

- Class Placodermi (archaic jawed fishes)
  - Order Arthrodira
  - Order Acanthodil
- Class Chondrichthyes (sharklike fishes)
  - Order Cladoselachil (primitive sharks)
  - Order Elasmobranchii -- sharks, skates, and rays
  - Order Holocephali -- chimaeras
- Class Osteichthyes (higher bony fishes)
  - Subclass Actinoptarygii (ray-finned fishes)
    - Order Chondrostei -- sturgeon, paddlefish, bichir
    - Order Holostei -- gar pike, bowfin
    - Order Teleostei -- herring, mackerel, eel, sea robin, trunkfish, sunfish, globe fish, seahorse, flounder, carp, catfish, salmon, trout, archer fish, four-eyed fish, shark sucker, pilot fish, electric eel, mudspringer, deep-sea fishes
  - Subclass Choanichthyes (fishes with internal nostrils)
    - Superorder Crossopterygii -- lobe-finned fishes
    - Superorder Dipnoi -- lungfishes
- Class Amphibia
  - Order Labyrinthodontia (primitive amphibians)
  - Order Urodeia -- salamanders, newts
  - Order Anura -- frogs, toads
  - Order Apoda (wormlike forms)
- Class Reptilia
  - Subclass Anapsida
    - Order Cotylosauria (stem reptiles)
    - Order Chelonia -- turtles, tortoises
  - Subclass Ichthyopterygia
    - Order ichthyosauria
  - Subclass Synaptosauria
    - Order Sauropterygia -- *Plesiosaurus*, *Thaumatosauros*, *Elasmosaurus*
  - Subclass Lepidosauria
    - Order Eosuchia (ancient two-arched reptiles)
    - Order Rhynchocephalia
    - Order Squamata
      - Suborder Lacertilia -- monitor lizard, Gila monster, glass "snake", horned toad, small-legged lizard, blind worm, flying dragon, chameleon
      - Suborder Ophidia -- cobra, marine snake, rattler, copperhead, water moccasin, coral snake, king cobra, anaconda
  - Subclass Archosauria (ruling reptiles)
    - Order Thecodontia (ancestral forms)
    - Order Crocodilia -- crocodile, alligator, Indian gavia
    - Order Pterosauria (flying reptiles) -- *Rhamphorhynchus*, *Pterodactylus*
    - Order Saurischia ("reptile-like" dinosaurs)
      - Suborder Theropoda (bipeds) -- *Allosaurus*, *Tyrannosaurus*
      - Suborder Sauropoda (quadrupeds) -- *Brontosaurus*, *Diplodocus*, *Brachiosaurus*
    - Order Ornithischia ("birdlike" dinosaurs)
      - Suborder Ornithopoda (bipeds) -- *Camptosaurus*, *Trachodon*, *Corythosaurus*
      - Suborder Stegosauria -- *Stegosaurus*
      - Suborder Ankylosauria (armored dinosaurs) -- *Ankylosaurus*, *Palaeoscincus*
      - Suborder Ceratopsia (horned dinosaurs) -- *Triceratops*, *Protoceratops*