

Porifera

"sponges"

basal animals

no true tissue

sedentary

marine or freshwater

suspension feeder

Bilaterians

Lophotrochozoa bilateral sym

Ecdysozoa triploblastic

Deuterostomia true coelom

2 openings

Mollusca

gastropods, bivalves, cephalopods

marine

coelomate

open circ system

soft bodied with hard shell

intelligence in cephalopods

Annelida

Polychaetes bristle worms

Oligochaetes earthworm leeches

fused rings

coelomates

closed circ system

Echinoderms

sea stars/urchins/ cucumbers, sand \$, brittle stars

slow moving/sessile

endoskeleton of ossicles

external sex repro

Ctenophora

comb jellies

basal eumetazoans

Lophotrochozoa

-protostomy

Platyhelminthes flatworms

Syndermata rotifers

Mollusca molluscs

Annelida annelids

Plathelminthes

flatworms

bilateral sym

acoelomate

aquatic

single opening

parasitic: tapeworm

Arthropoda

segmented body plan

cuticle

open circ system

specialized jointed appendages

- walking, feeding, sensory, reprod, defense

Arthropoda subphyla

Chelicerate horseshoe crab, scorpions, ticks, mites, spiders

Myriapod centipedes, millipedes

Crustacean crab, lobster, shrimp, barnacles

Hexapod insects and relatives

Chordates

Notochord

dorsal hollow nerve cord

pharyngeal slits

post anal tail

Cnidaria

jellyfish, anemones, corals, hydras

radial symmetry

diploblastic

sessile/motile

sac w/ central digestive compartment

single opening

Syndermata

rotifers

aquatic

pseudocoelomate

two opening

parthenogenesis

Ecdysozoans

most species rich animal group

protosomy

ecdysis shedding of cuticle

cuticle tough exoskeleton 4 support and protection

Nemotoda

roundworms

parasitic live in body fluids

reproduce sexually internal fertilization

Deuterostomia

Echinoderms and chordates

shared developmental characteristics (deuterostomy)

radial indeterminate cleavage

anus from blastopore