

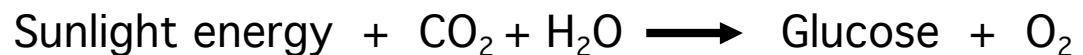
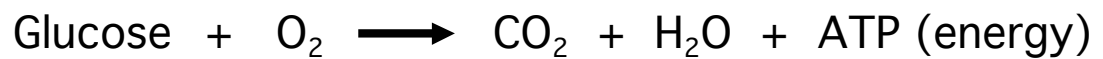
## Chapter 6 Taxonomy

- A. Hierarchy
- Domain
  - Latin
  - Kingdom
  - Phylum
  - Class
  - Order
  - Family
  - Genus
  - species
- scientific name:  
binomial,
- commom name

- B. Taxonomic Theory
- different groups (taxa)
  - cladistics
  - anatomical / molecular / evolutionary relationships
  - parsimony

- C. Different Cell types
- Prokaryotic
  - Eukaryotic
    - Animal
    - Plant
- Table of comparison (pg 171)

- D. Different nutritions
- Autotrophic vs. heterotrophic
  - Ingestive vs. absorptive
  - Cellular respiration vs. photosynthesis



## Chapter 6 Taxonomy (cont.)

### E. Three domains: Six Kingdoms

Archaea	Archaea
Eubacteria	Eubacteria
Eukarya	Protista Plantae Mycota Animalia

### F. Archaea

Bacteria that live in unusual environments

### G. Eubacteria

common bacteria  
different shapes/arrangements/cell walls  
symbiosis (example  
benefit/ harm

### H. Protista

Single cell eukaryotic  
Protozoa grouped by locomotion  
*Amoeba. Paramecium, Tetrahymena, Euglena*  
anatomy from lab  
(red tides, diatoms, seaweeds)

### I. Plantae

Eukaryotic cells with cell walls and chloroplasts  
Aquatic (seaweeds and algae)  
Non-vascular      Bryophytes (mosses)  
Vascular  
    Non-seeded      Pterophyta (ferns)  
    Seeded  
        Uncovered seeds      gymnosperms  
        Covered seeds      angiosperms  
    Seed dispersal

## Chapter 6 Taxonomy (cont.)

### J. Mycota

Eukaryotic cells, hyphae

Absorptive heterotrophs (the “decomposers”)

Uses/harms

### K. Animalia

Eucaryotic cells

Ingestive heterotrophs

Some basic characteristics:

Symmetry (3 types)

Digestive system (2 types)

Layers (none, 2 or 3)

Cavity (none false, real)

Organizational level (cells, tissues, organs)

Cephalization

Segmentation

Embryo organization

Nine Phyla

Basic characteristics and examples from each

Porifera

Cnidaria

Flatworms (Platyhelminthes)

Roundworms (Nematoda)

Mollusca

Annelida

Arthropoda

Echinodermata

Chordata (5 classes too)