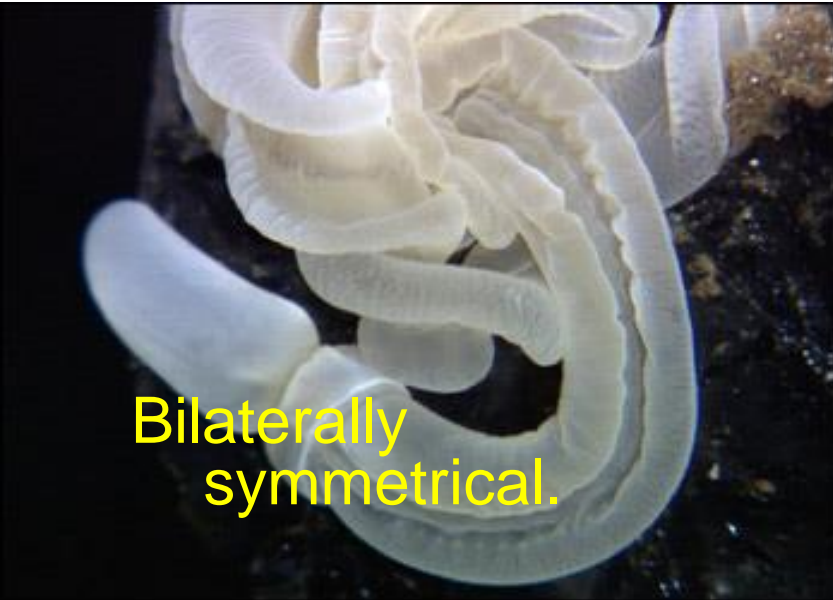


Phylum Hemichordata

Characteristics of Hemichordata:-

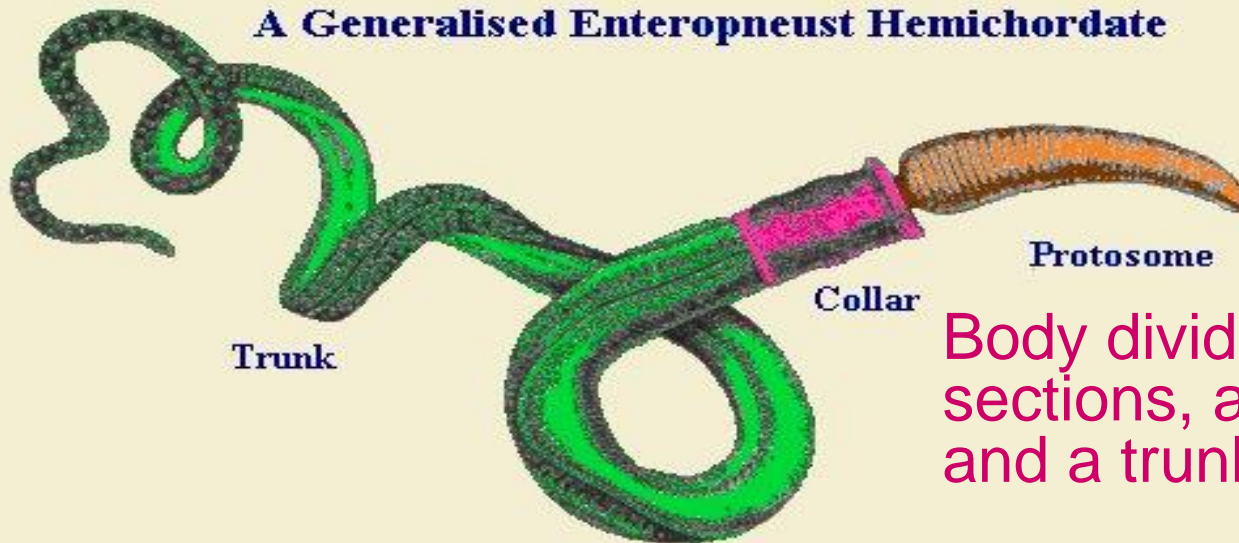


Bilaterally symmetrical.



All live marine environments.

A Generalised Enteropneust Hemichordate



Body divided into three sections, a proboscis, a collar and a trunk.

Phylum Hemichordata (85 species)

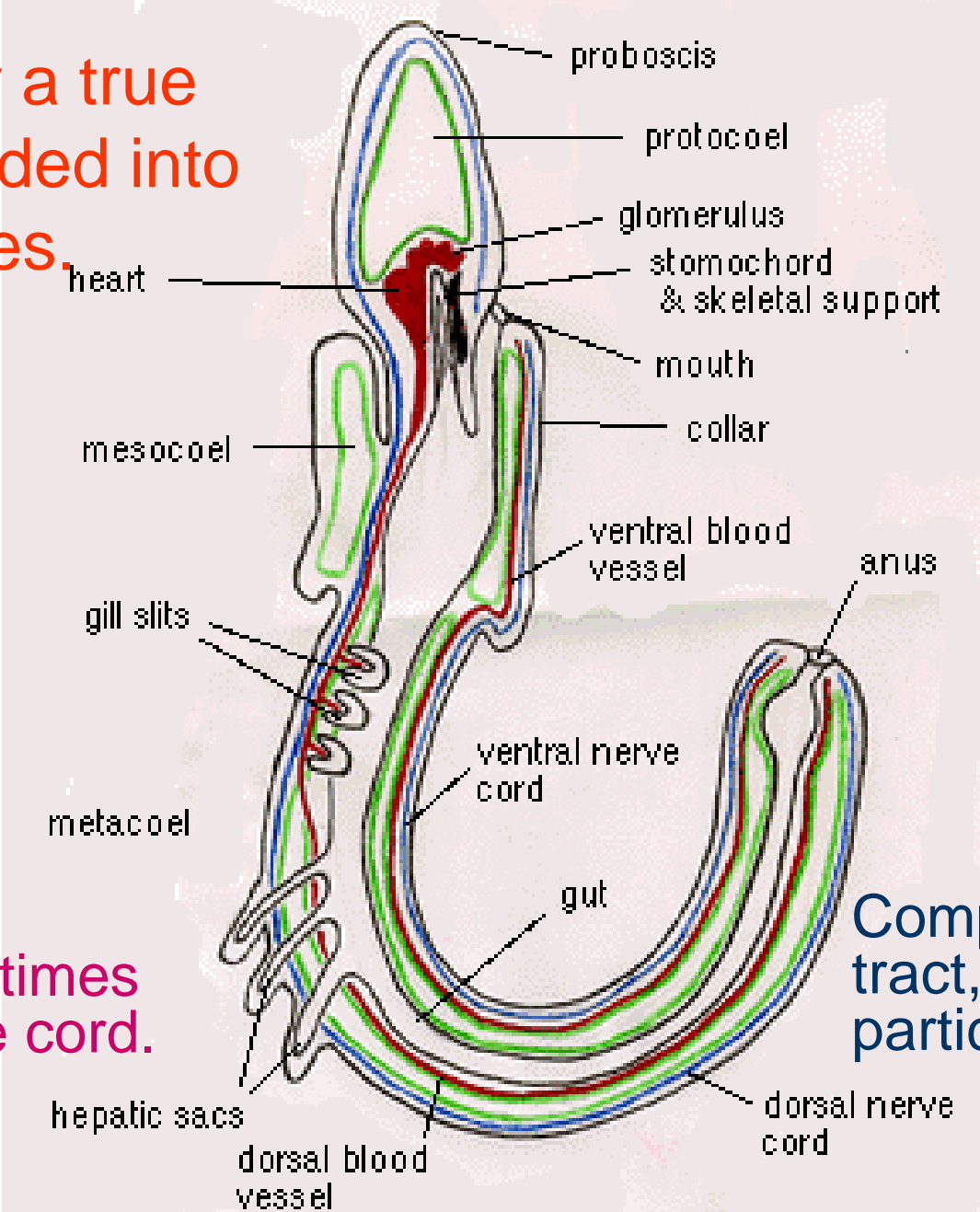
Class Pterobranchia (Sea Angels)

Class Enteropneusta (acorn worms)



Small group of marine worms that show similarities to Echinoderms and Chordates

Body cavity a true coelom divided into three cavities.



Dorsal, sometimes tubular, nerve cord.

Complete digestive tract, feeds on fine particles in the water.

Tornaria of Acorn Worms



Auricularia of Sea Cucumbers



Has a deuterostome embryology and resembles in ciliation feeding mechanism (opposed band) and general appearance an auricularia larva of sea cucumbers

Also shares with echinoderms:

- Adult axial complex similarity (hemal -excretory system)
- Coelom divided in three parts

Adult Characteristics of Acorn Worms

Coelom like echinoderms

Proboscis for digging (protocoel)

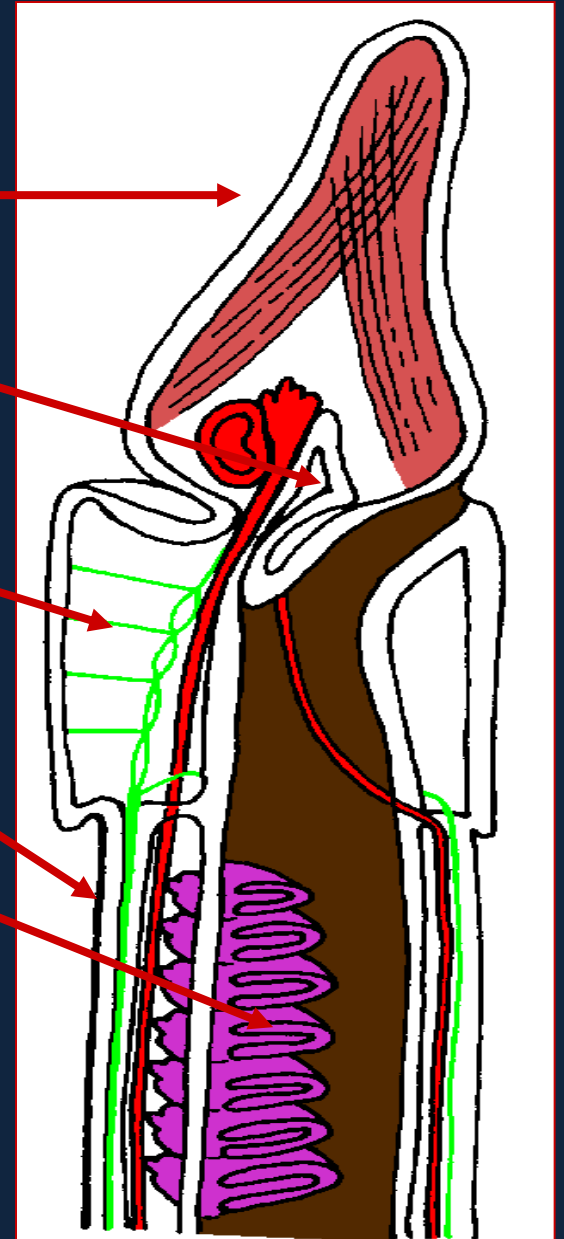
Stomochord first considered a notochord

Collar with mouth (mesocoel)

Main body is the trunk (metacoel)

Up to 100 pair of pharyngeal slits

N.S. An epidermal net... Like the echinoderm nervous system but.. in some a dorsal hollow nerve cord



PHYLUM: HEMICHORDATA

- ❑ Share several similarities with the chordates including
 - ❑ pharyngeal slits
 - ❑ dorsal nerve cord
- ❑ Hemichordates appear to have diverged close to a point at which the chordates originated.
- ❑ Hemichordates are divided into three classes that differ greatly from each other, although they show similar structure in early embryological stages



Evolutionary ties b/w hemichordates and echinoderms

Ciliated larvae

