

CLASSIFICATION OF ORGANISMS

This list indicates the taxonomic hierarchical organization of the organisms studied in lab. On practical exams, you will not be asked to identify grades (terms indicated in quotation marks). These are included to help you understand relationships of the taxa.

Domain **Bacteria**

Domain **Archaea**

Domain **Eukarya**

Kingdom **Euglenozoa**

Phylum Euglenophyta (euglenoids)

Phylum Kinoplastida (e.g. *Trypanosoma*)

Kingdom **Alveolata**

Phylum Dinoflagellata (dinoflagellates)

Phylum Apicomplexa (apicomplexans)

Phylum Ciliophora (ciliates)

Kingdom **Stramenopila**

Phylum Oomycota (water molds)

Phylum Bacillariophyta (diatoms)

Phylum Phaeophyta (brown algae)

Kingdom **Amoebozoa**

Phylum Gymnamoeba (amoebas)

Phylum Myxogastriida (pl. slime molds)

Phylum Dictyostelida (cell. slime molds)

Kingdom **Animalia** (animals)

"Parazoa"

Phylum Porifera (sponges)

"Eumetazoa"

"Radiata"

Phylum Cnidaria (cnidarians)

Class Hydrozoa (hydrozoans)

Class Scyphozoa (jellyfish)

Class Anthozoa (sea anemones, corals)

"Bilateria"

"Protostomia"

Phylum Platyhelminthes (flatworms)

Class Turbellaria (freeliving flatworms)

Class Trematoda (flukes)

Class Cestoda (tapeworms)

Phylum Nematoda (roundworms)

Phylum Annelida (segmented worms)

Class Oligochaeta (oligochaetes)

Class Polychaeta (polychaetes)

Class Hirudinea (leeches)

Phylum Mollusca (mollusks)

Class Polyplacophora (chitons)

Class Gastropoda (snails and slugs)

Class Bivalvia (bivalves)

Class Cephalopoda (octopi and squids)

Phylum Arthropoda (arthropods)

Subphylum Chelicerata (chelicerates)

Class Merostomata (horseshoe crabs)

Class Arachnida (spiders)

Subphylum Uniramia

Class Diplopoda (millipedes)

Class Chilopoda (centipedes)

Class Insecta (insects)

Subphylum Crustacea

Class Crustacea (crustaceans)

"Deuterostomia"

Phylum Echinodermata (echinoderms)

Class Asterozoa (sea stars)

Class Ophiurozoa (brittle stars)

Class Echinozoa (sea urchins, etc.)

Class Holothurozoa (sea cucumbers)

Phylum Chordata (chordates)

Subphylum Urochordata (tunicates)

Subphylum Cephalochordata (lancelets)

Subphylum Vertebrata (vertebrates)

Class Myxini (hagfishes)

Class Cephalaspidomorphi (lamprey)

Class Chondrichthyes (sharks, etc.)

Class Actinopterygii (ray-fin fishes)

Class Actinistia (lobed-finned fishes)

Class Dipnoi (lungfishes)

Class Amphibia (amphibians)

Class Mammalia (mammals)

Class Testudines (turtles)

Class Lepidosauria (lizards, snakes, tuatara)

Class Crocodylia (crocodilians)

Class Aves (birds)

Kingdom **Fungi** (fungi)

Phylum Chytridiomycota (chytrids)

Phylum Zygomycota (zygomycetes)

Phylum Ascomycota (ascomycetes)

Phylum Basidiomycota (club fungi)

Kingdom **Rhodophyta** (red algae)

Kingdom **Chlorophyta** (green algae)

Phylum Chlorophyta (chlorophytes)

Phylum Charophyta (stoneworts)

Kingdom **Plantae** (plants)*

"Embryophytes"

"Bryophytes"

Phylum Hepatophyta (liverworts)

Phylum Bryophyta (mosses)

"Tracheophytes" (vascular plants)

Phylum Lycophyta (club mosses)

Phylum Pterophyta (ferns, horsetails, whisk ferns)

"Spermatophytes" (seed plants)

"Gymnosperms"

Phylum Ginkgophyta (ginkgos)

Phylum Cycadophyta (cycads)

Phylum Coniferophyta (conifers)

"Angiosperms"

Phylum Anthophyta (flowering plants)

Class Magnoliids (Magnolias, etc.)

Class Eudicotyledones (true dicots)

Class Monocotyledones (monocots)