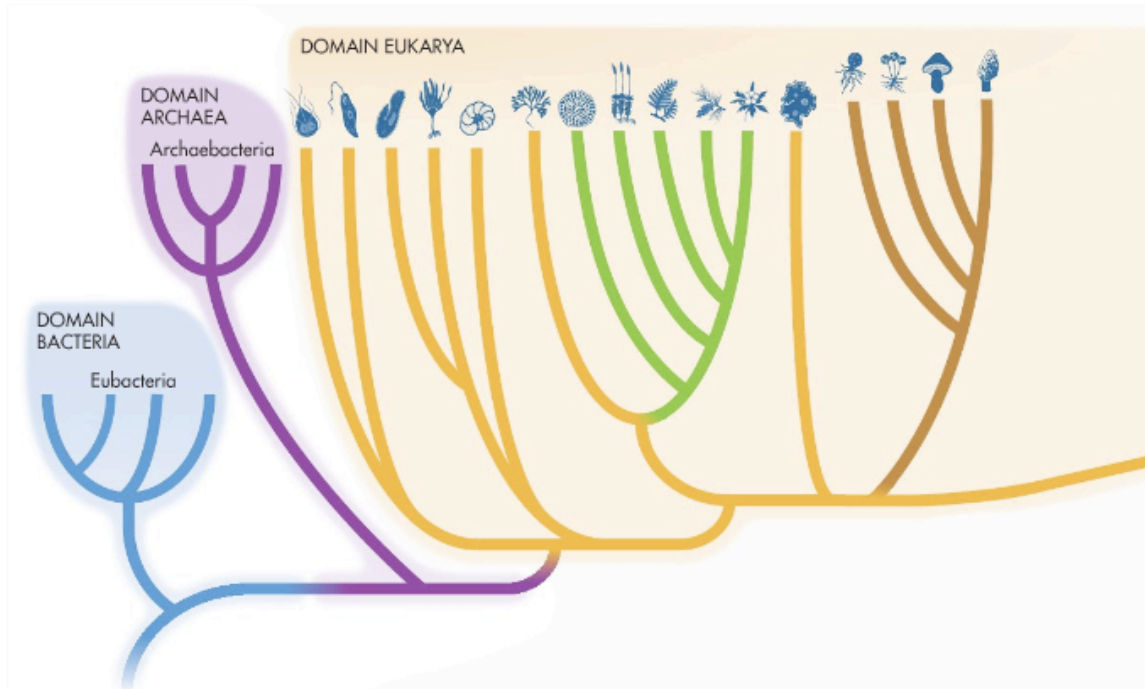


Accelerated Biology

Chapter 19 Reading Guide

Read Section 19.1 and answer the following questions.

1. Make a sketch below of Figure 1 on page 412.



2. What does it tell you about the evolution of each of the kingdoms? To answer this question, fill in these blanks:
 - a. Protista evolved from **archaebacteria**
 - b. Animalia, **plantae**, and fungi all evolved from **Protista**.
 - c. No organisms evolved from the prokaryotic kingdom **eubacteria**.
3. What 2 types of cells can organisms have?

Prokaryotic - cell without a nucleus

Eukaryotic - have a nucleus and other membrane bound organelles
4. What is the meaning of the word heterotroph?

Hetero = other

Troph = feed

Heterotroph = "Other-feeder"
5. What is the meaning of the word autotroph?

Auto = self

Troph = feed

Autotroph = "Self-feeder"

6. What are the names of the 3 domains?

Bacteria, Archaea, and Eukarya

7. How do domains compare to kingdoms?

Domains are larger than kingdoms.

i.e. The plantae, animalia, fungi and Protista kingdoms are all in the Eukarya Domain

Read pages 414 and 415

8. How are bacteria and Archea the same in terms of cell type and nutrition?

Cell type - prokaryotic

Nutrition - both domains contain autotrophic and heterotrophic bacteria

9. How are bacteria and archea different in terms of cell walls and environment?

Cell walls - Cell walls of bacteria contain peptidoglycan

Environment - Archeabacteria can survive in extreme environments (high Temps, low pH)

Read pages 416 and 417

10. What kingdoms belong to the domain Eukarya?

The plantae, animalia, fungi and Protista kingdoms

11. What makes cells in organisms in the domain Eukarya different from cells of organisms in the other two domains?

They are eukaryotic!

Read page 420

12. What characteristic makes something a protist?

They are eukaryotic DON'T FIT in the plant, animal, or fungi Kingdoms

13. Because we did not see protists in the Pond lab, go to my wiki and watch the video on protists.
Draw at least 3 different protists below:

http://www.youtube.com/watch?v=-zsdYOGtbOk&feature=player_embedded - !

Read Page 421

14. Why were fungi previously put in the plant kingdom?

They are sessile (can not move from place to place)

General appearance is similar to plants

15. Why are fungi not plants?

Lack the green pigment chlorophyll and the ability to conduct photosynthesis

Cell walls made of chitin not cellulose like in plants

Reproduce differently than plants

16. Why are fungi not animals?

Fungi do not ingest their food

Read pages 422 and 424

17. Plants are not the only photosynthetic organisms. What makes them different from algae, which are protists?

Cell walls are composed of cellulose

18. What makes animals different from heterotrophic protists?

ALL animals are multicellular

Animals have specialized cells and tissues