

Animals

- Includes insects, arachnids, and crustaceans
- 75% of all animal species, and 60% of all species total
- Have segmented bodies, jointed appendages, and exoskeletons made of chitin
- Grow by molting
 - As they grow, they shed their old exoskeleton and grow a new one
- Mollusks
 - Octopi, squid, snails, bivalves (clams and oysters), etc
 - Live in shells for protection
 - Some have a muscular "foot" for movement
- In deuterostomes that hole becomes the anus
 - Includes chordates and echinoderms
 - Echinoderms include starfish, sea urchins, and sand dollars
 - Invertebrates with nervous systems
 - Have tube feet: little tubular extensions on their appendages that help them move
 - Chordates
 - The notochord is a rod of tissue that extends from head to tail, and in invertebrates this becomes the backbone
 - Dorsal hollow nerve chords form the chordate nervous system, and in invertebrates this becomes the brain and spinal chord
- Vertebrates are a subgroup of the chordates, and is a major group of organisms
 - Have a backbone from the notochord
 - First vertebrates were jawless fish around 500 mya
 - Fins and jaws evolved, allowing easier movement and feeding
 - Vertebrates moved onto land around 400 mya
 - Involved modification of bodily structures
 - Bones in the fins of the fish underwent changes to ultimately form limbs
 - Limbs have undergone even further modification
 - Land vertebrates
 - Amphibians, reptiles, birds (including dinosaurs), and mammals