

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

