

# Prokaryotes, Protists, Fungi and Plants Discussed in Biology 213

## Domain Archaea

- Euryarchaeota
- Crenarchaeota
- Korarchaeota
- Nanoarchaeota

## Domain Eubacteria

- Proteobacteria
- Firmicutes (Gram Positive Bacteria: Low-GC and High GC)
- Cyanobacteria
- Spirochetes
- Chlamydia

## Domain Eukarya

Protista – Comprised of Several Candidate Kingdoms

### Excavates

- Diplomonadida (Archaezoa) Diplomonada
- Parabasala (Archaezoa) Trichomonada
- Euglenophyta (Euglenoids)
- Kinetoplastida (Trypanosomes)
- Heteroloboseans
- Alveolata
  - Dinoflagellata (Pyrrophyta) (Dinoflagellates)
  - Apicomplexa (Sporozoans) (Non-motile)
  - Ciliophora (Ciliates)

### Stramenopila

- Phaeophyta (Brown algae – the kelps)
- Chrysophyta (Chrysophytes)
- Oomycota (water molds)
- Bacillariophyta (Diatoms)
- Cryptophyta (Cryptomonads)

- Haptophyta (Haptophytes)

### Ameobozoa

- Myxogastriada (Plasmodial Slime Molds)
- Dictyostelida (Cellular Slime Molds)
- Gymnamoeba (Gymnamoebas)
- Entamoeba (Entamoebas)

### Rhizaria

- Cercozoa
- Radiolaria and Heliozoans
- Foraminifera (Forams)

### Choanoflagellida

## Protists or Plants

- Rhodophyta (red algae)
- Chlorophyta (Green algae) Many Alliances)

**Kingdom Fungi**

- Microsporidia
- Chytridiomycota
- Zygomycota
- Glomeromycota
- Ascomycota
- Basidiomycota
  - Deuteromycota
  - "Lichens"

**Kingdom Plantae**

- Bryophyta
- Hepatophyta
- Anthocerophyta
- Lycophyta (Lycopodiophyta) (Comprised of 3 Classes)
  - Lycopodiae
  - Selaginellae
  - Isoetae
- Monilophyta or Pteridophyta (Comprised of 3 Groups)
  - Ferns (5 Orders – Combined here under "Pterophyta")
    - Ophioglossales
    - Marattiales
    - Filicales
    - Marsileales
    - Salviniales
  - Equisetales (Sphenophyta)
  - Psilotales (Psilotophyta)
- Progymnospermophyta
- Cycadophyta
- Ginkgophyta
- Coniferophyta
- Gnetophyta
- Anthophyta