

Phylum Chordata

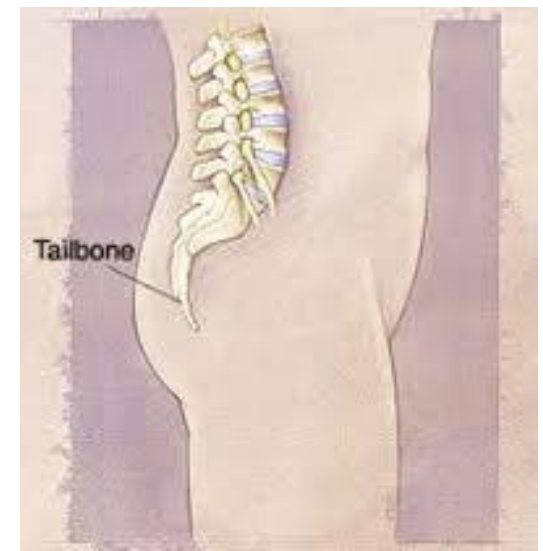
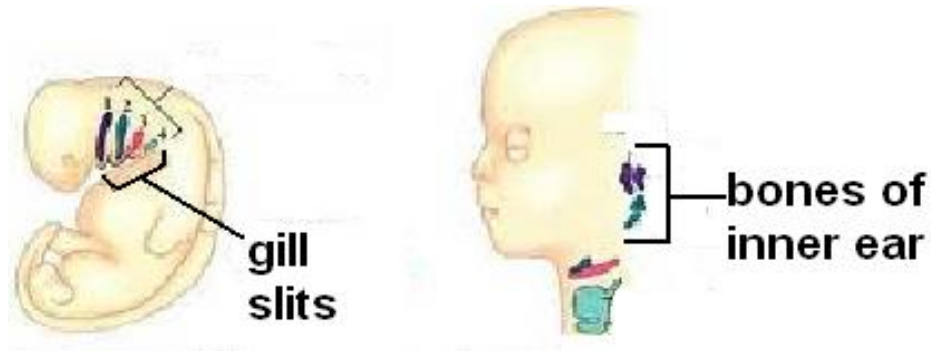
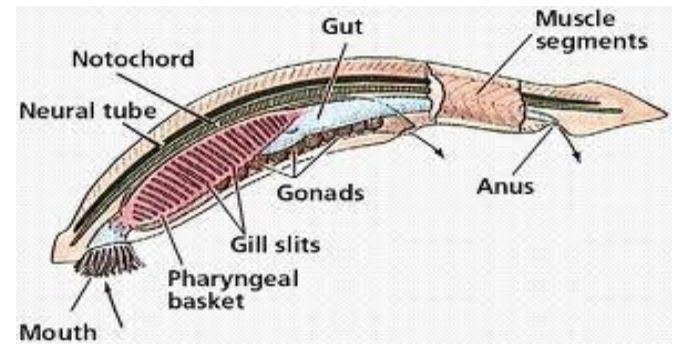
ex. Humans, cats, horses, fish, frogs...

★ only about 5% of known species



Characteristics of Phylum Chordata:

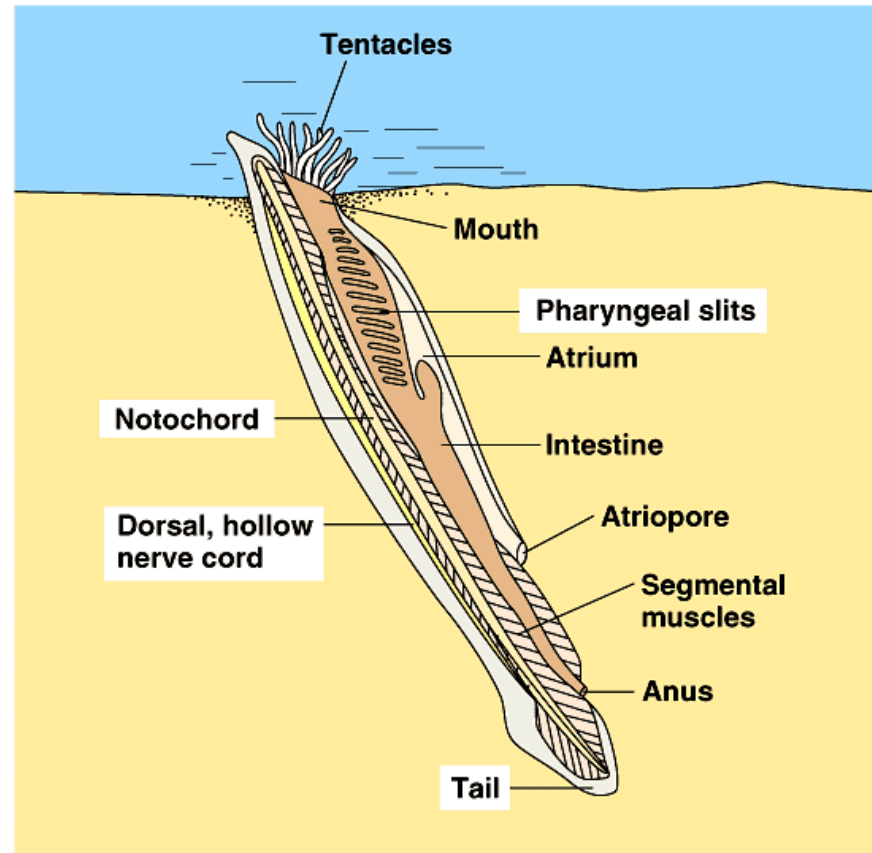
- Have a **notochord** = a stiff rod of cartilage running down the back of the animal.
 - *Later the notochord is replaced by the backbone.*
- Hollow dorsal nerve tube
- Gill slits (pharyngeal slits)
- Tail that extends past the anus.



Subphylum Urochordata: ex) Tunicates



Subphylum Cephalochordata: ex) Amphioxus

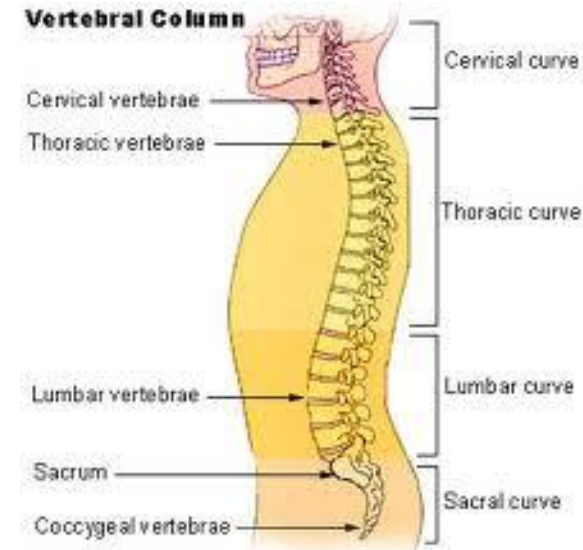


(a)

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Subphylum Vertebrata characteristics:

- Bilateral symmetry
- Coelom
- Have vertebrae = hollow, cartilaginous or bony structures that surrounds & protects the dorsal nerve cord
- Endoskeleton
- Large brain protected by a skull
- Complex heart, closed circulatory system
- 1 or 2 pairs of appendages
- Gills or lungs for breathing
- Special outer covering = “skin” (fur, scales, fat, hair....)

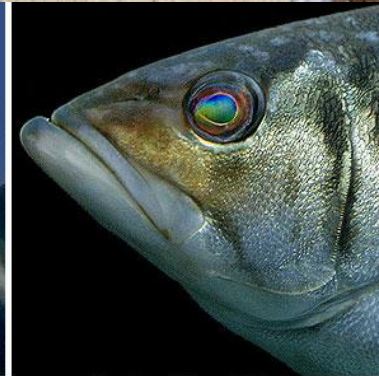


There are 7 classes of vertebrates:

- Class Agnatha
- Class Chondrichthyes
- Class Osteichthyes
- Class Amphibia
- Class Reptilia
- Class Aves
- Class Mammalia



Class Chondrichthyes: Hammerhead Shark



Class Osteichthyes: Kelp Bass



Class Amphibia: Tree Frog



Class Reptilia: Day Gecko



Class Aves: Broadbill



Class Mammalia: Caracal

Ecological roles of vertebrates:

- Food source
- Control animal and plant populations
- Pollinators (birds, bats)
- Seed dispersal
- Aerate soil (moles, squirrels)
- Create ponds - beavers

