

## **Arthropoda (Subphylum Chelicerata & Crustacea)**

### **FIGURES TO KNOW:**

#### **Phylum Arthropoda (Subphylum Chelicerata & Crustacea):**

Table 7.1 – for this week: First 3 subphyla and their classes

Fig. 7.2 & 7.3 – note trochophore larvae shared by both annelids & arthropods

Fig 7.5 & 7.6- Examples of different Arthropod appendages

Table 7.2 - names of tagmata of all groups, plus body regions they comprise

Fig. 7.7 - all, Also note different placement of abdomen on crab v. crayfish

Fig. 7.8 - all, recognize serial homology & homology. Know head/thorax/abdominal appendages

Fig. 7.9 - all. Be able to identify sex of crayfish

Fig. 7.11 - eyes, stomach, heart, gills, digestive gland, excretory organ (green gland)

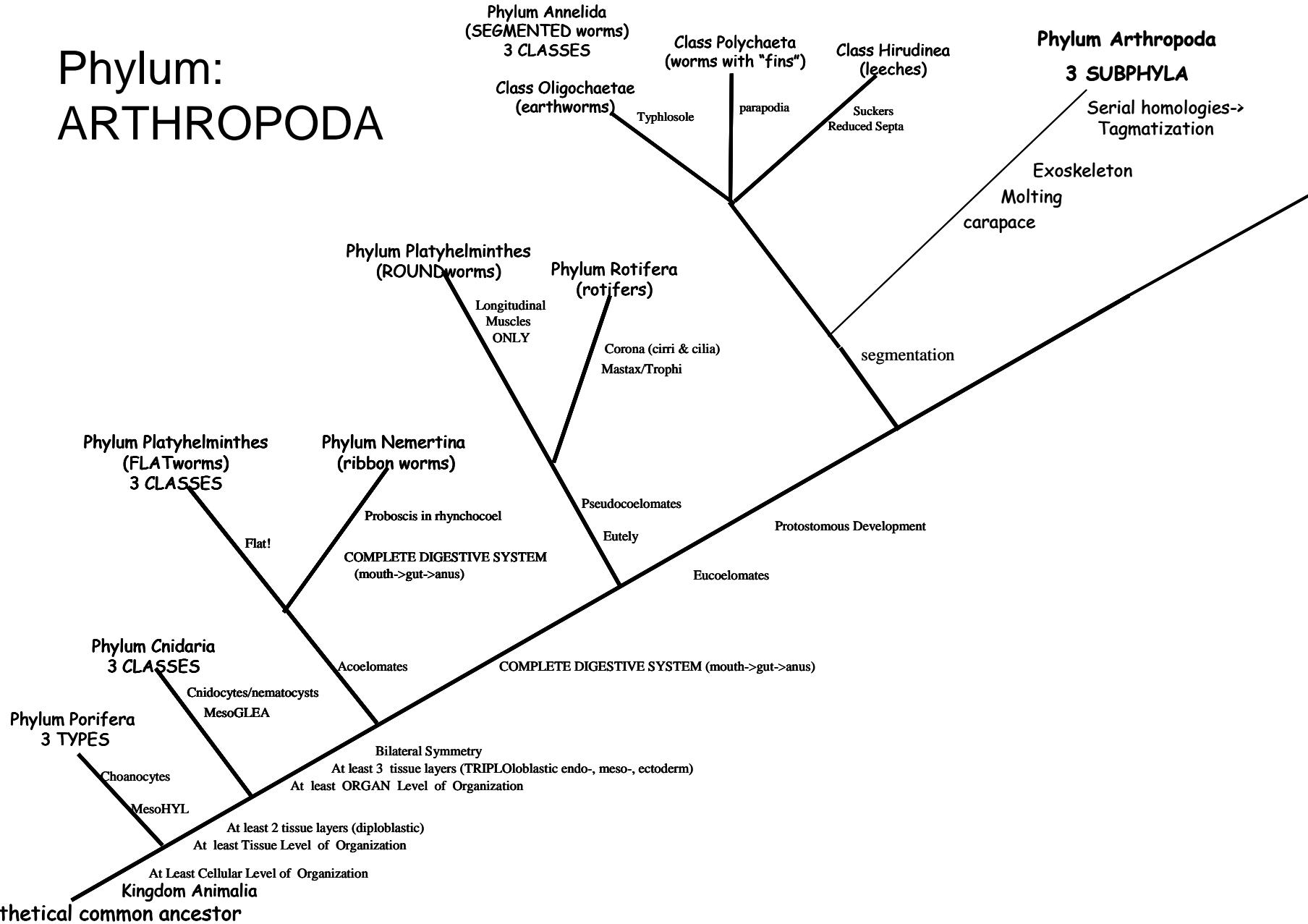
Fig. 7.12 - antenna, antennule, rostrum, eye, heart, digestive gland, extensor muscles, intestine, telson, anus, flexor muscles, stomach, esophagus, mouth, green gland, ventral nerve cord, & brain

Fig. 7.14 - A & B, plus pyloric stomach (add).

Fig. 7.16 - the names of the tagma of spider and horseshoe crab.

Book gills & carapace of horseshoe crab, chelicerae, pedipalp. Note that "abdomen" is not a tagma on the spider, but a body region.

# Phylum: ARTHROPODA



## Subphylum #1 Chelicerata

### CLASSES

Merostomata (Horseshoe crabs)

Arachnida Acarina (Ticks)

Araneae (Spiders, Scorpions)

Pycnogonida Sea Spiders

## Subphylum Chelicerata Scorpions & Spiders 3 classes

2 tagmata:

Prosoma &  
Opisthosoma

4 pairs of walking legs

Chitinous exoskeleton

No antennae (only Arthropods w/o antennae!)

## Trilobitmorphia

### Trilobites

Pedipalps

Carapace

Molting

Exoskeleton

Tagmosis

## Subphylum Crustacea Crabs and such 5 classes

### CLASSES

Branchiopoda Water fleas & Fairy Shrimp

Ostracoda Seed Shrimp

Copepoda Copepods

Cirripedia Barnacles

Malacostraca Shrimp, Lobster, Roly-polys .....

2 tagmata

Cephalothorax &  
Abdomen

5 pairs of "walking" legs = Chelipeds

Calcified exoskeleton

## ARTHROPODA Subphyla #1 & #2