Know how all organisms within a cladogram are organized and how they are related
- Know what cladistic analysis is and its importance
- Know how a cladogram is constructed
- Know what similarities in DNA can be used for
- Know how similar genes and DNA evidence can be used to classify organisms
- Know what a molecular clock is and its importance

Section 3

- Vocabulary

Domain	Archaeobacteria	Plantae
Bacteria	Eukarya	Animalia
Eubacteria	Protista	
Archaea	Fungi	

- Know how Linnaeus classified organisms into two kingdoms
- Know how we came to use the five kingdom system and then the six kingdom system
- Be able to name all six kingdoms
- Know what a domain is, why it was created and what the three domains are
- Know what bacteria means and what organisms are in the Bacteria Domain
- Know what archaea means and what organisms are in the Archaea Domain
- Know what eukarya means and what organisms are in the Eukarya Domain
- Be able to describe the characteristics of the four kingdoms in the Eukarya Domain