

Kingdom Animalia

Phylum Arthropoda

Subphyla Trilobita

extinct



Subphylum Crustacea

crabs, crayfish,
pillbugs, waterfleas,
copepods



Subphylum Uniramia

Subphylum Chelicerata

Class Xiphosura

horseshoe crabs



Class Chilopoda

centipede



Class Diplopoda

millipede



Class Insecta

Coleoptera

beetles



Hymenoptera

bees,
wasps, ants



Lepidoptera

butterflies &
moths



Orthoptera

grasshoppers



Diptera

flies
& mosquitoes



Class Arachnida

spiders,
scorpions,
ticks



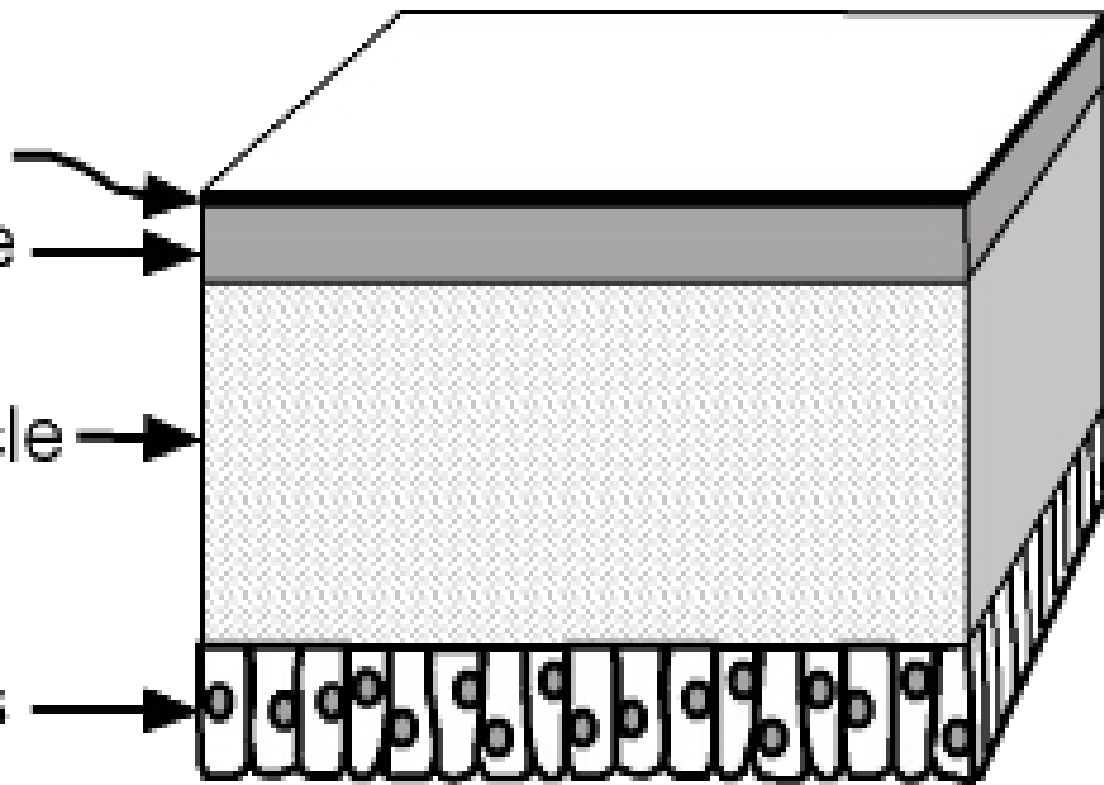
*not all insect
orders shown

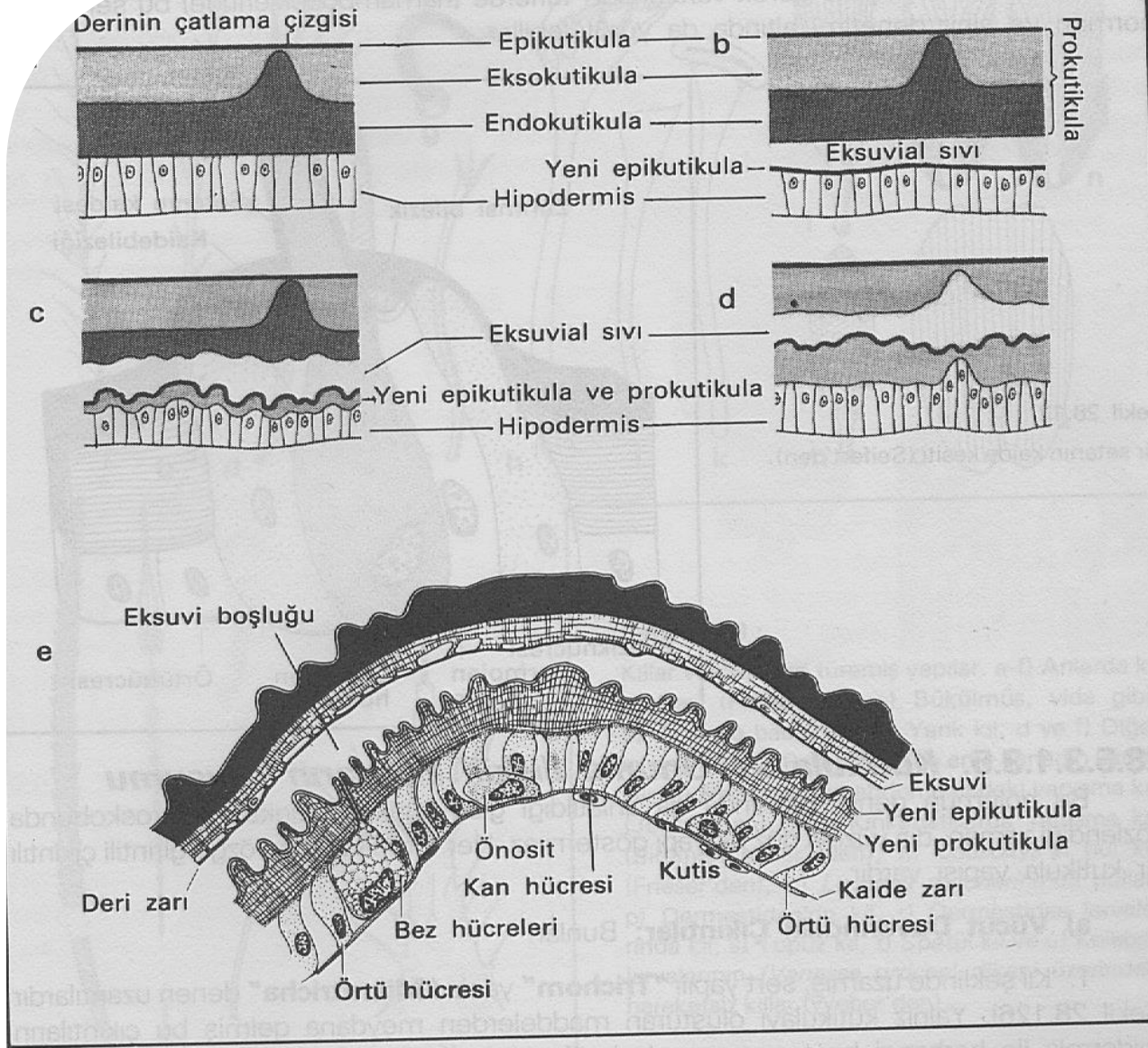
epicuticle

exocuticle

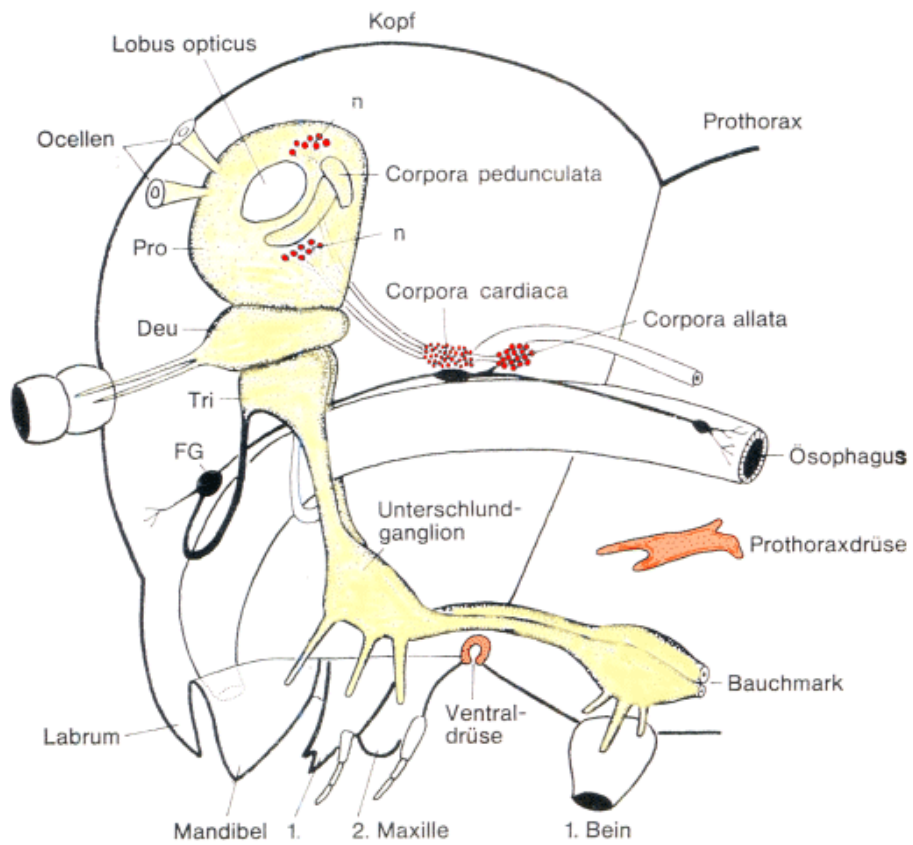
endocuticle

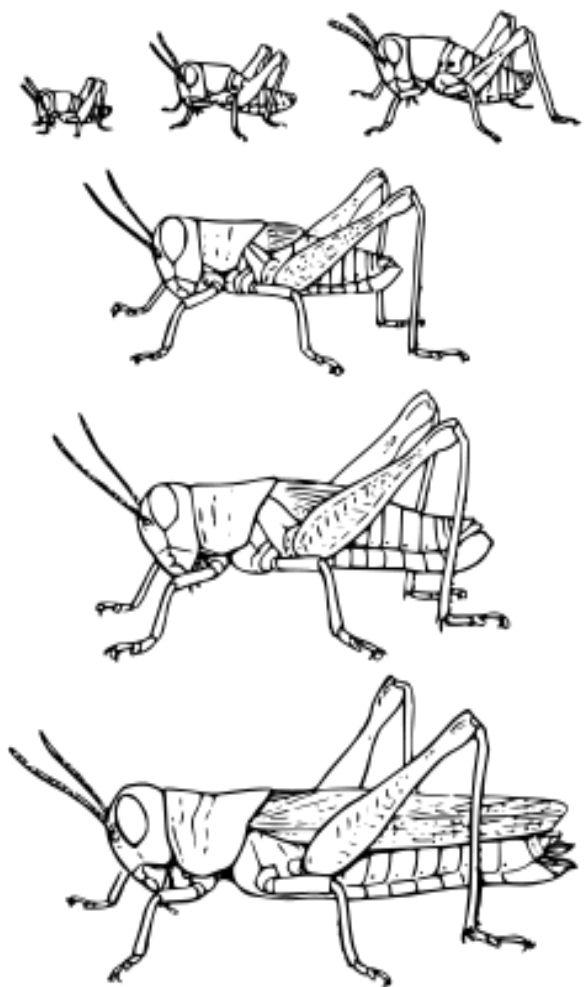
epidermis



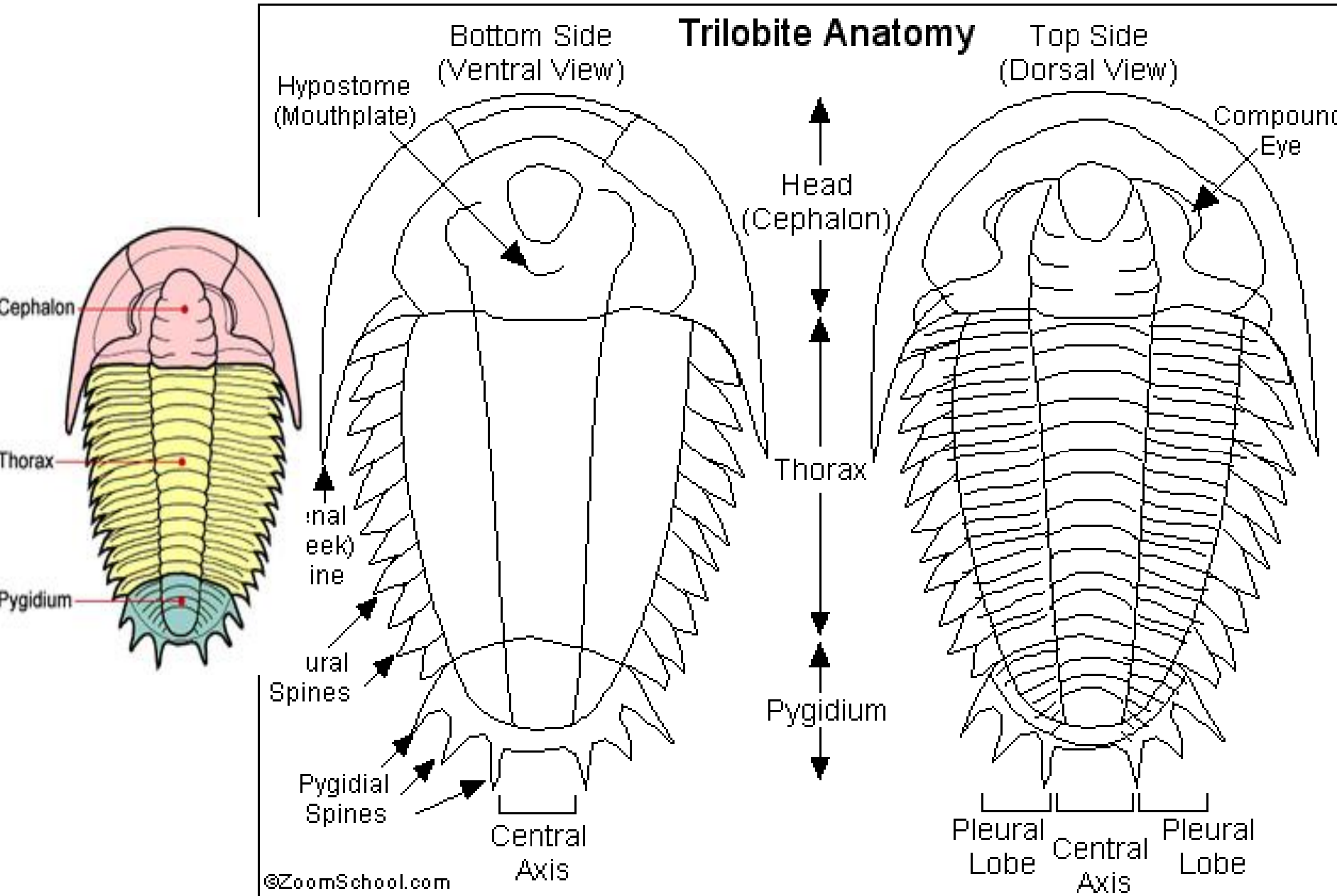


Şekil 28.11 : a-d) Eklembacaklılarda deri değiştirilmesi. a) Deri değiştirme evreleri arasında tam oluşmuş dış iskelet, b) Epidermin ayrılması, eksuviyal sıvının salgılanması ve yeni epikutikulanın oluşumu, c) Eski endokutikulanın sindirilmesi ve yeni prokutikulanın salgılanması, d) Deri değiştirmeden hemen önceki evre; eski ve yeni iskelete sarılmış durumda ve e) *Carausius morosus*'un deri değiştirmesinden (ecdysisinden) hemen önceki bir evrede, enine kesit (Barnes ve Seifert'den).





Subfilum : Trilobitomorpha

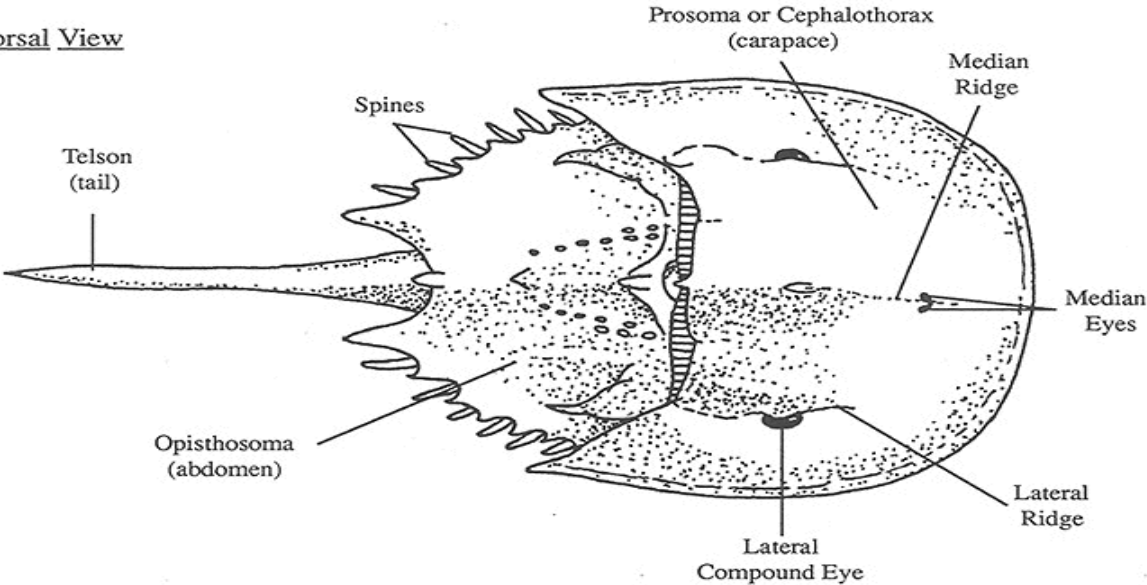




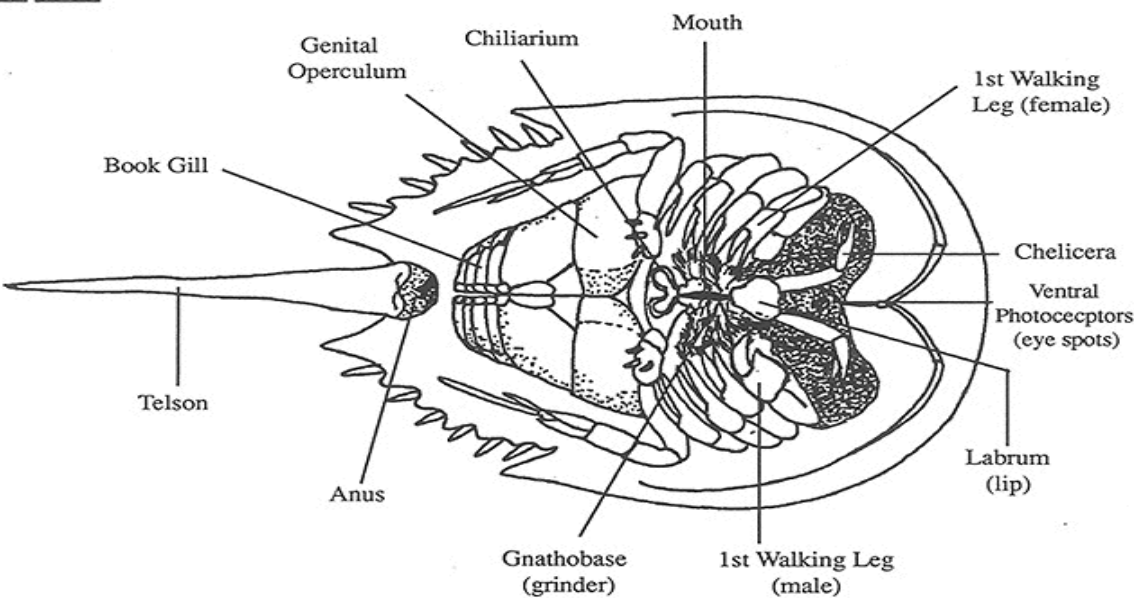
Subfilum : Chelicerata
Klasis: Merostomata
Subklasis: Xiphosura

Horseshoe Crab

Dorsal View



Ventral View

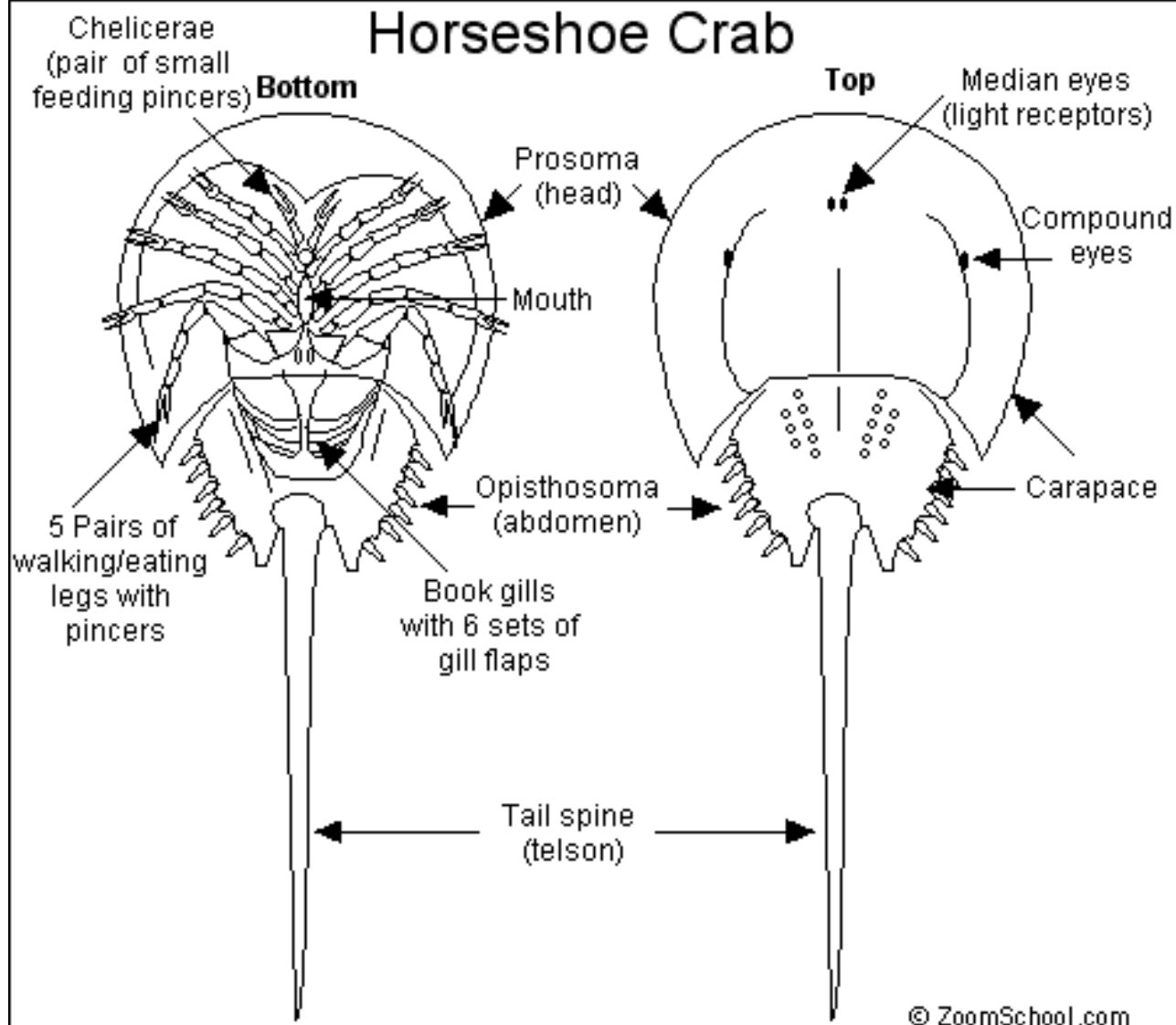


Subfilum : Chelicerata
Klasis: Merostomata
Subklasis: Xiphosura

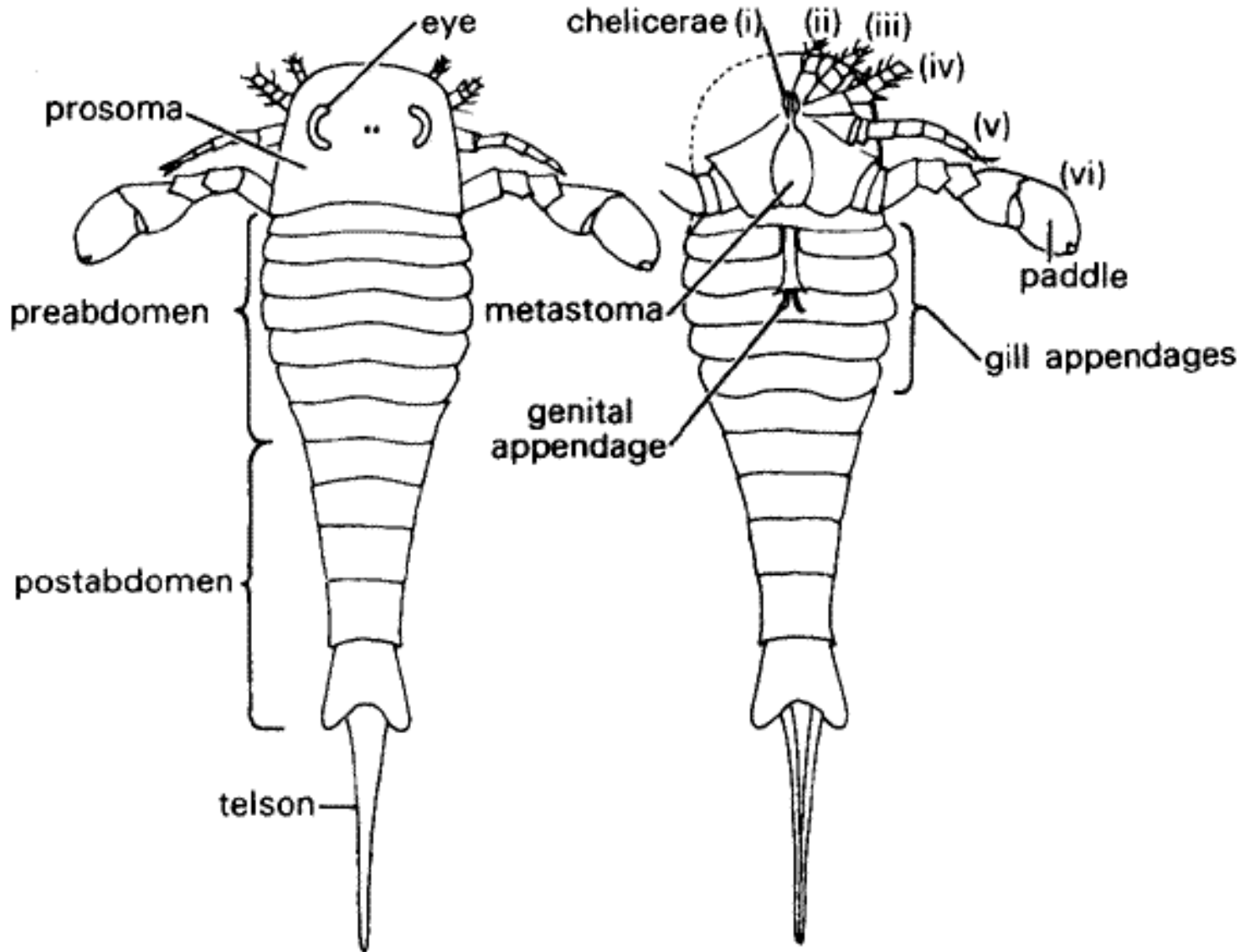


Limulus

Horseshoe Crab

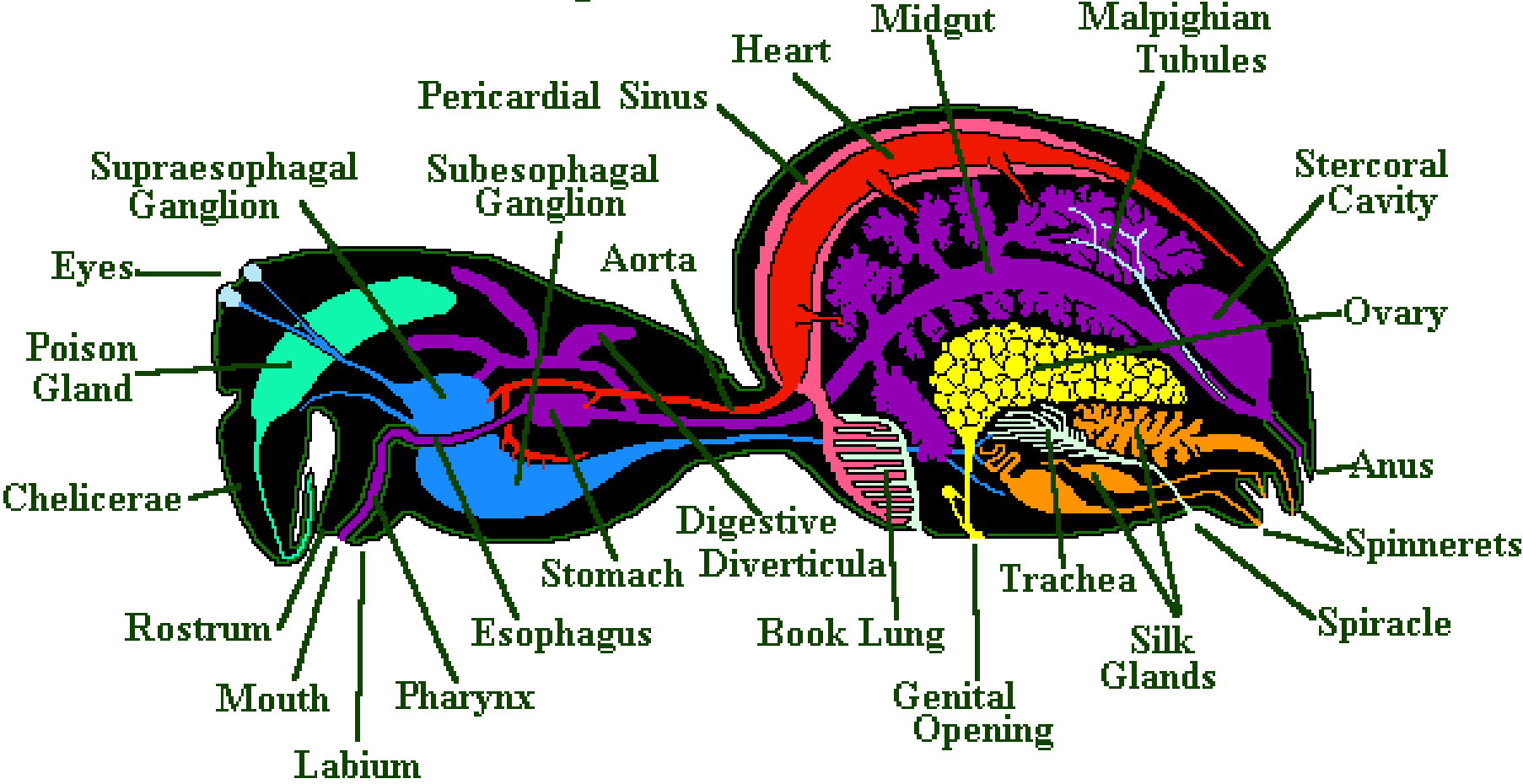


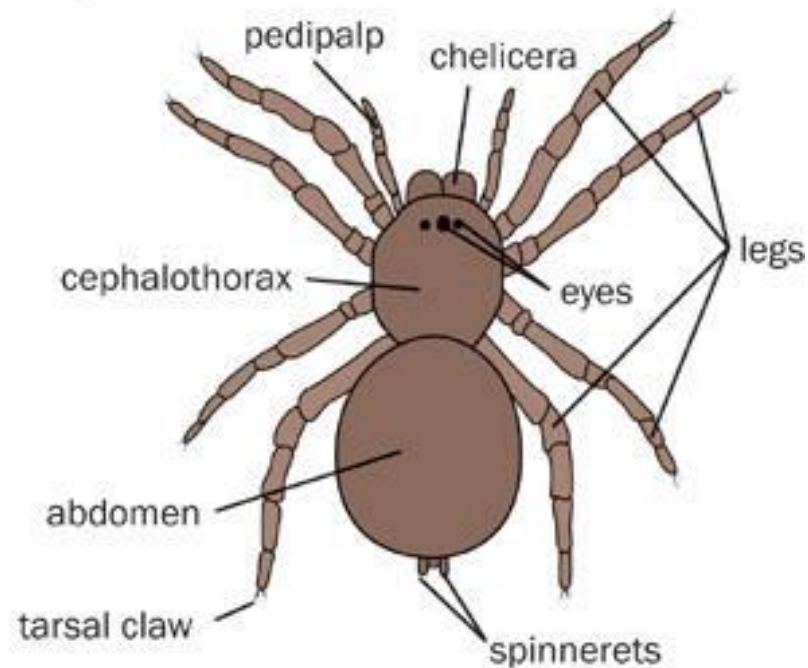
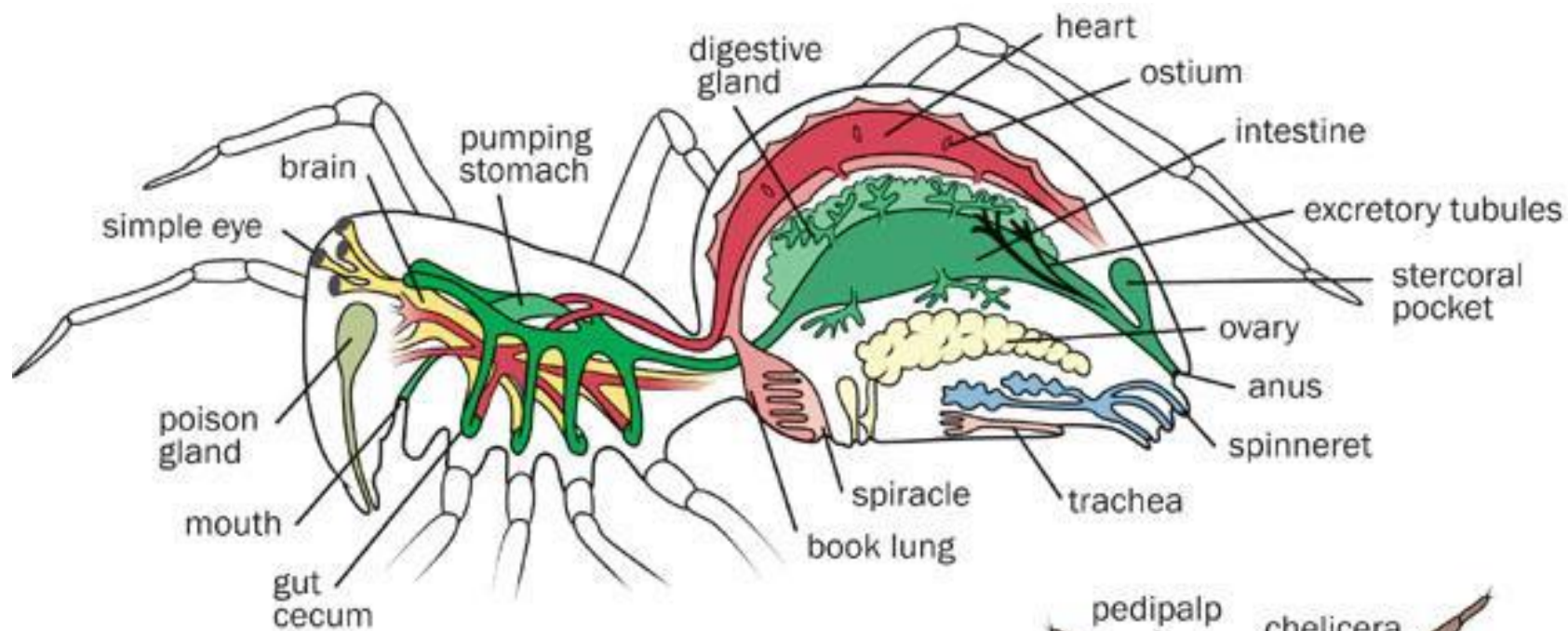
Subklasis: Eurypterida

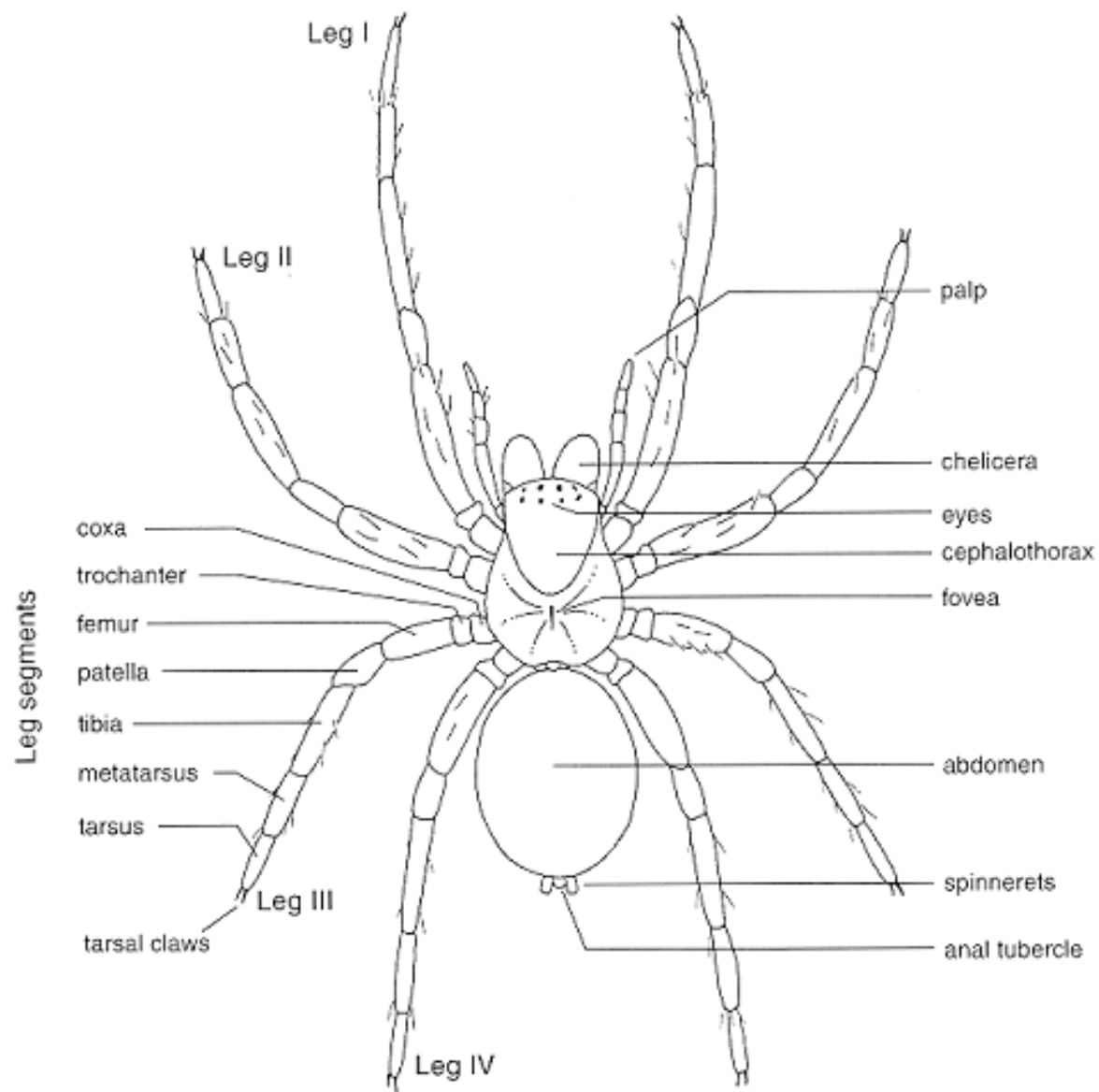


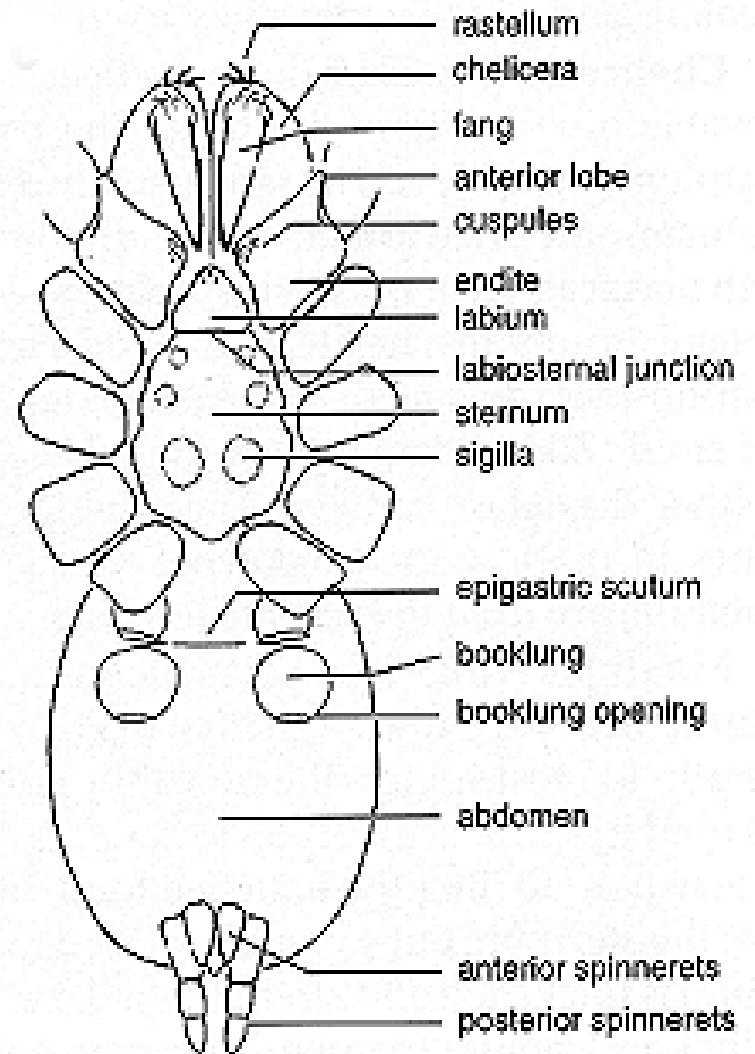
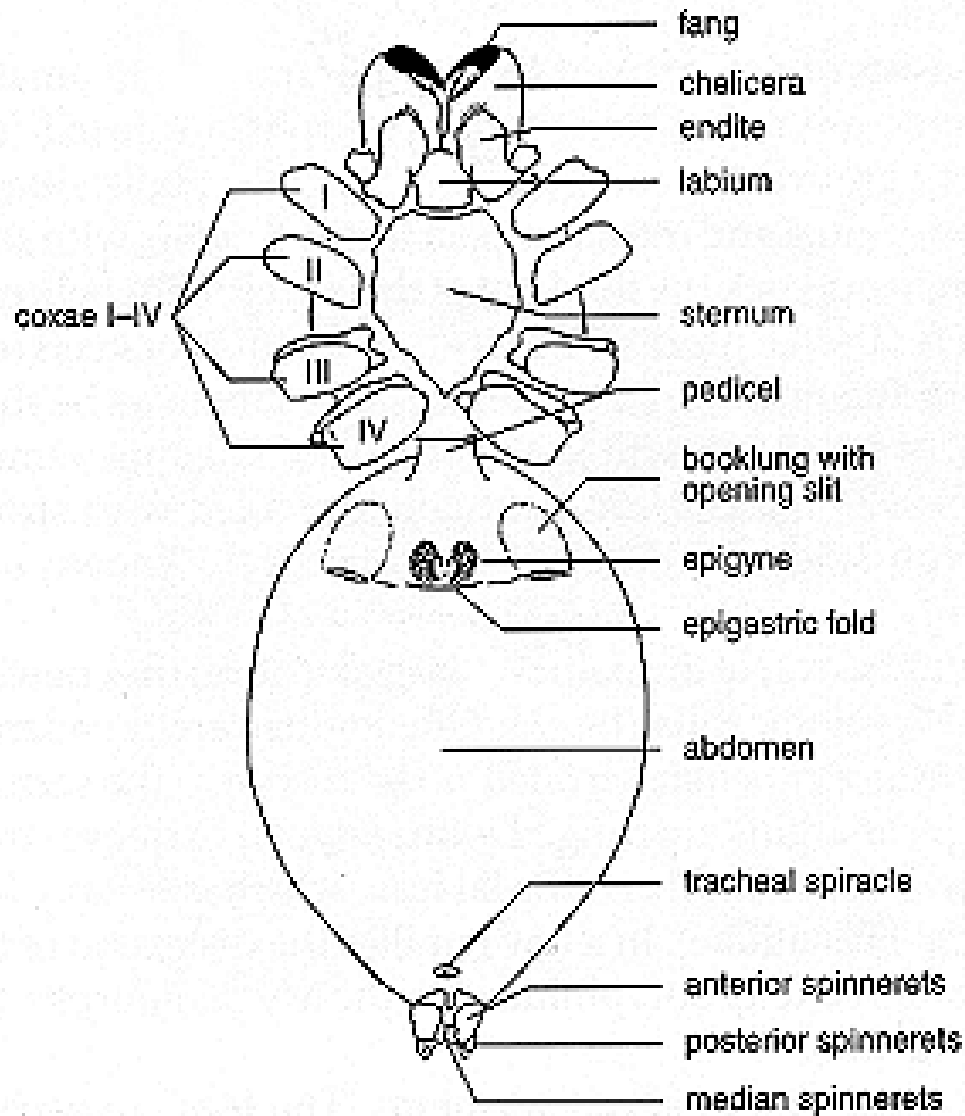
A Hypothetical Spider

Internal Organs of Female









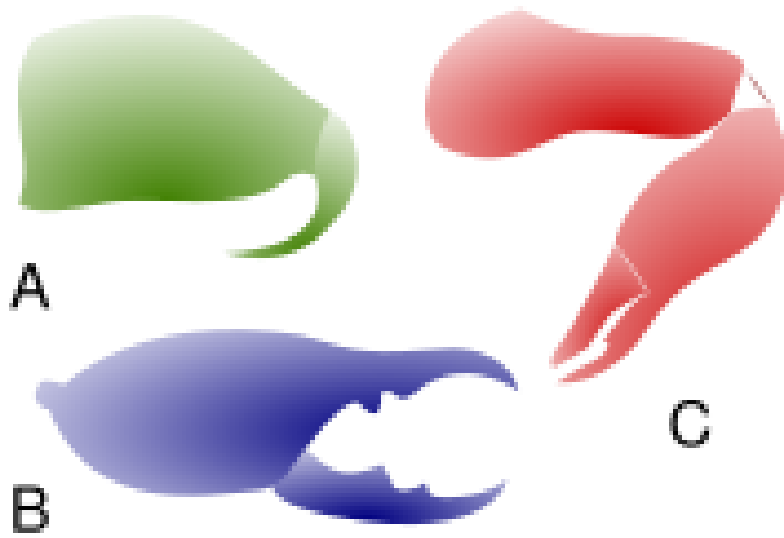




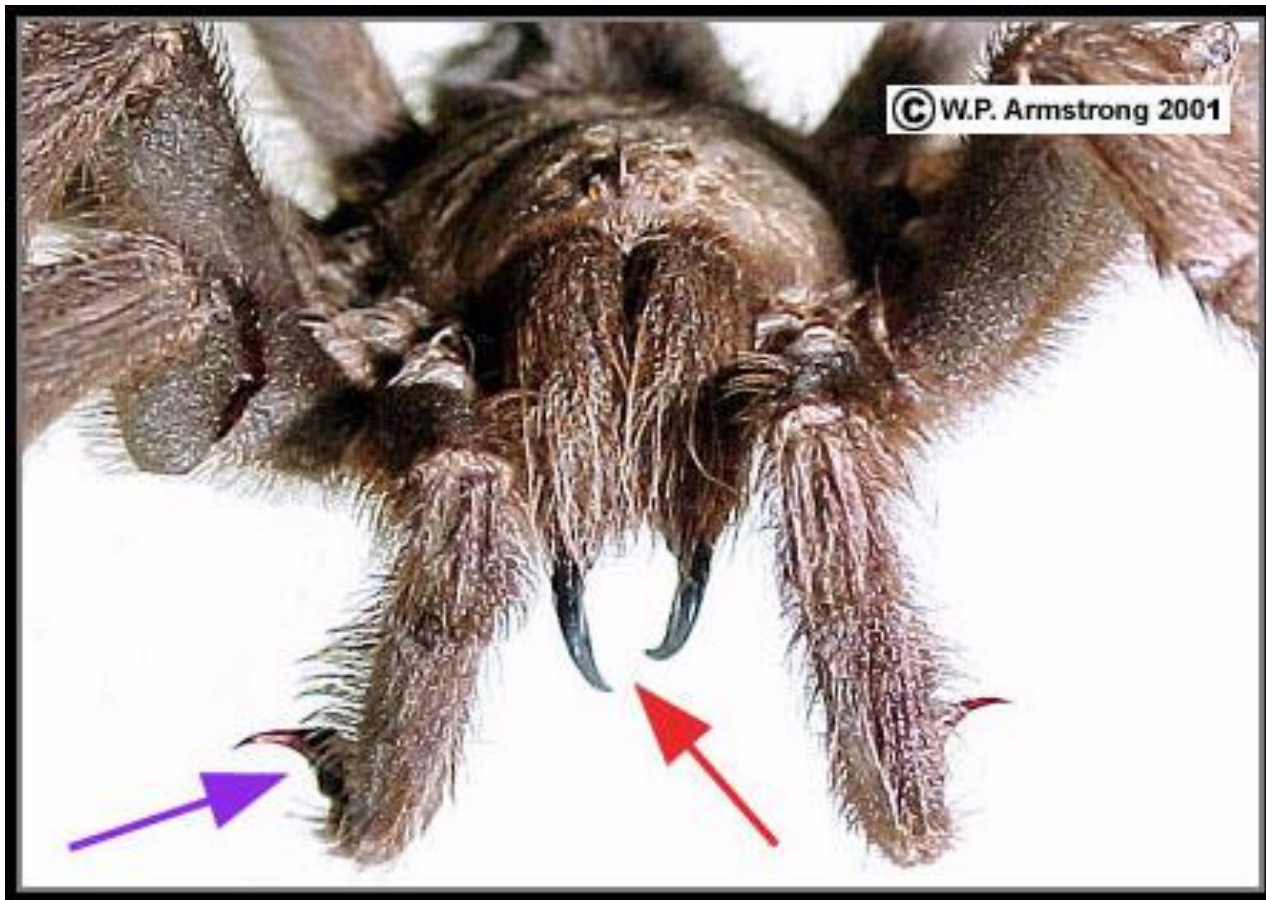












Tarantula



© Stefan Sollfors, www.euraspiders.com

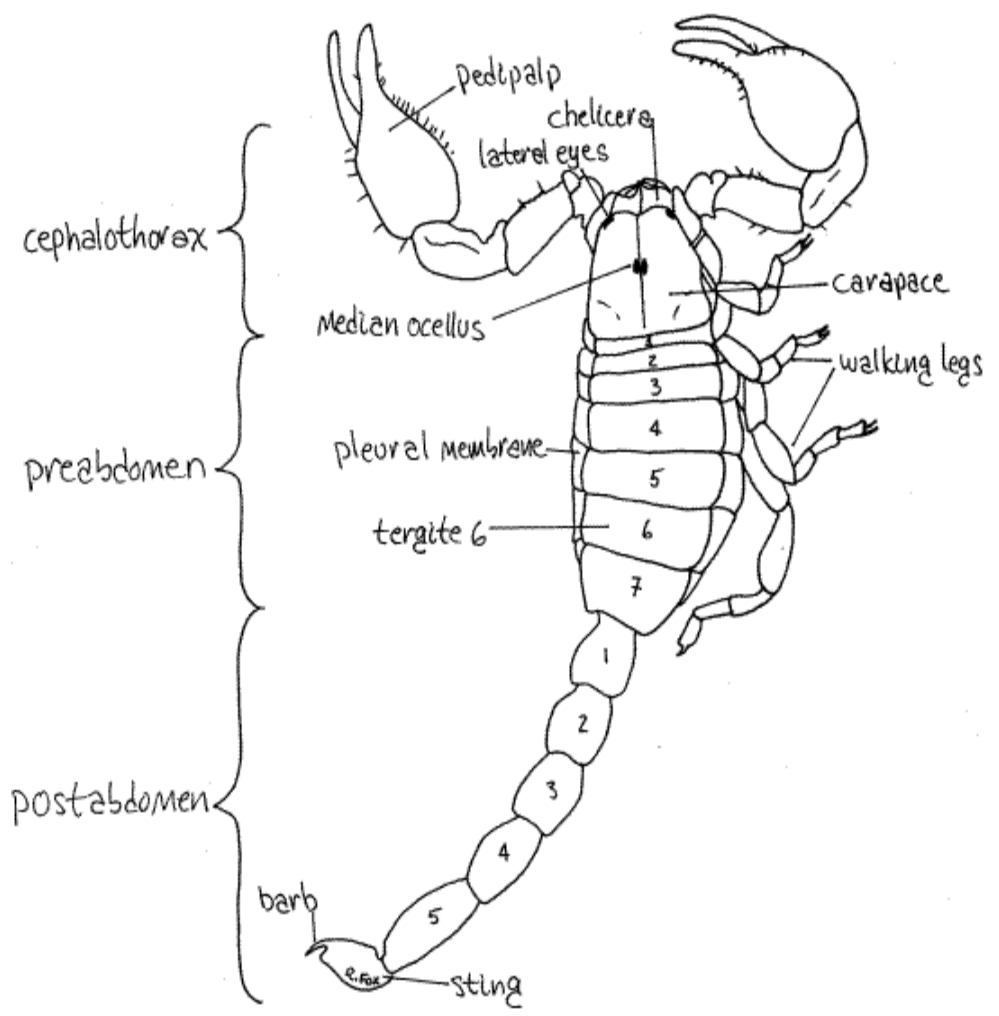
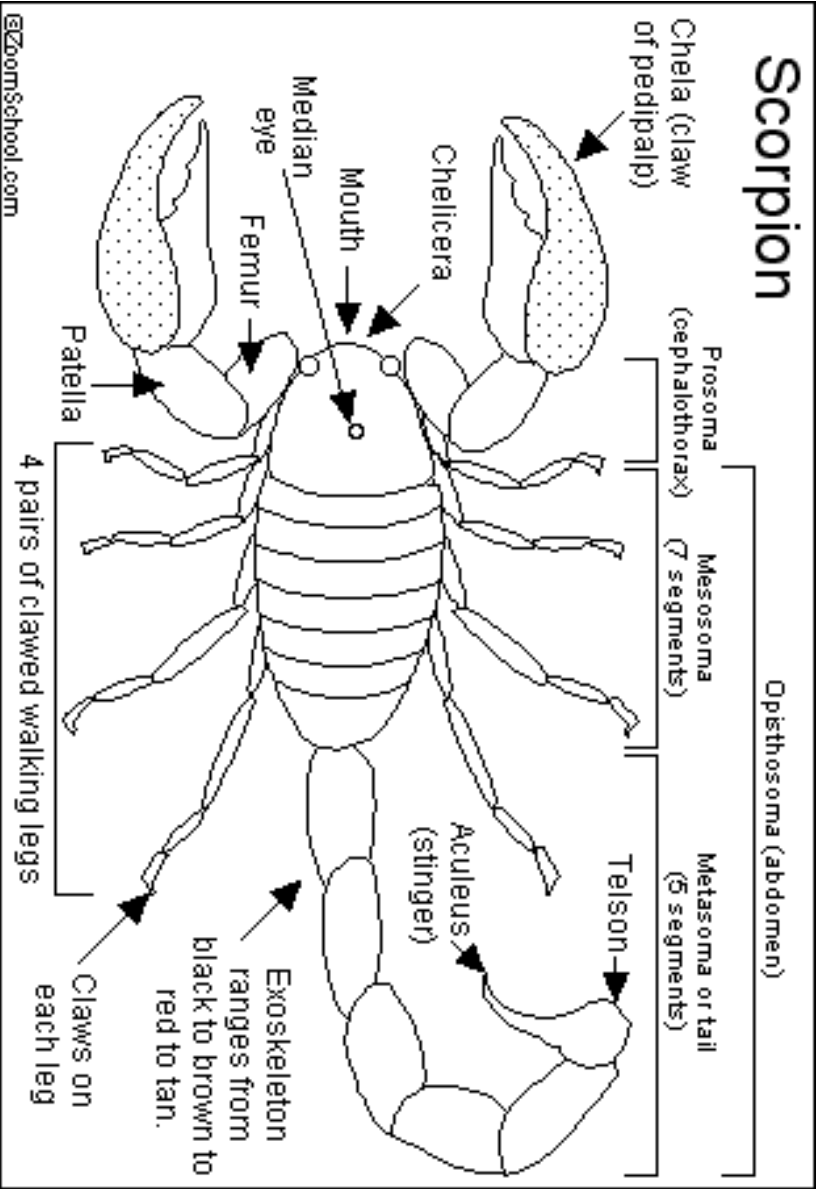


Spider spinneret (silk secreted from piriform gland spigot, Spiny Back Spider, *Castercantha* sp.) (SEM x3,740)

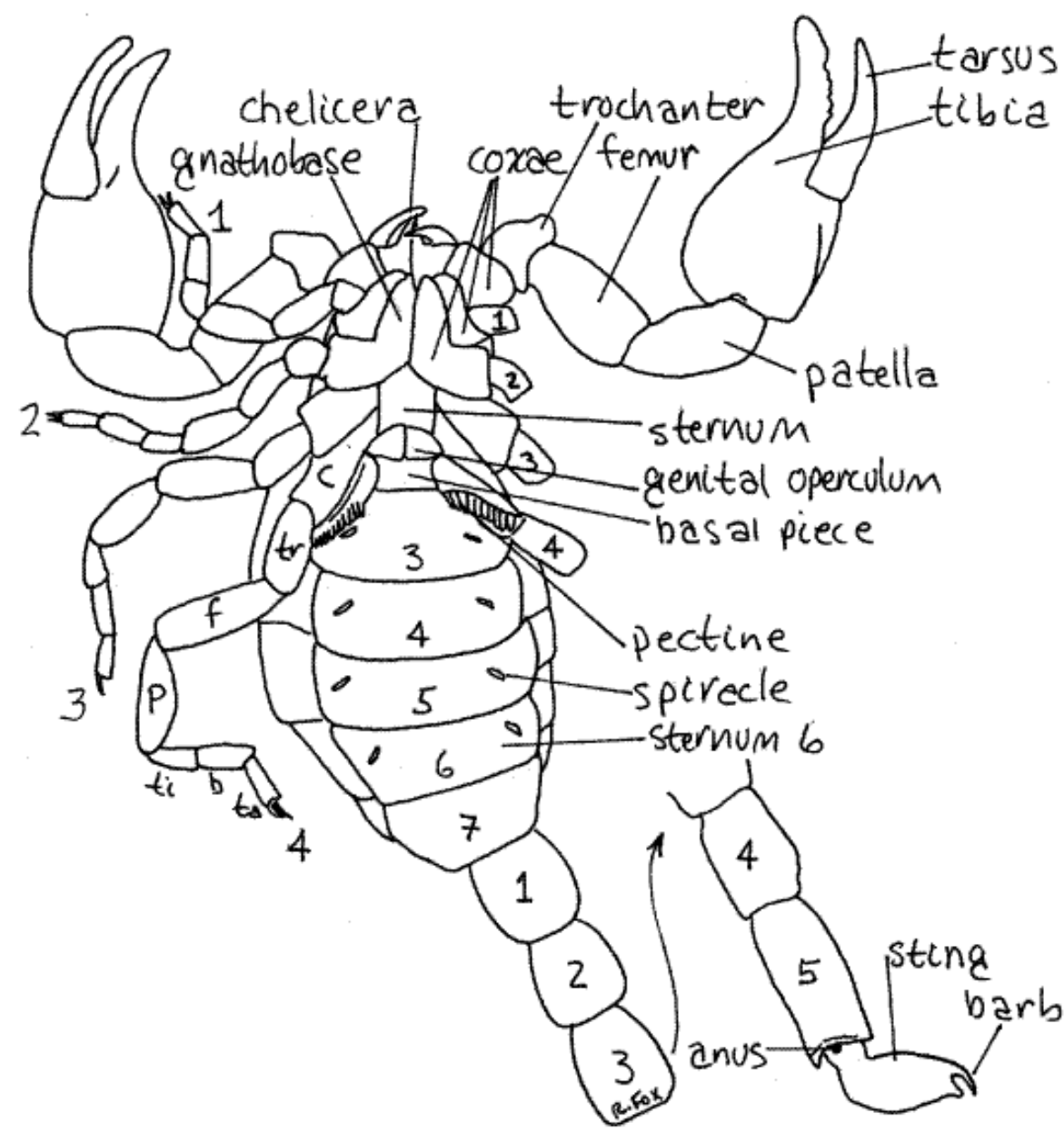




Ordo : Scorpiones



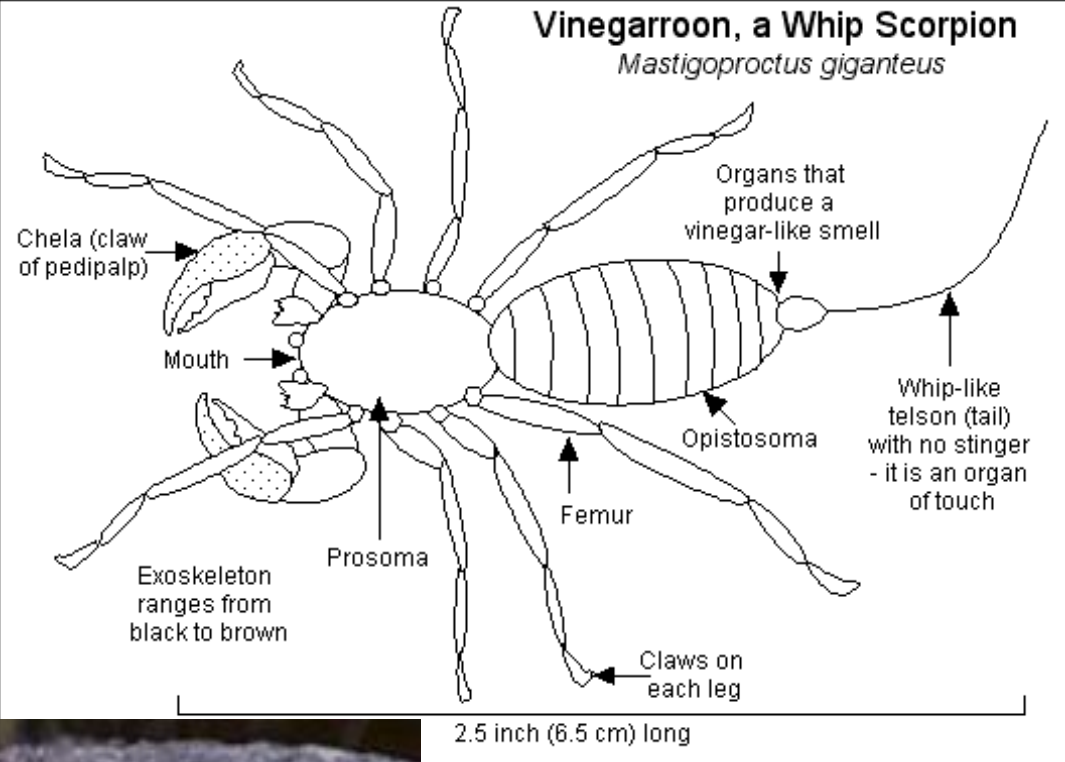
Ordo : Scorpiones



Ordo : Scorpiones



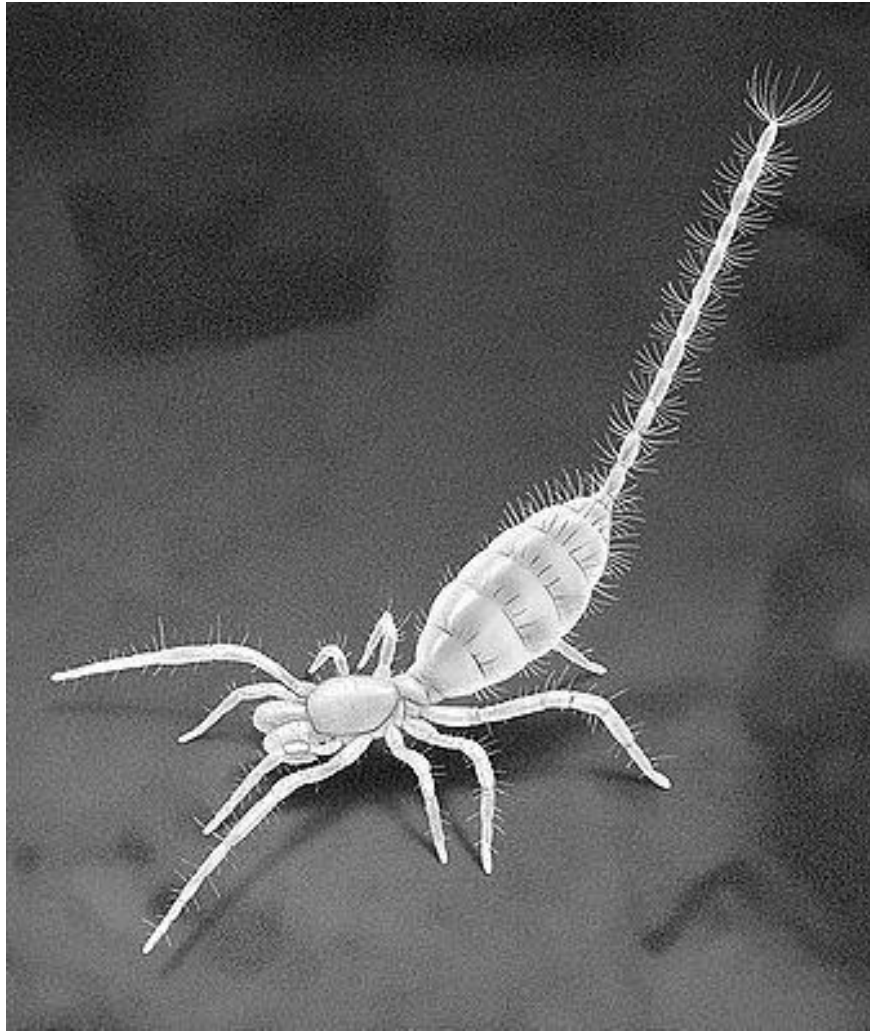
Ordo : Uropygi



Ordo : Amblypygi



Ordo : Palpigradi



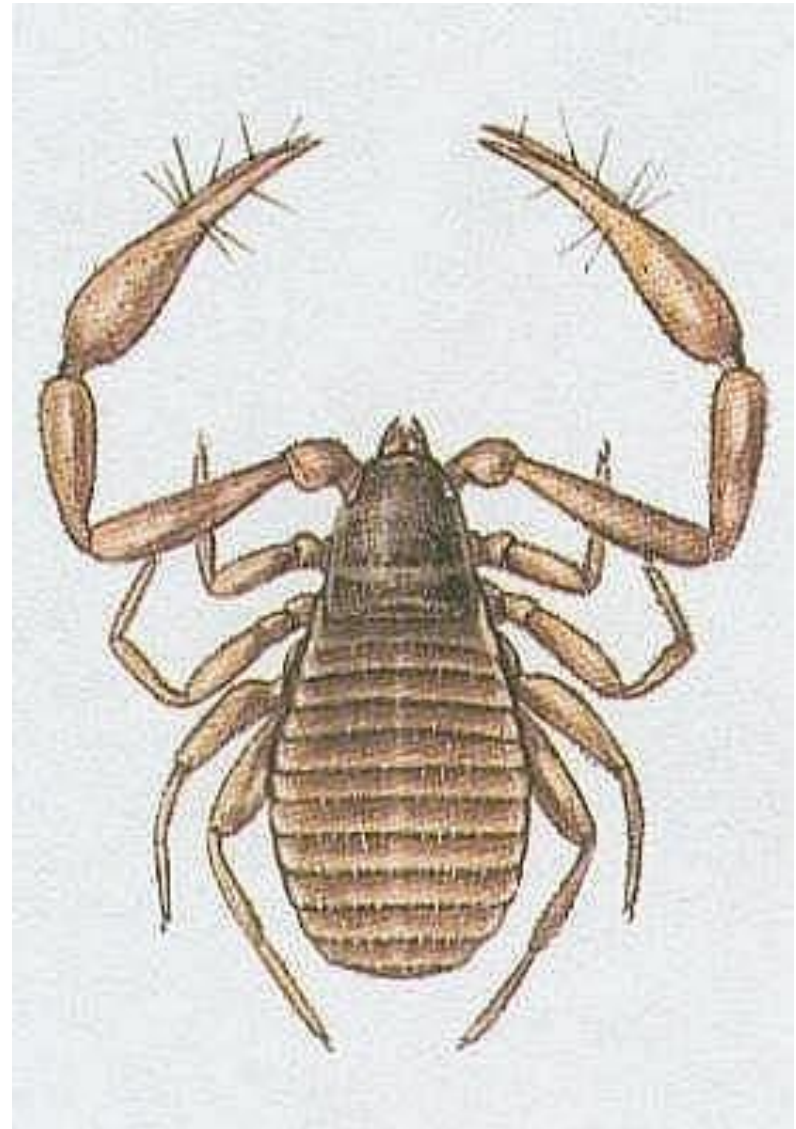
Ordo : Ricinulei



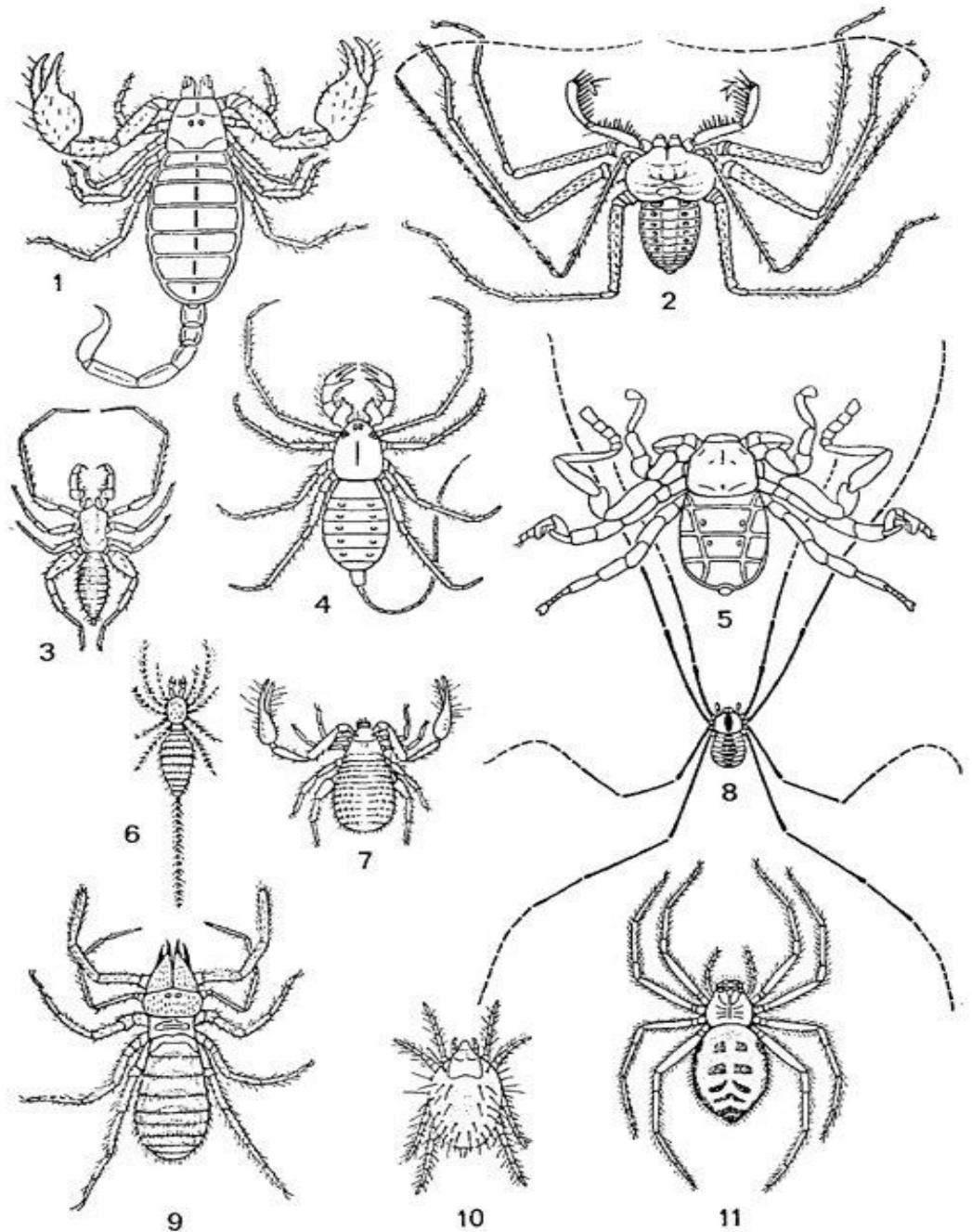
Ricinulei thanatosis



Ordo : Pseudoscorpionida



1. scorpiones,
2. Amblypygi,
3. Schizomida,
4. Uropygi,
5. Ricinulei,
6. Palpigradi,
7. Pseudoscorpions,
8. Opiliones,
9. Solifugae,
10. Acari,
11. Araneae (after Hubert)



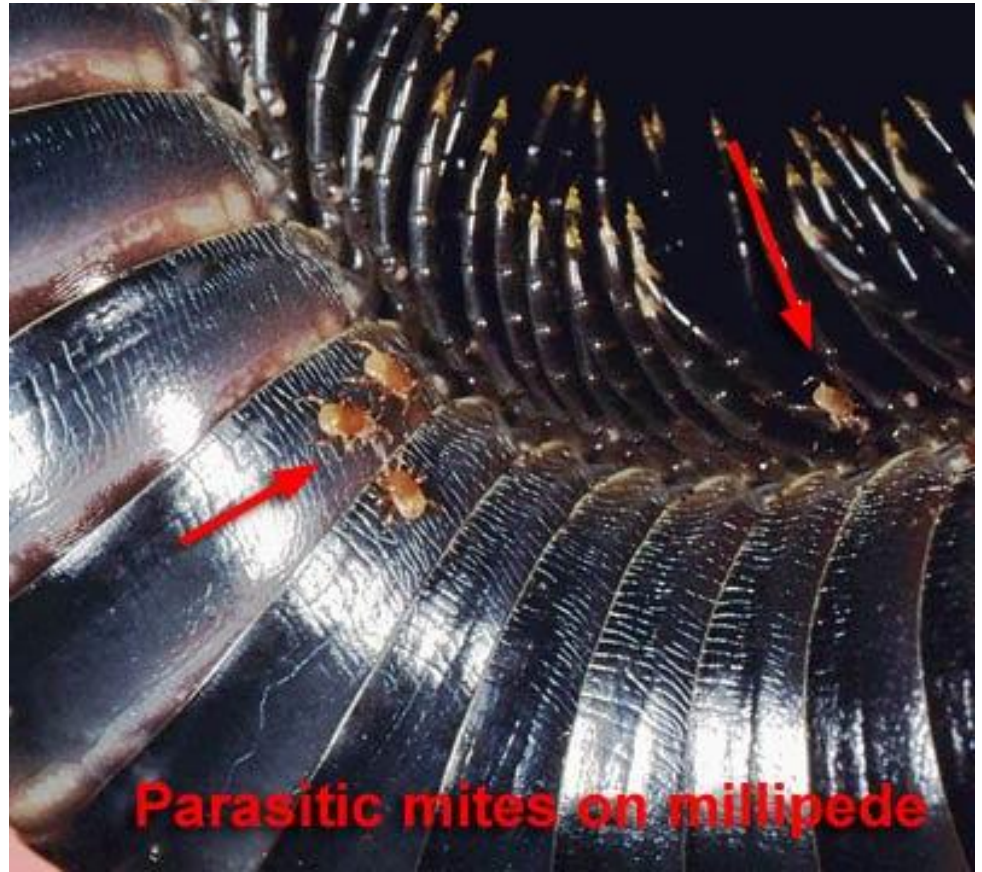
Phylum **Arthropoda**
Subphylum **Chelicerata**
Class **Arachnida**
common **Sun Spider**



Ordo : Opiliones



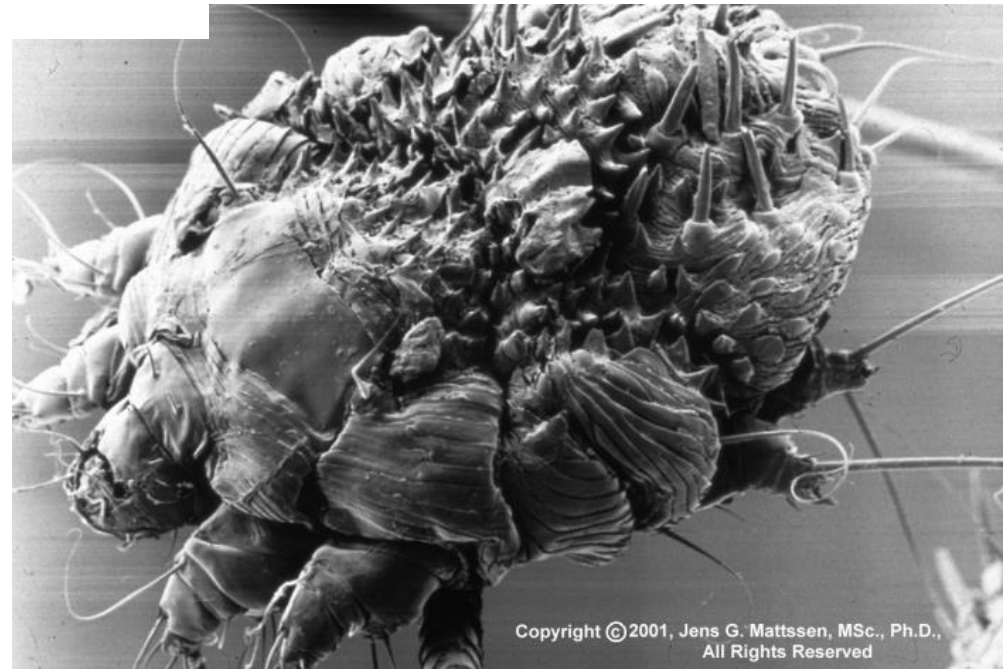
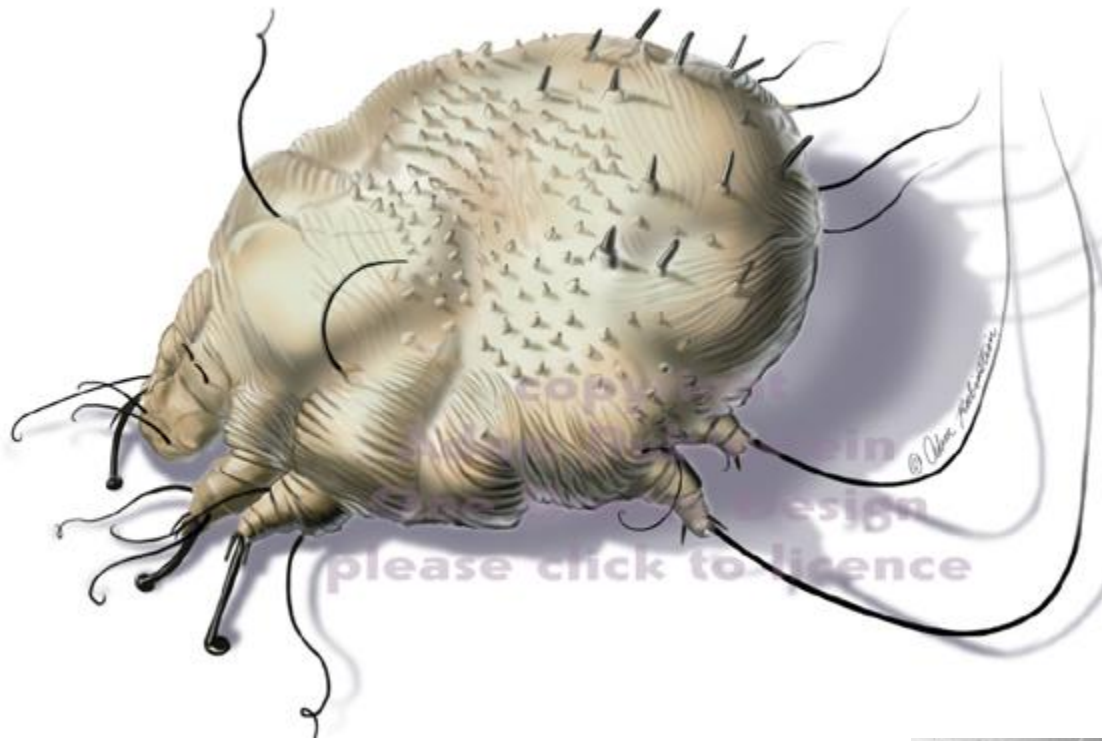
Ordo : Acarina



Parasitic mites on millipede







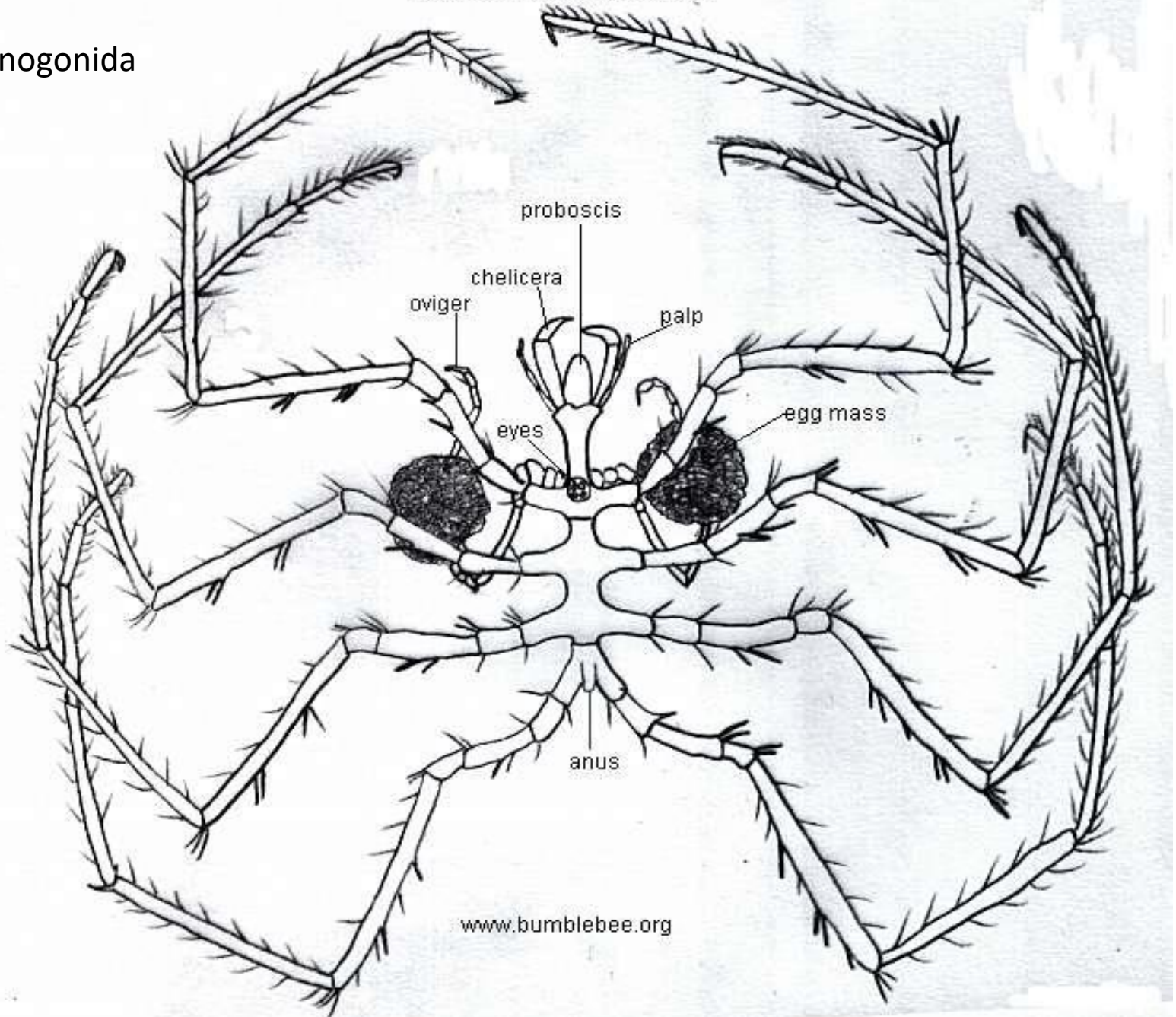
Sarcoptes scabiei

Sarcoptes scabiei



Nymphon rubrum, sea spider

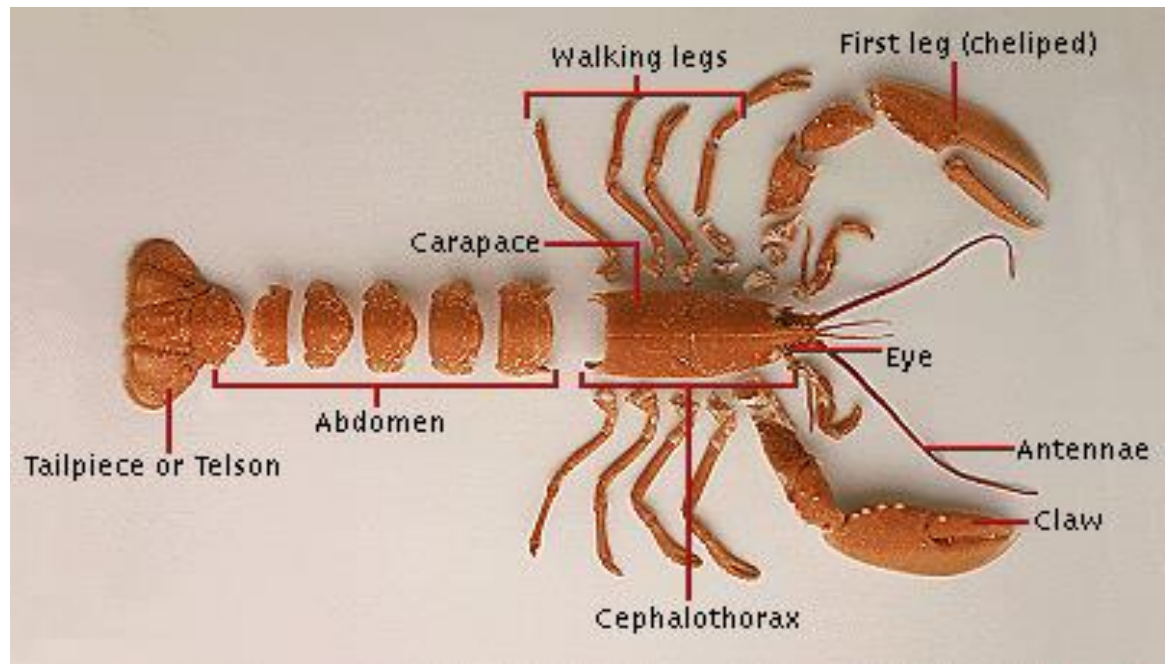
Klasis : Pycnogonida



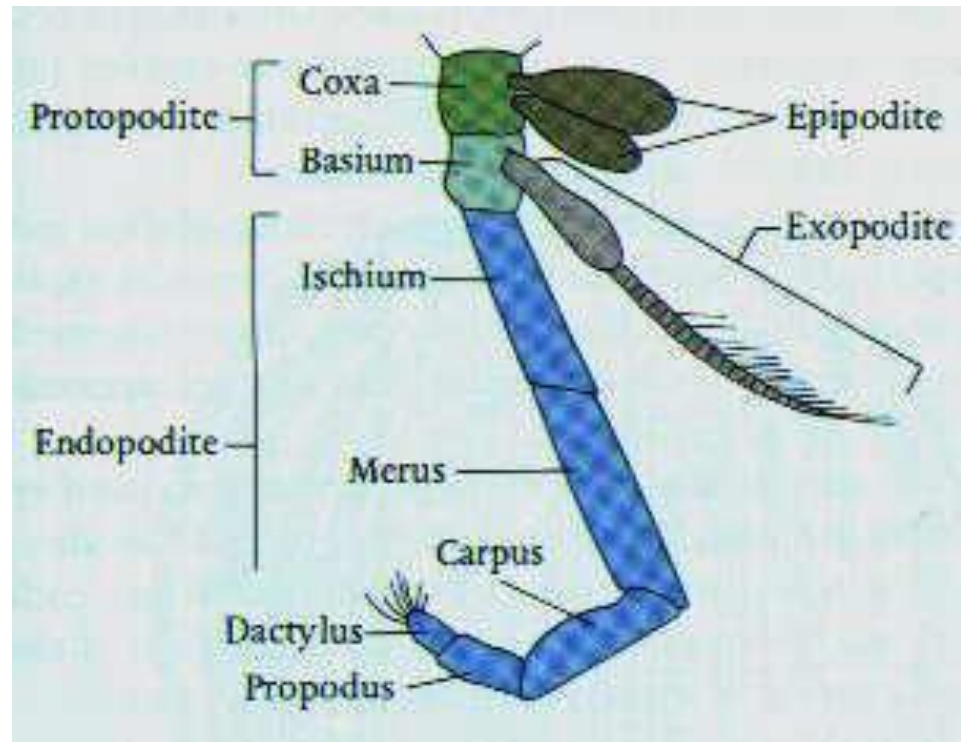
Subfilum : Mandibulata
Klasis : Crustacea

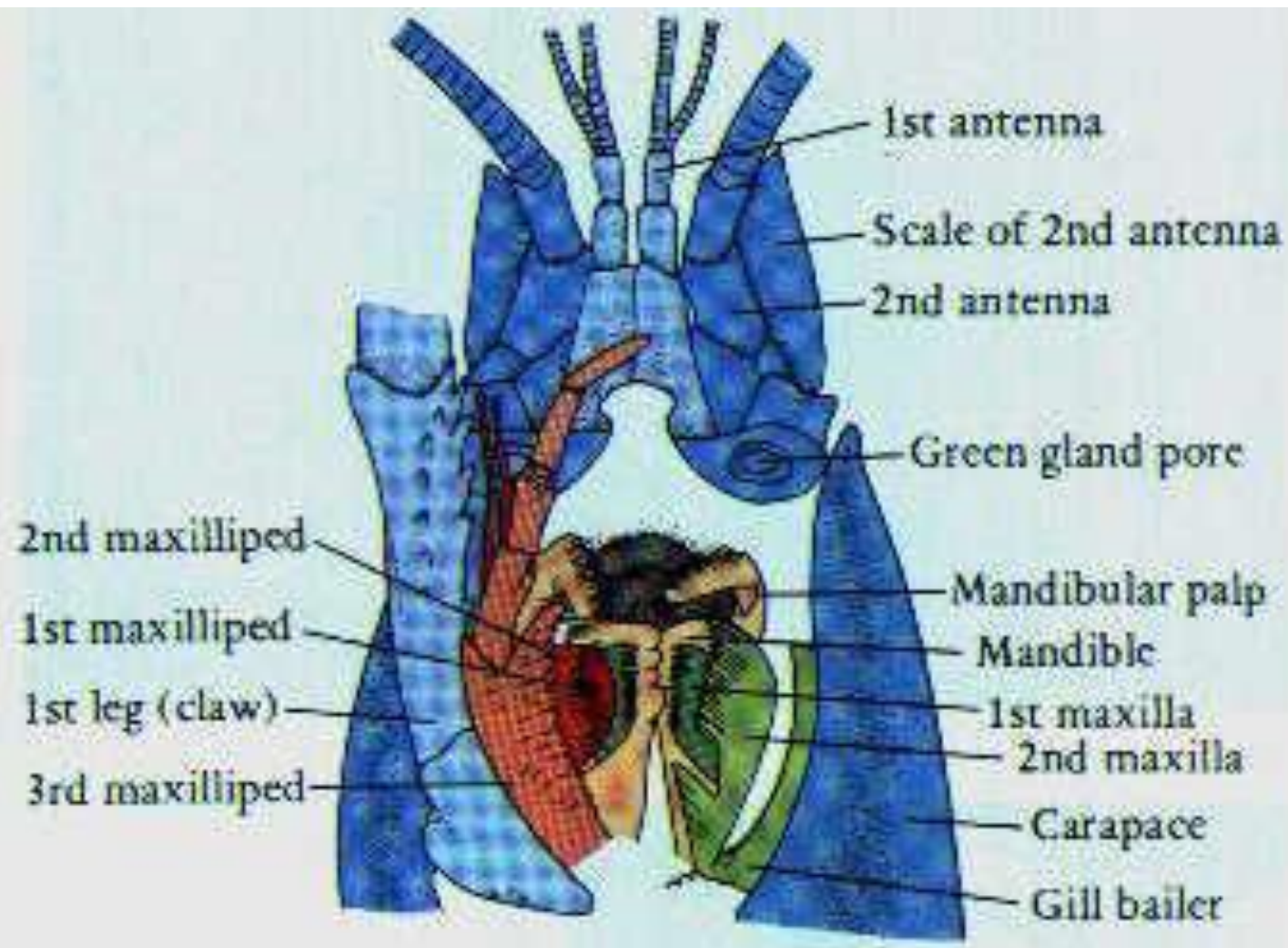


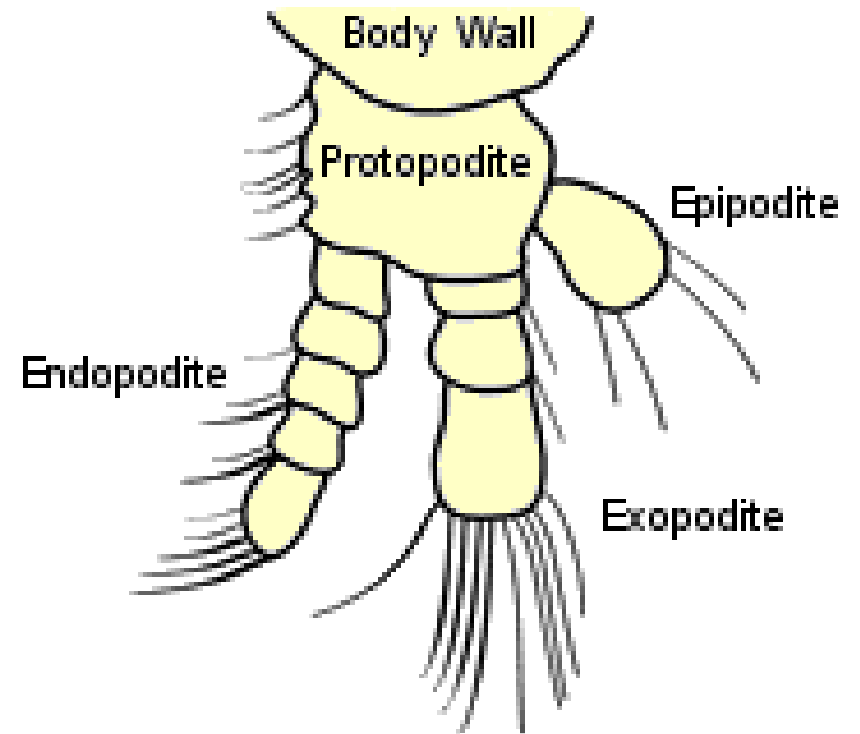
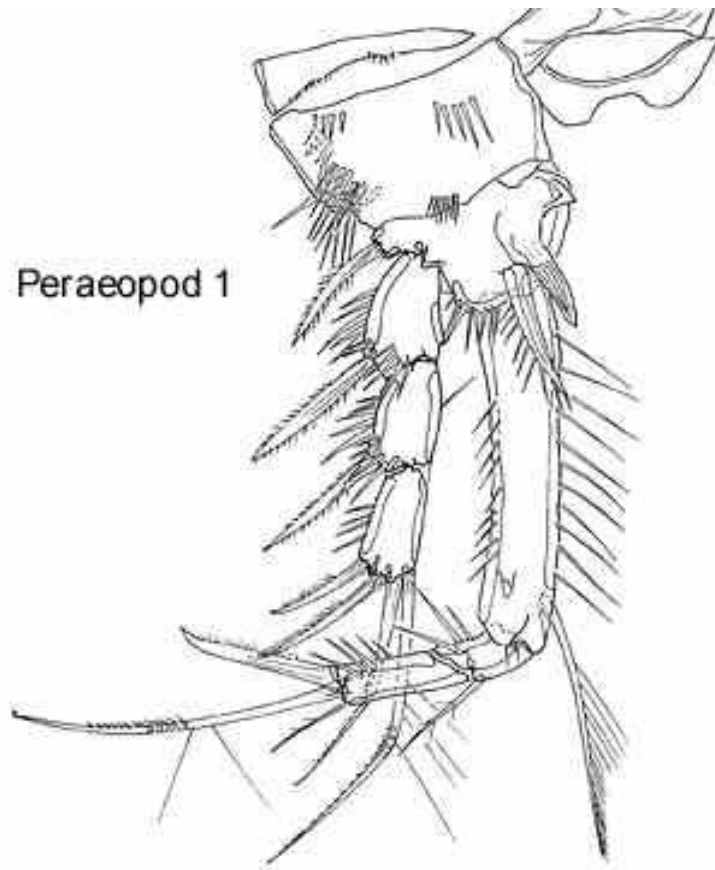
Entomostraca



Malacostraca







Klasis : Crustacea

SubKlasis : Cephalocarida

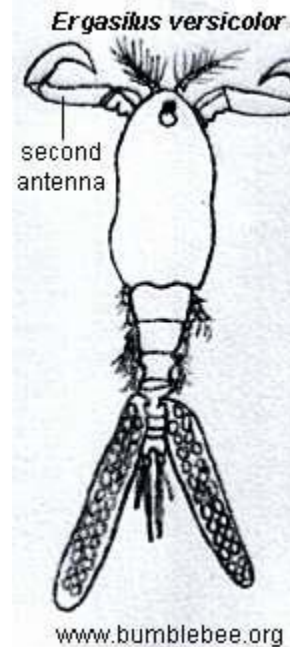
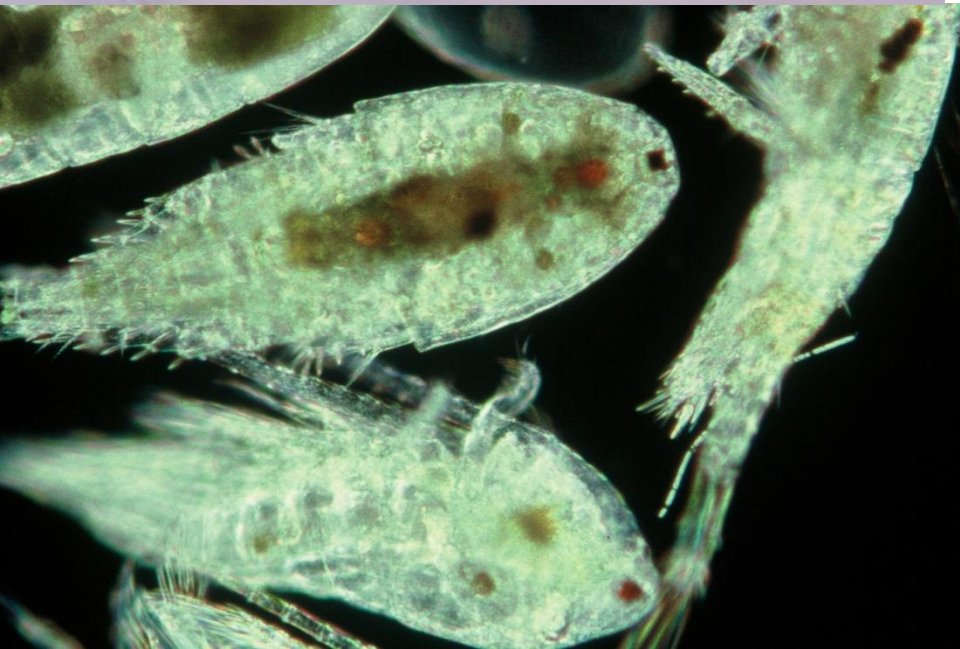
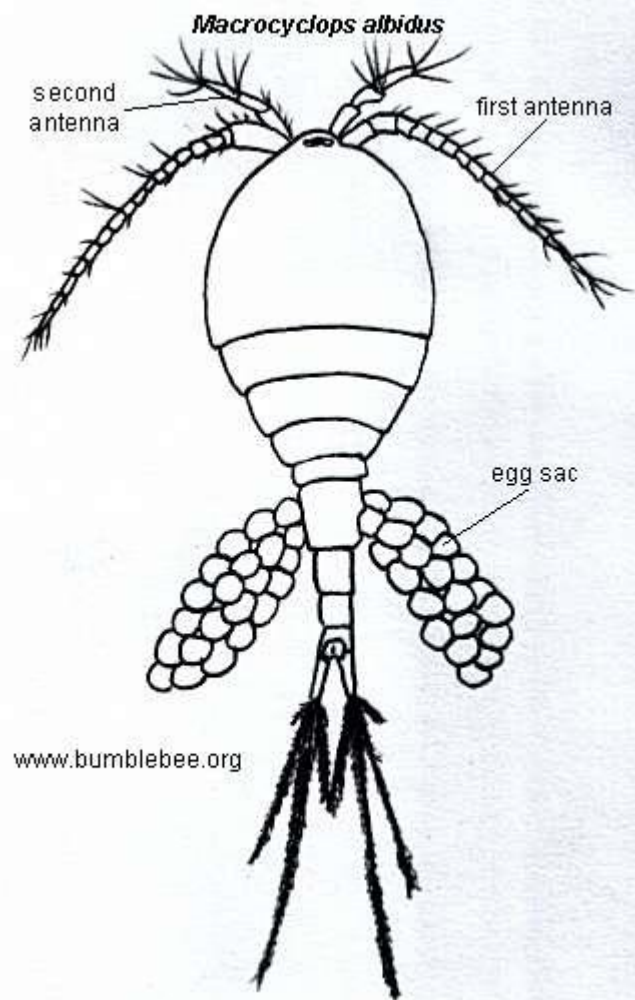


Subklasis : Branchiopoda

Ordo : [Ostracoda](#)

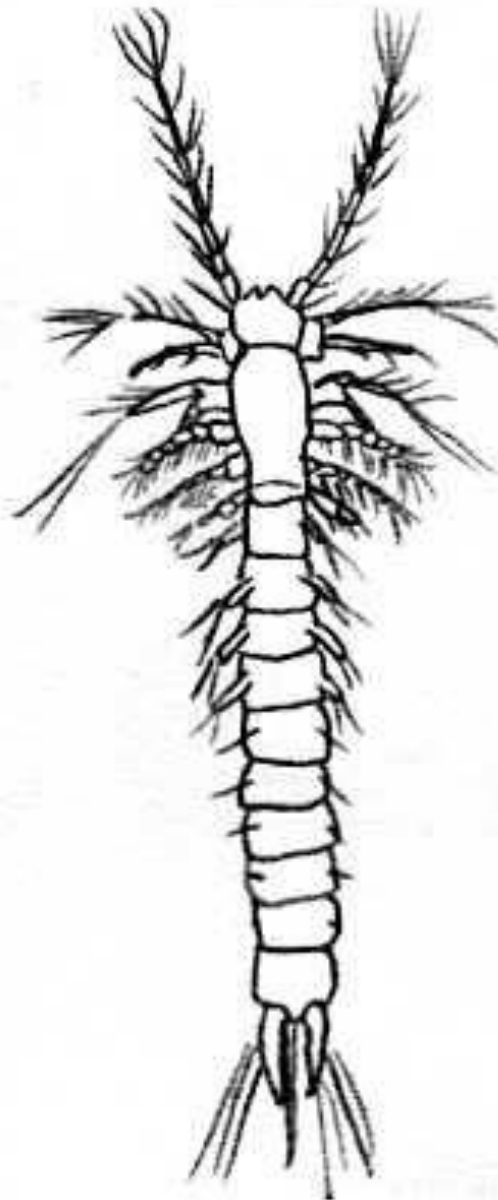


Subklasis : Copepoda

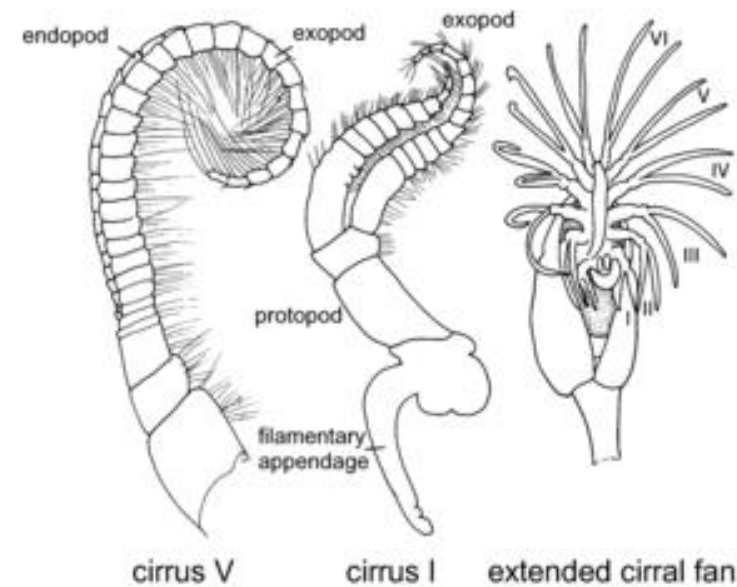
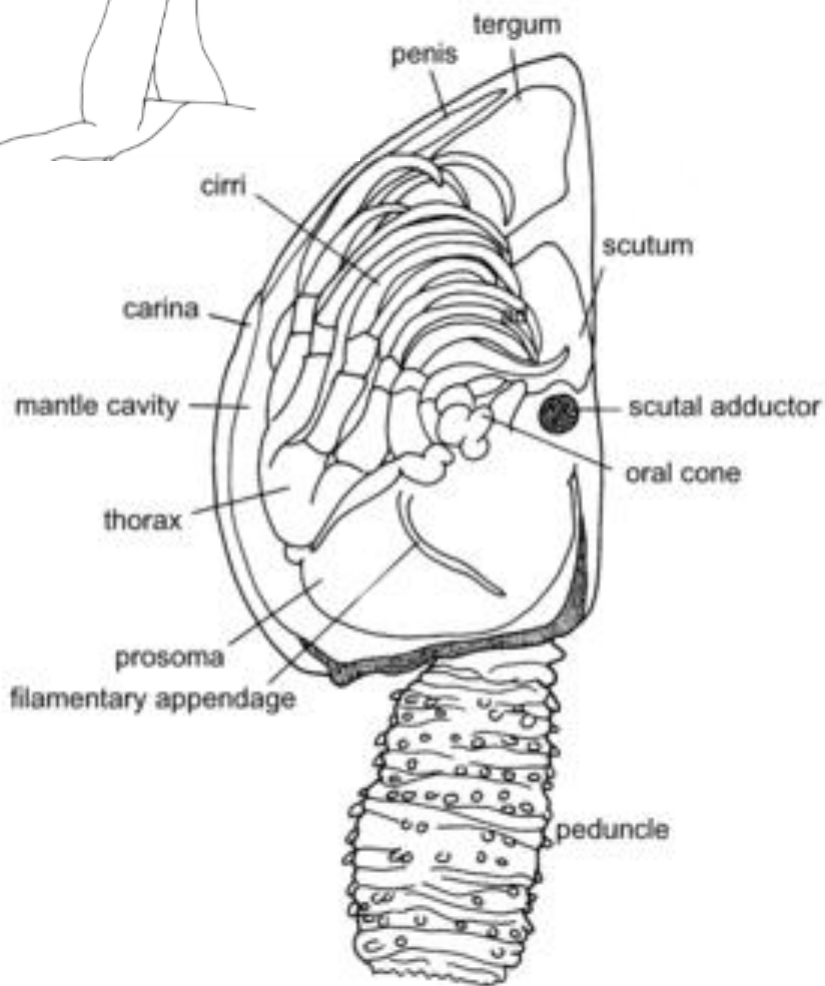
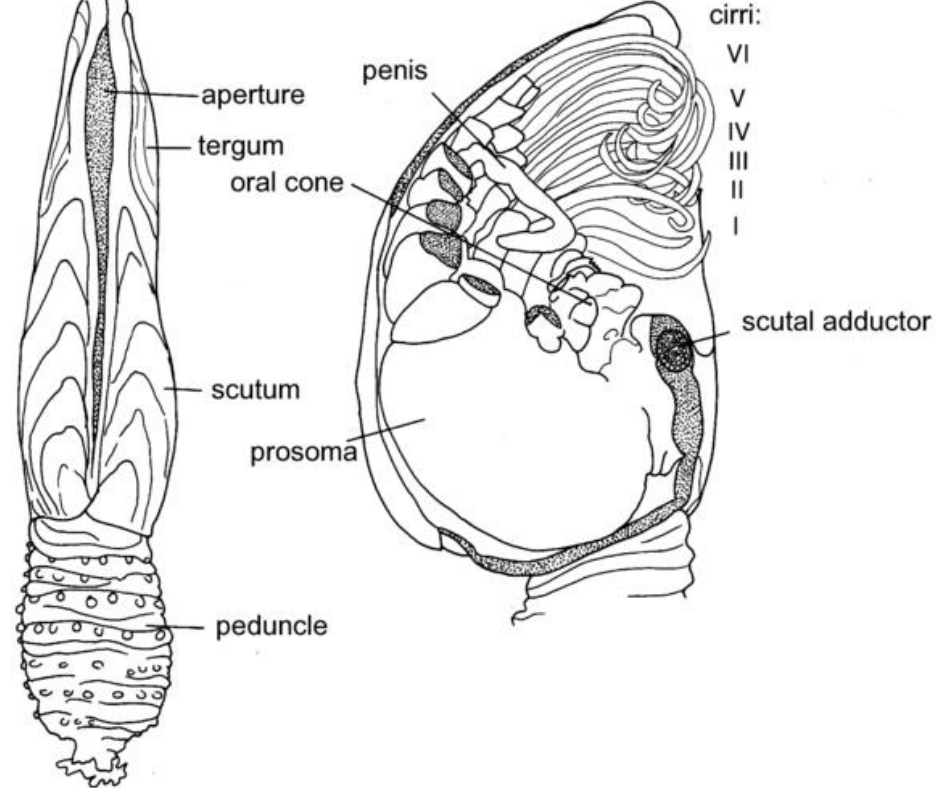
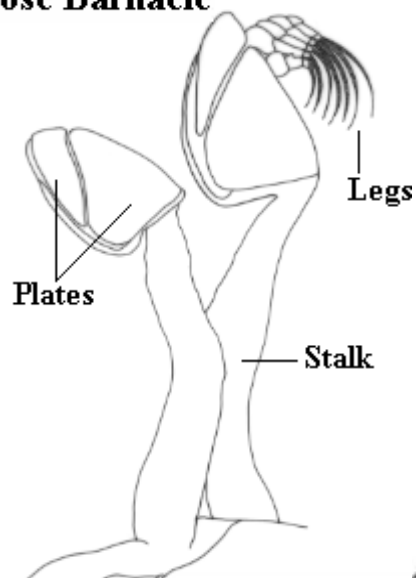


Subklasis : Mystacocarida - Branchiura

Mystacocarida



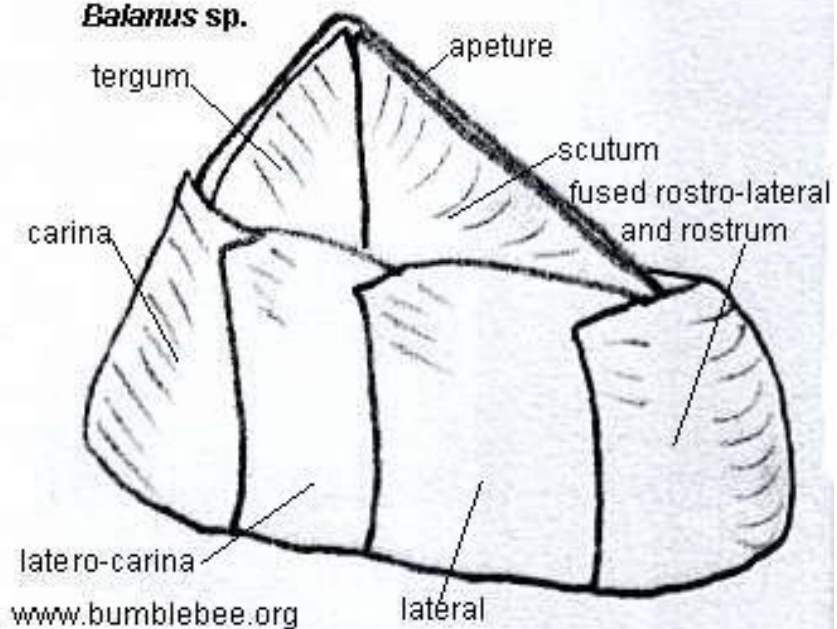
Goose Barnacle



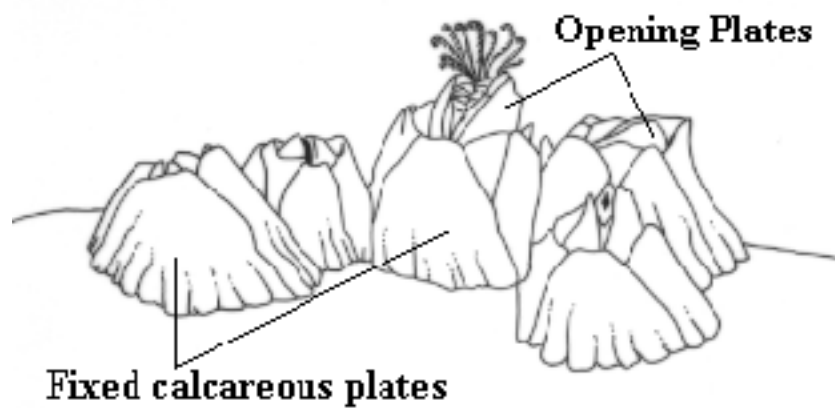


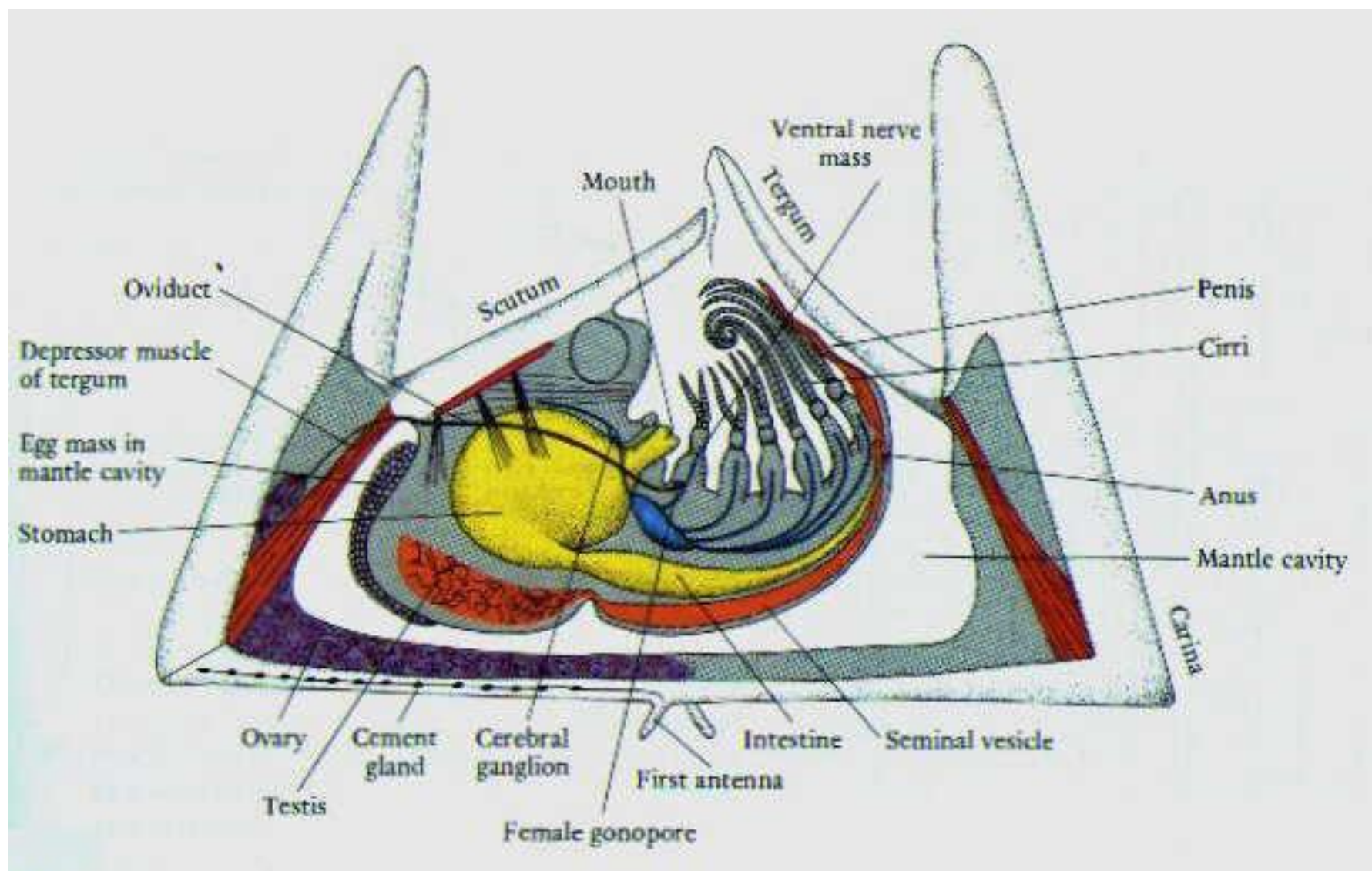
Lepas anatifera Linnaeus

Balanus sp.



Acorn Barnacle







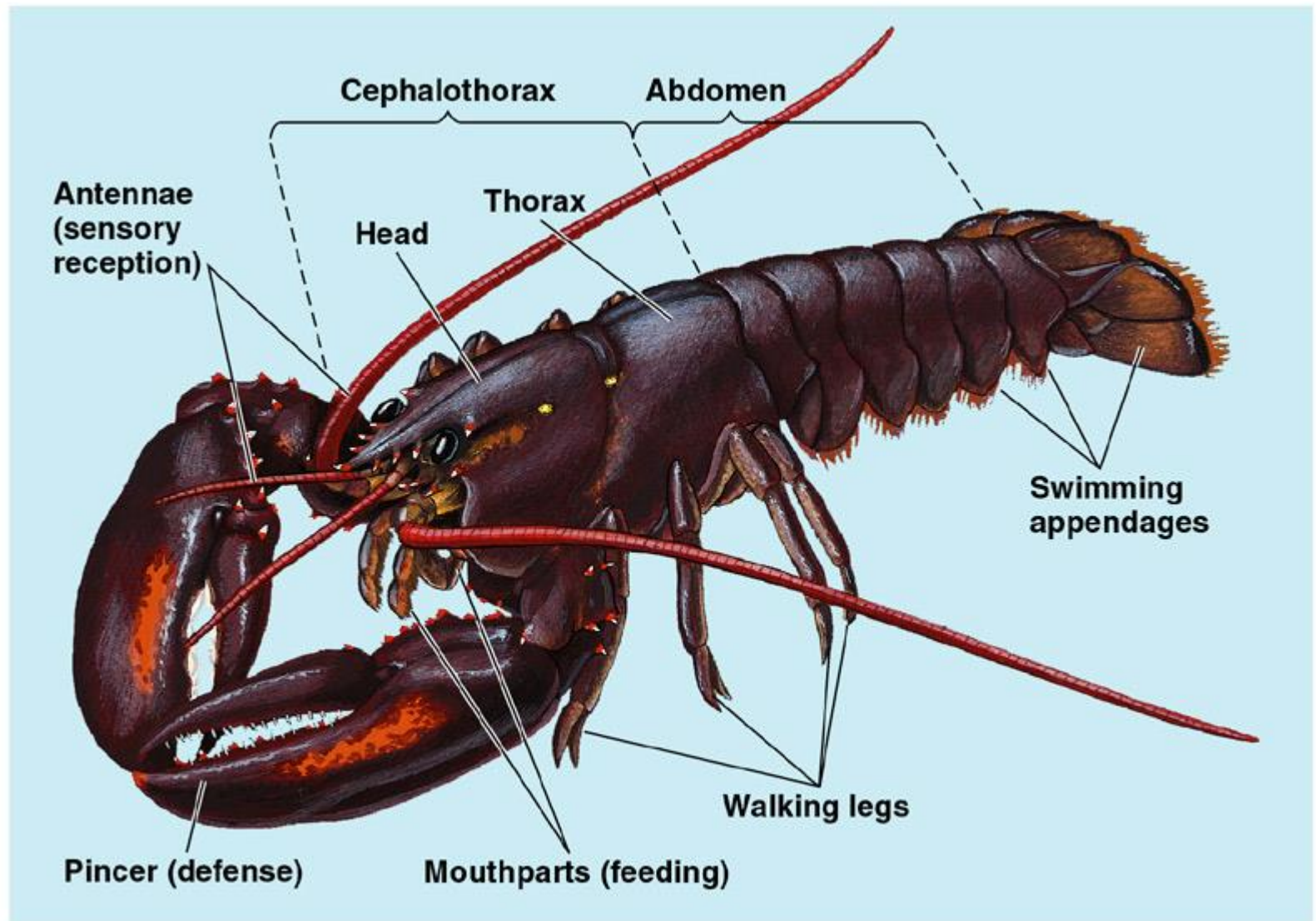
Balanus nubilus

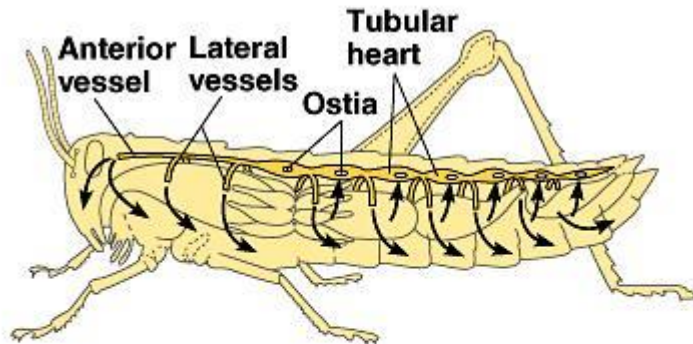
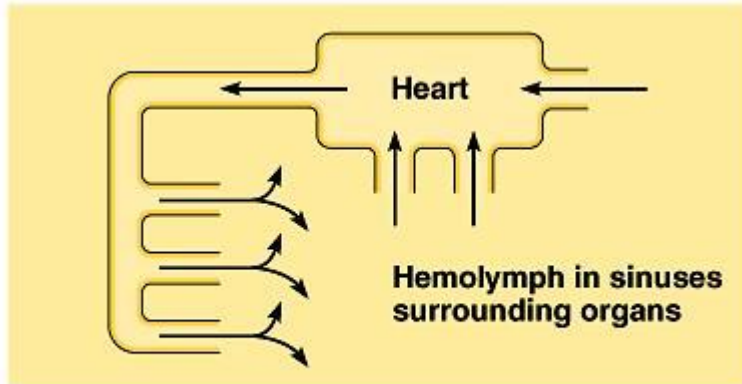
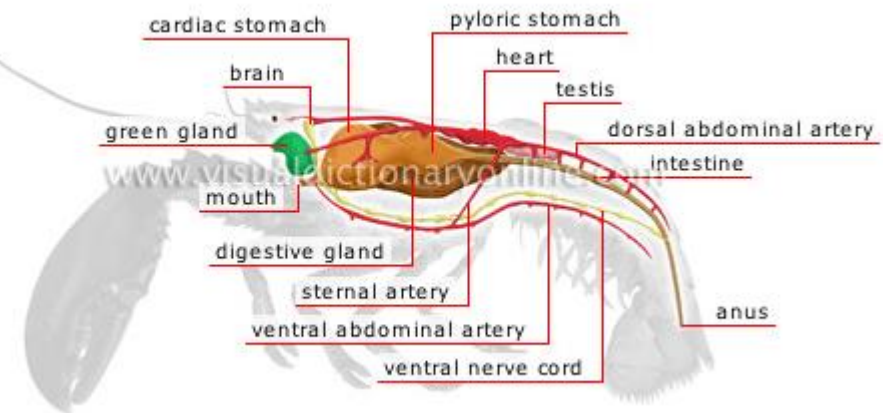


Balanus amphitrite



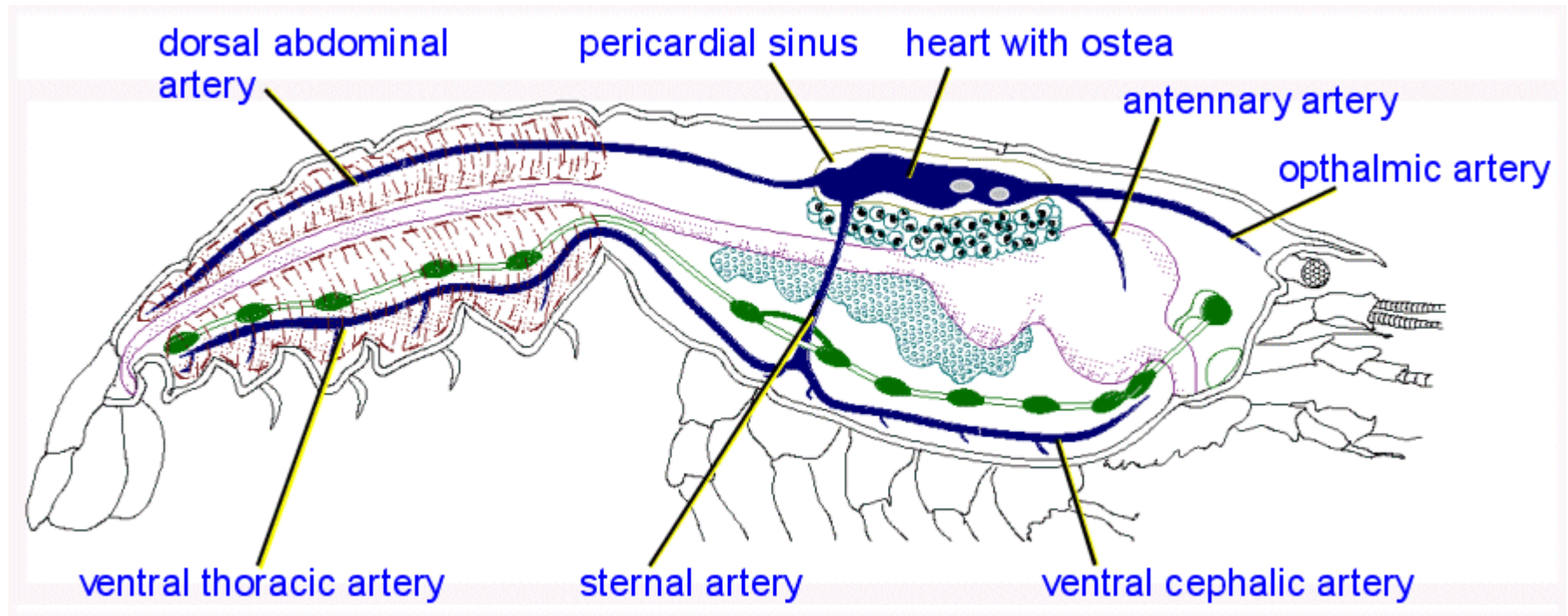




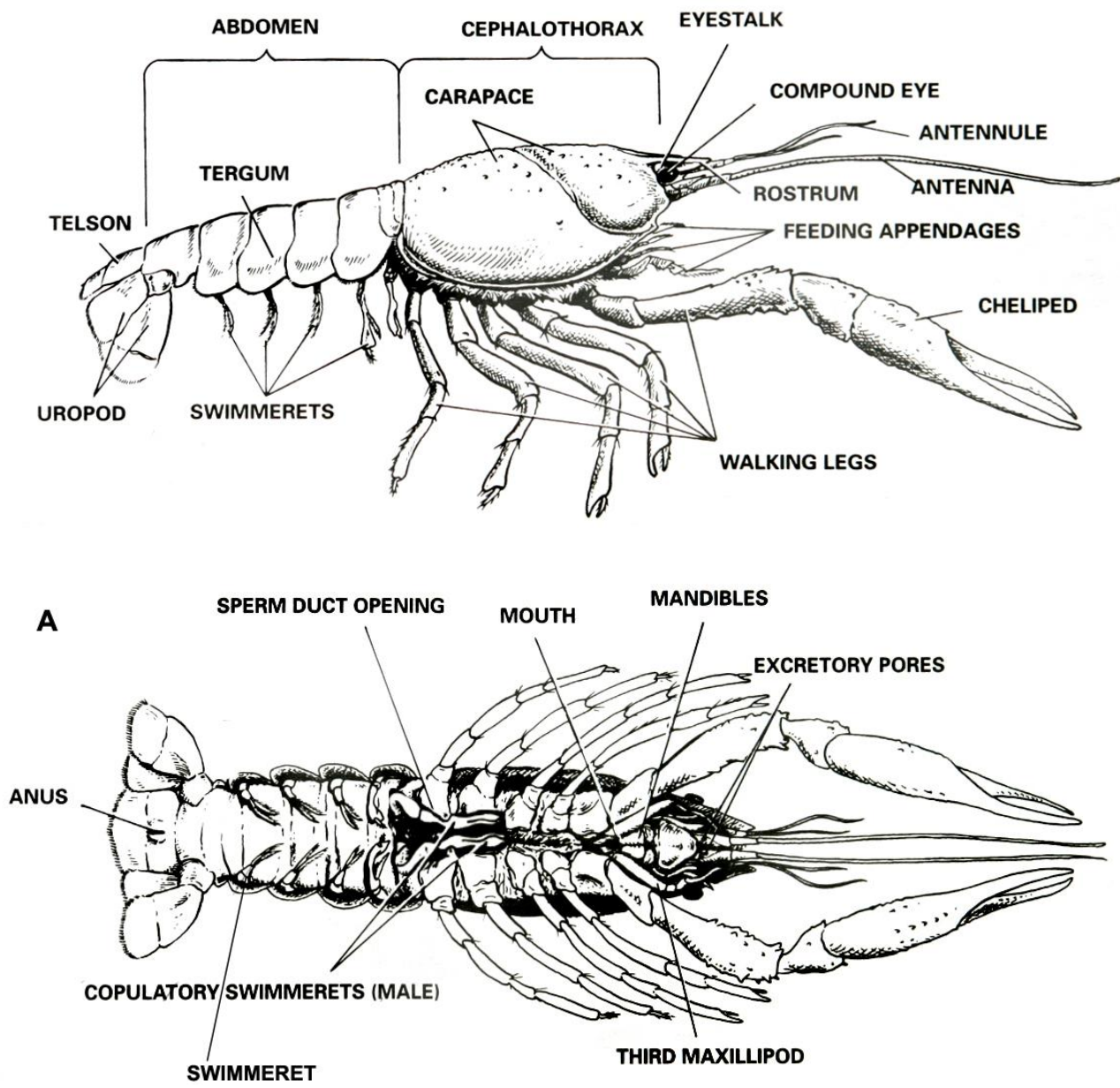


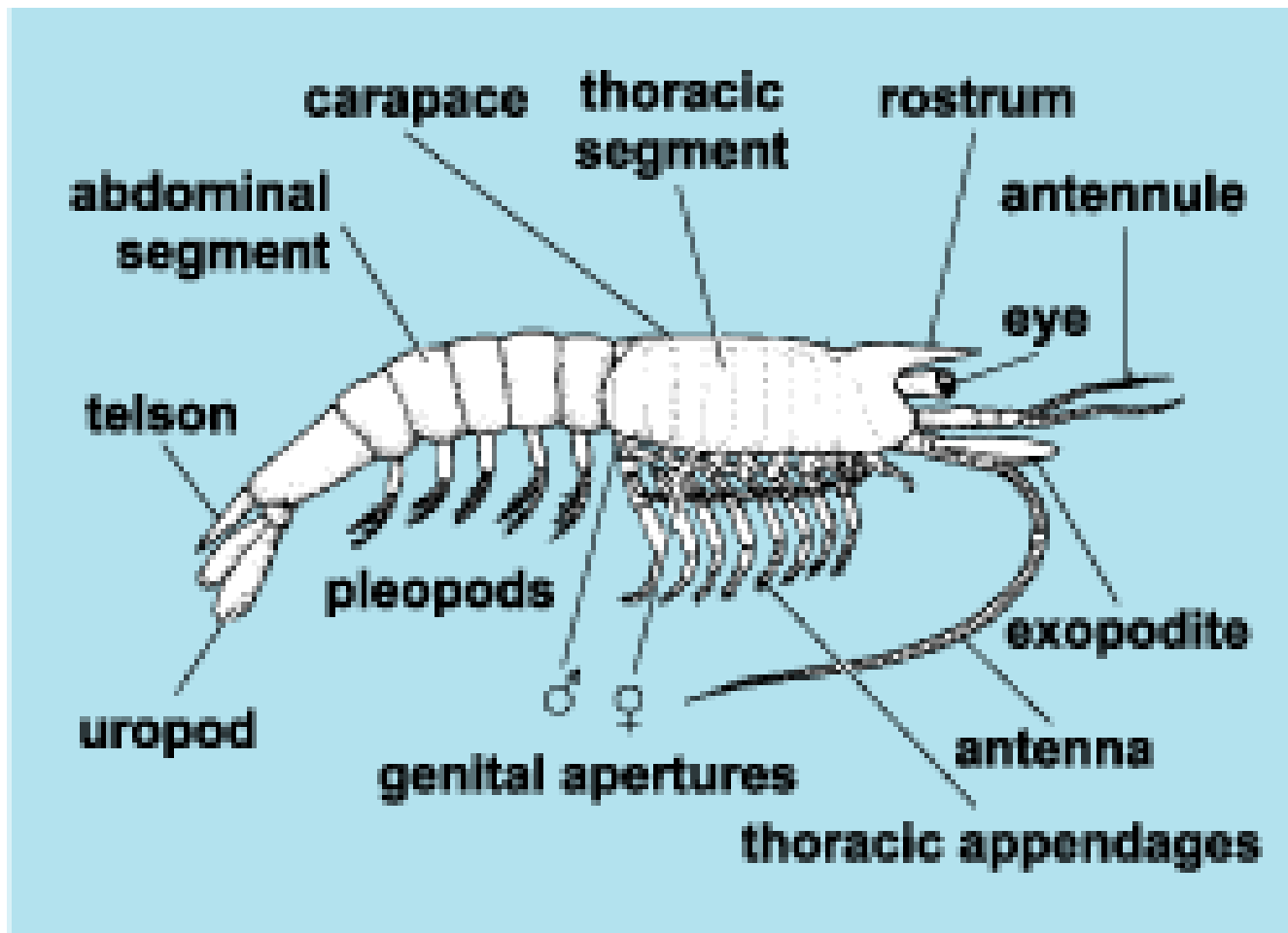
(a) Open circulatory system

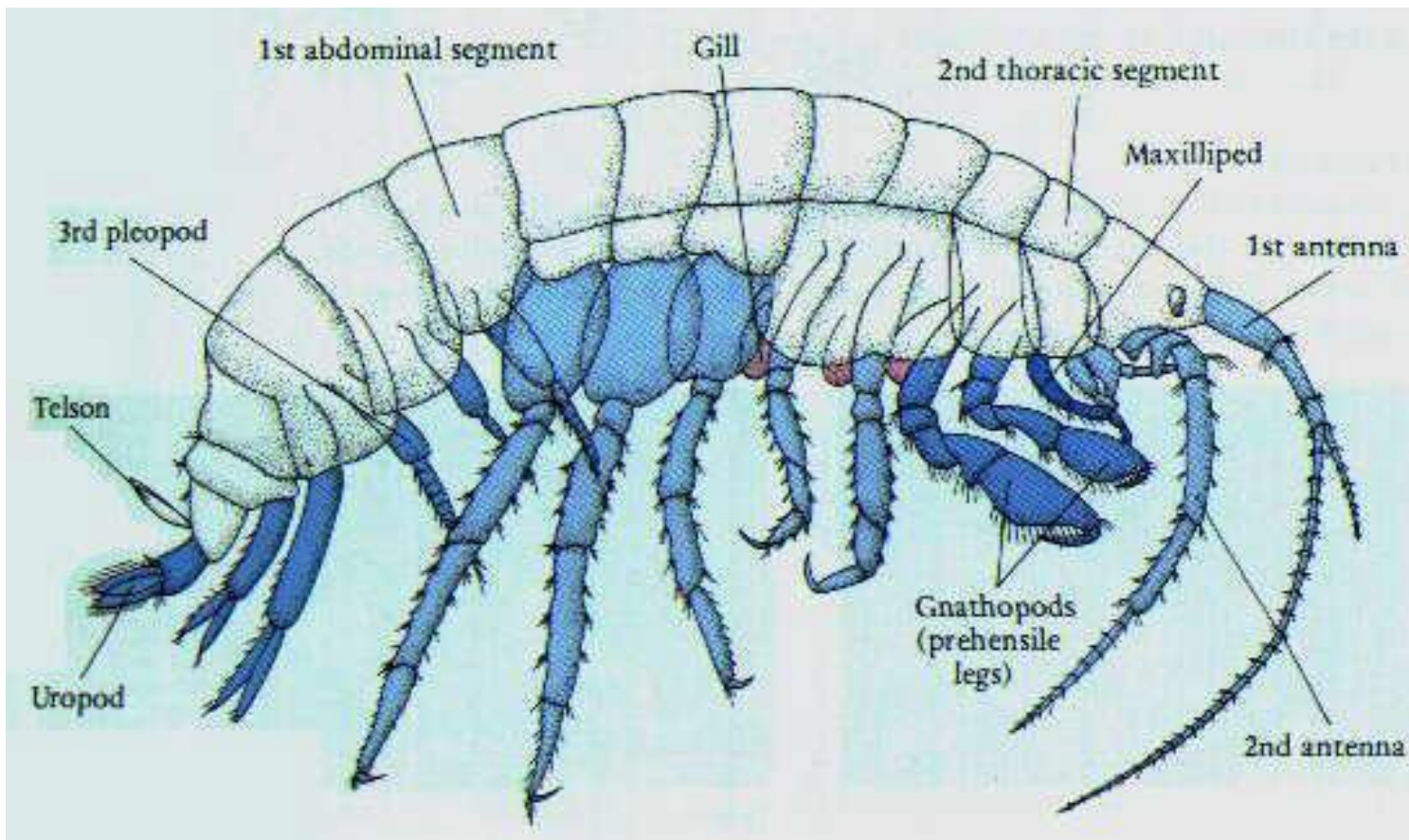
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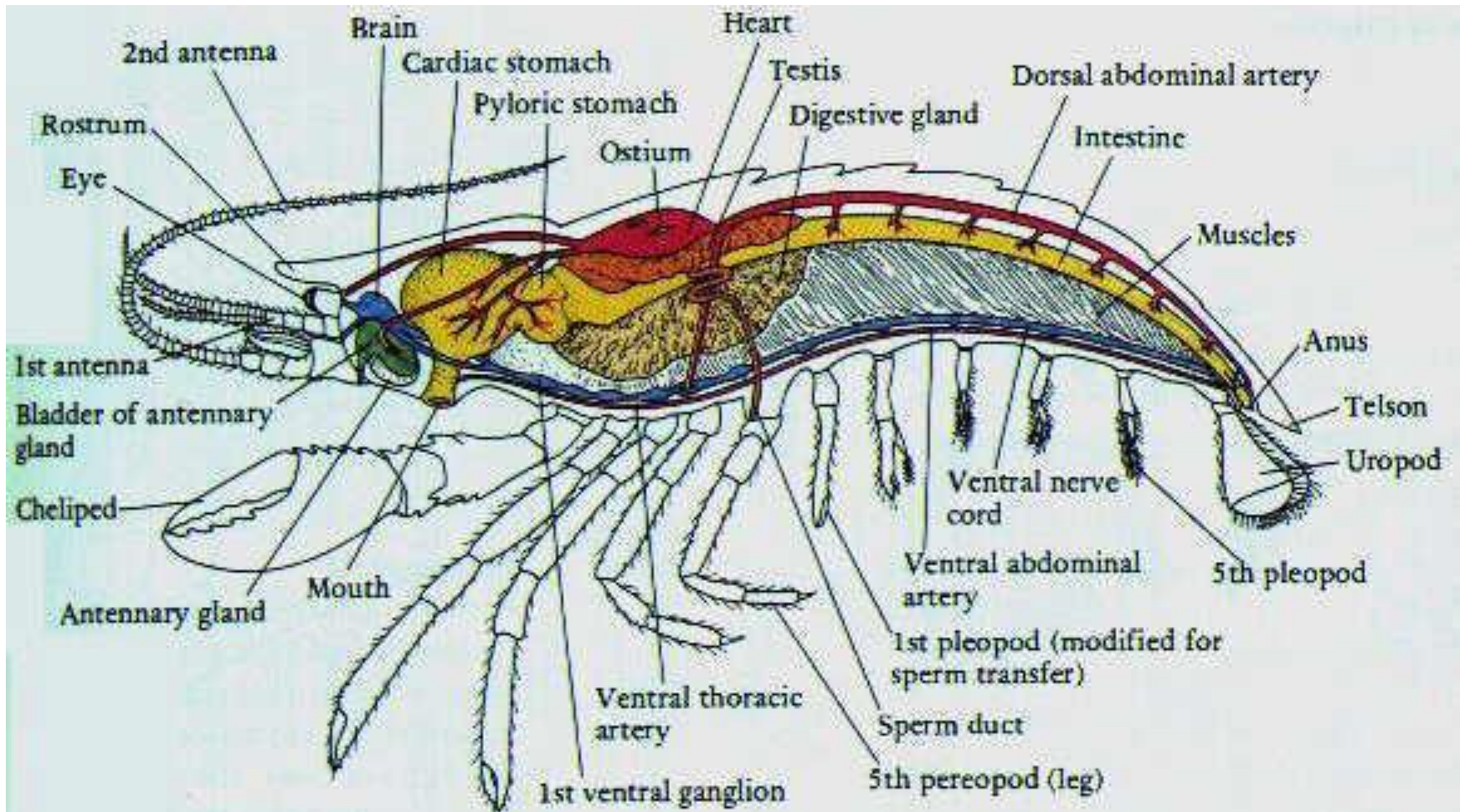


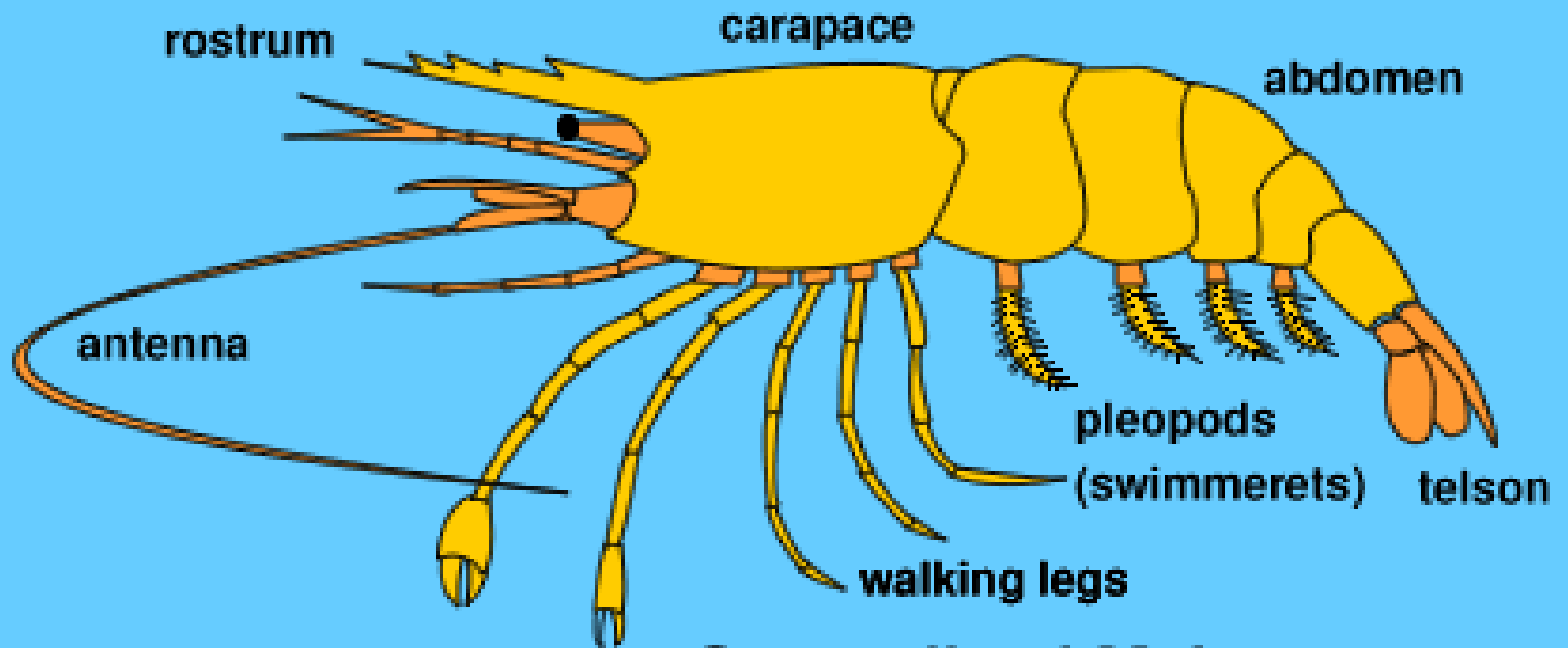
Subklasis : Malacostraca







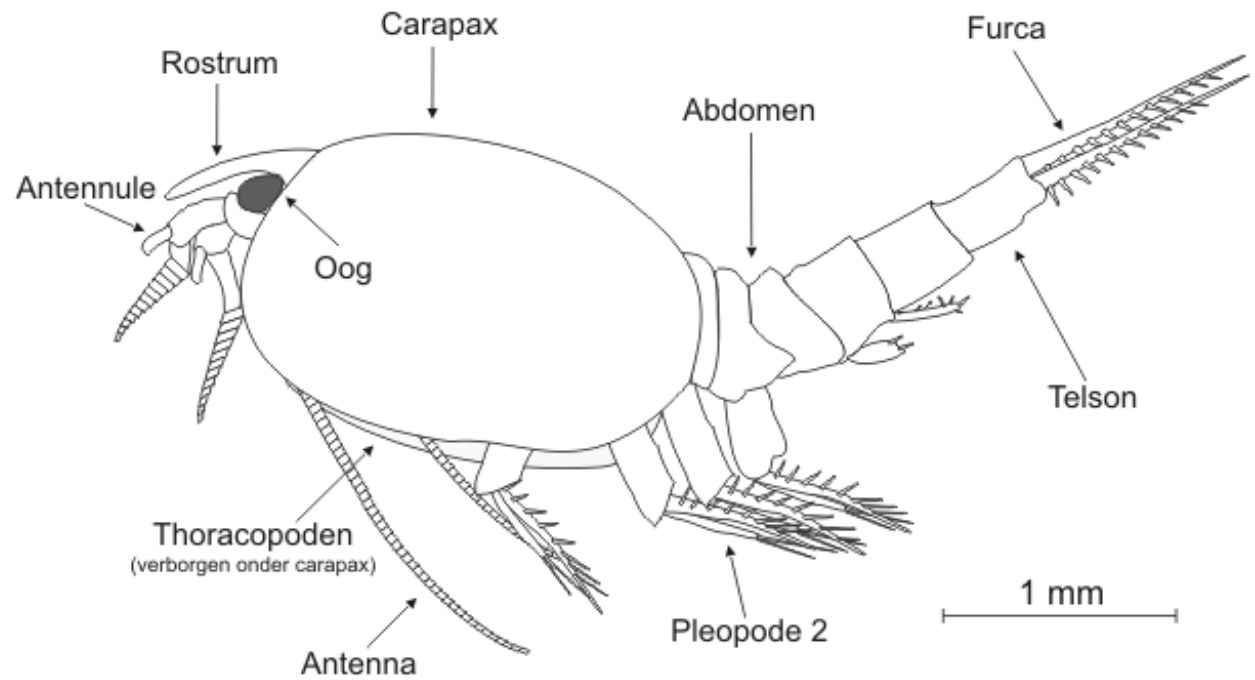




Generalized Malacostracan

Grup : Phyllocarida (Nebaliacea)

Ordo : Leptostraca



Grup : Eumalacostraca
Superordo : Syncarida

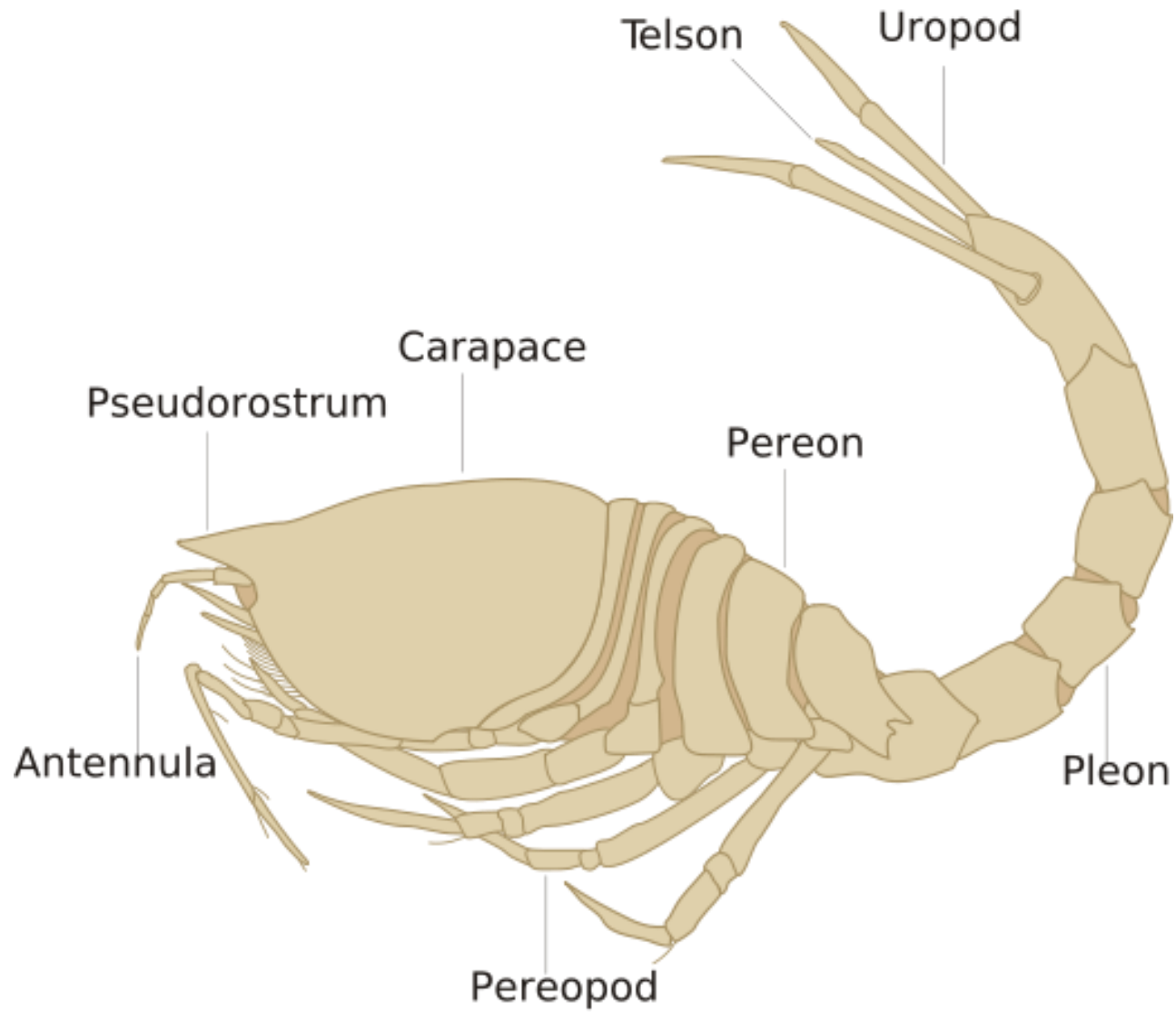


Superordo : Peracarida
Ordo : Mysidacea

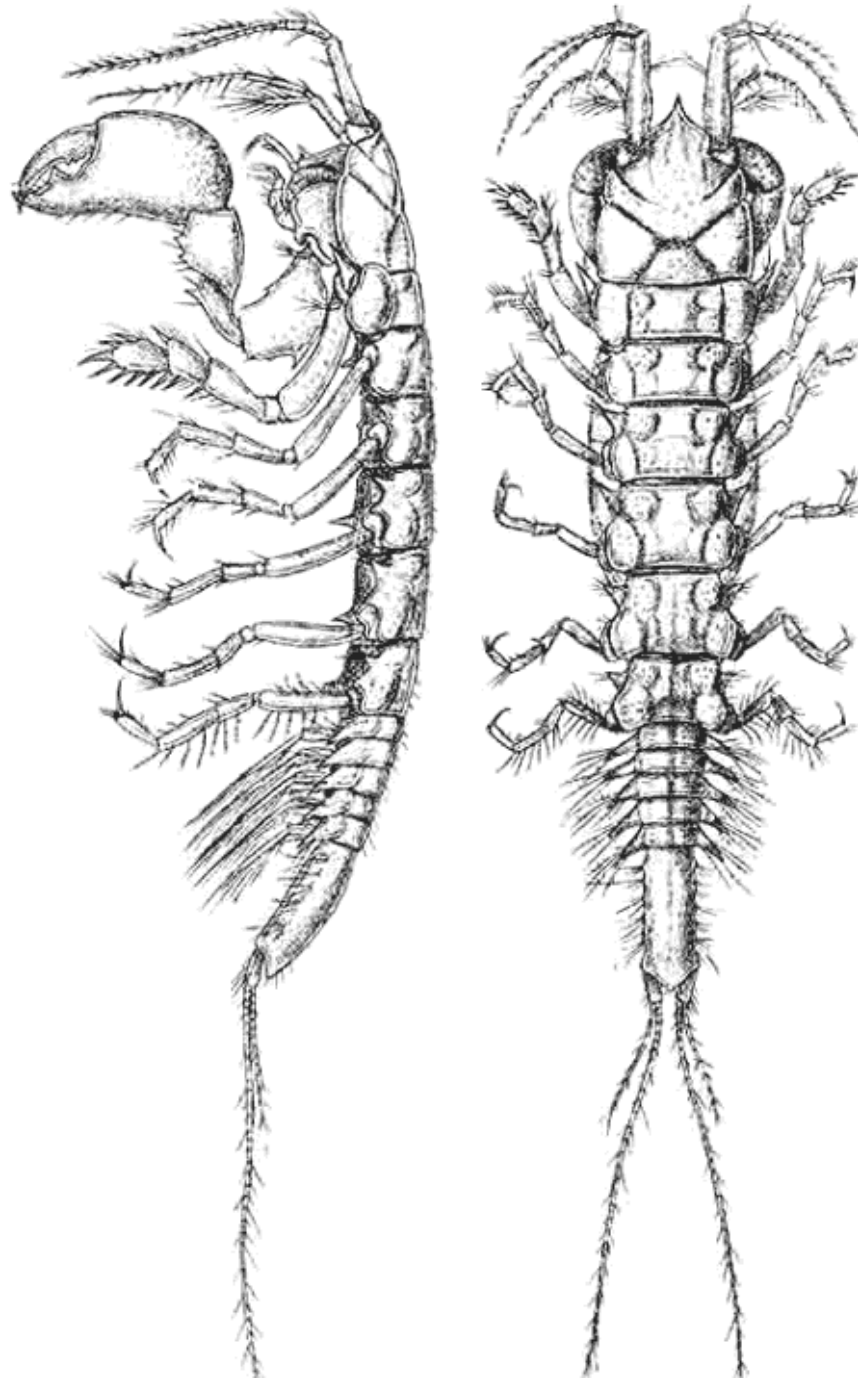
**Heteromysis sp, an
unusually colourful
opossum shrimp
(Mysidacea)**



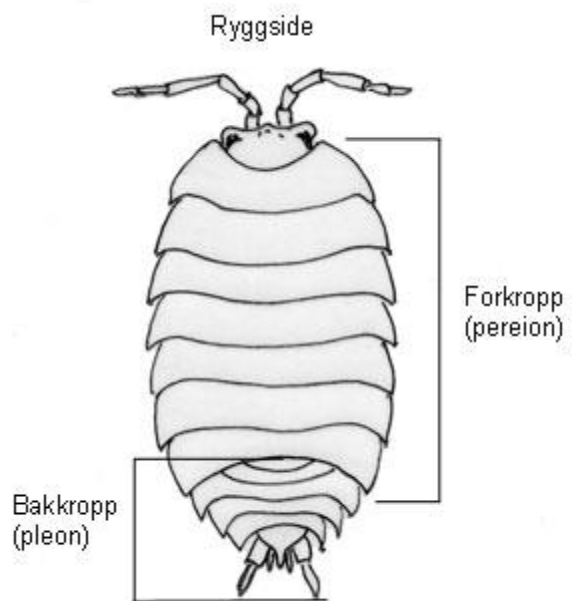
Ordo : Cumacea



Ordo : Tanaidacea



Ordo : Isopoda

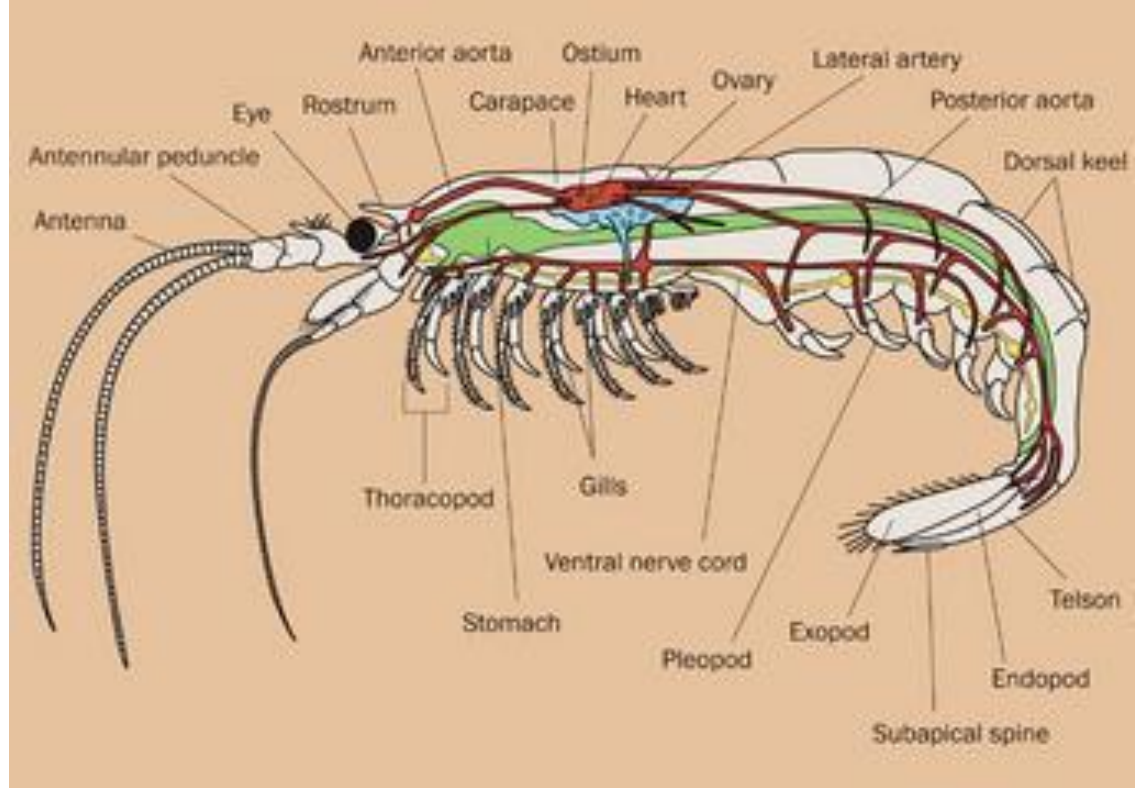


Ordo : Amphipoda

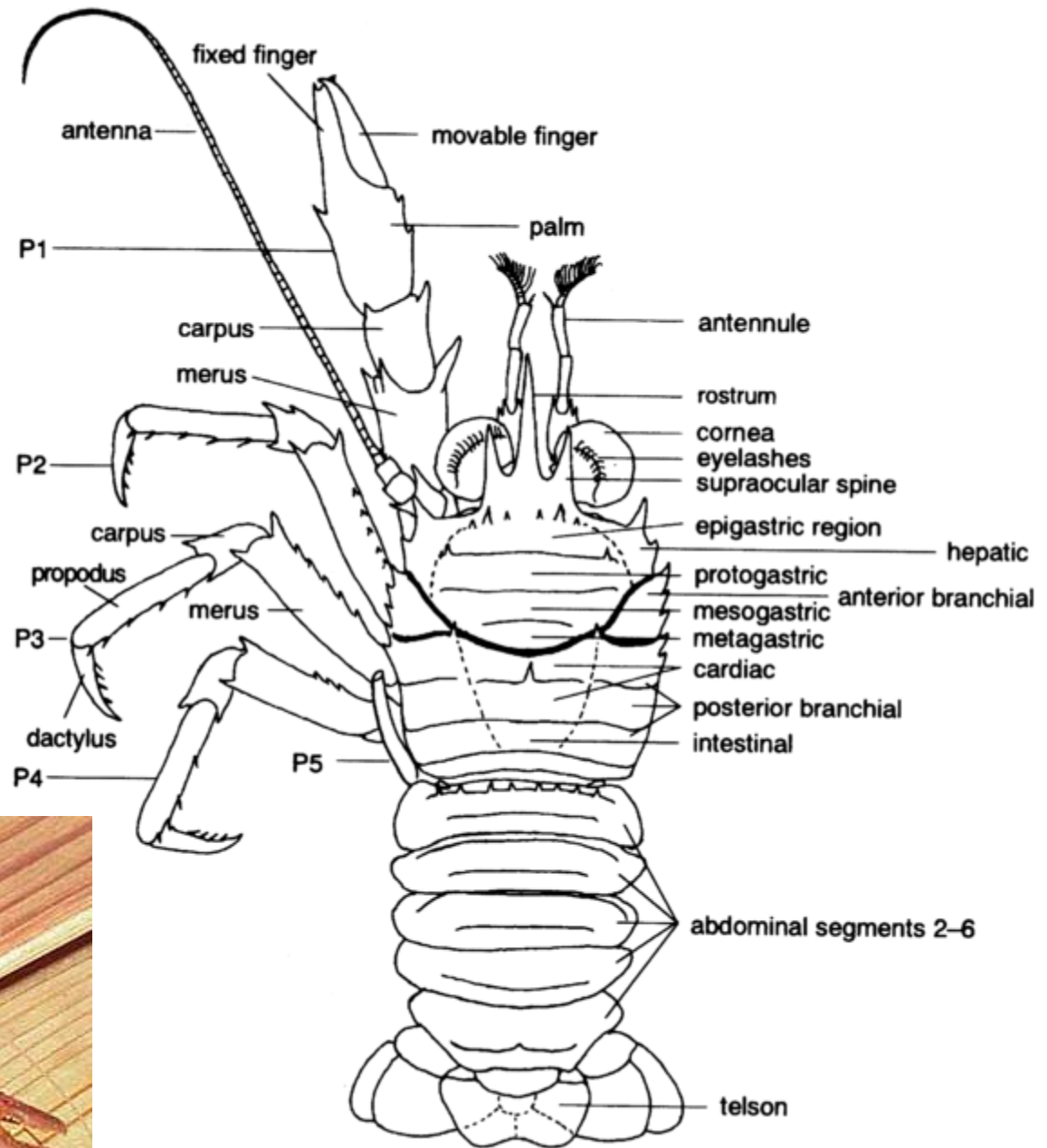


Amphipoda Eusiridae

Süperordo : Eucarida
Ordo : Euphausiacea



Ordo : Decapoda



Subordo : Natantia



Palaemon serratus



Subordo : Reptantia
Macrura



Scudae armatus



Panulirus ornatus

Anomura



Branchyura



Macrocheria kaempferi



Myriapoda
Klasis : Chilapoda

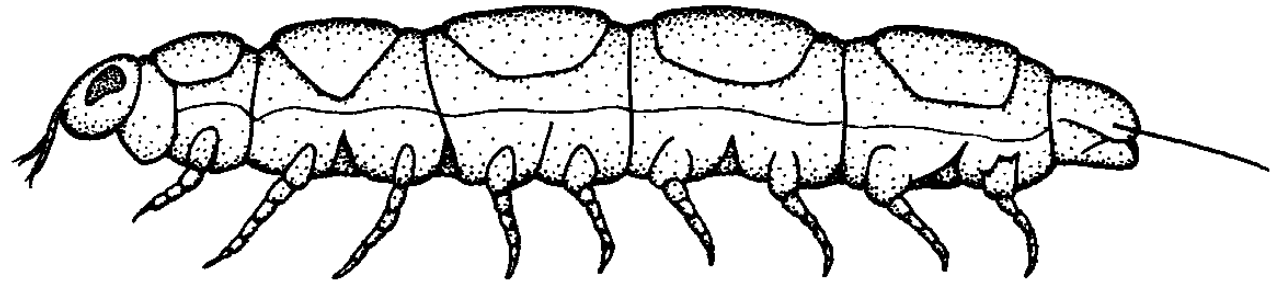


Klasis : Diplopoda



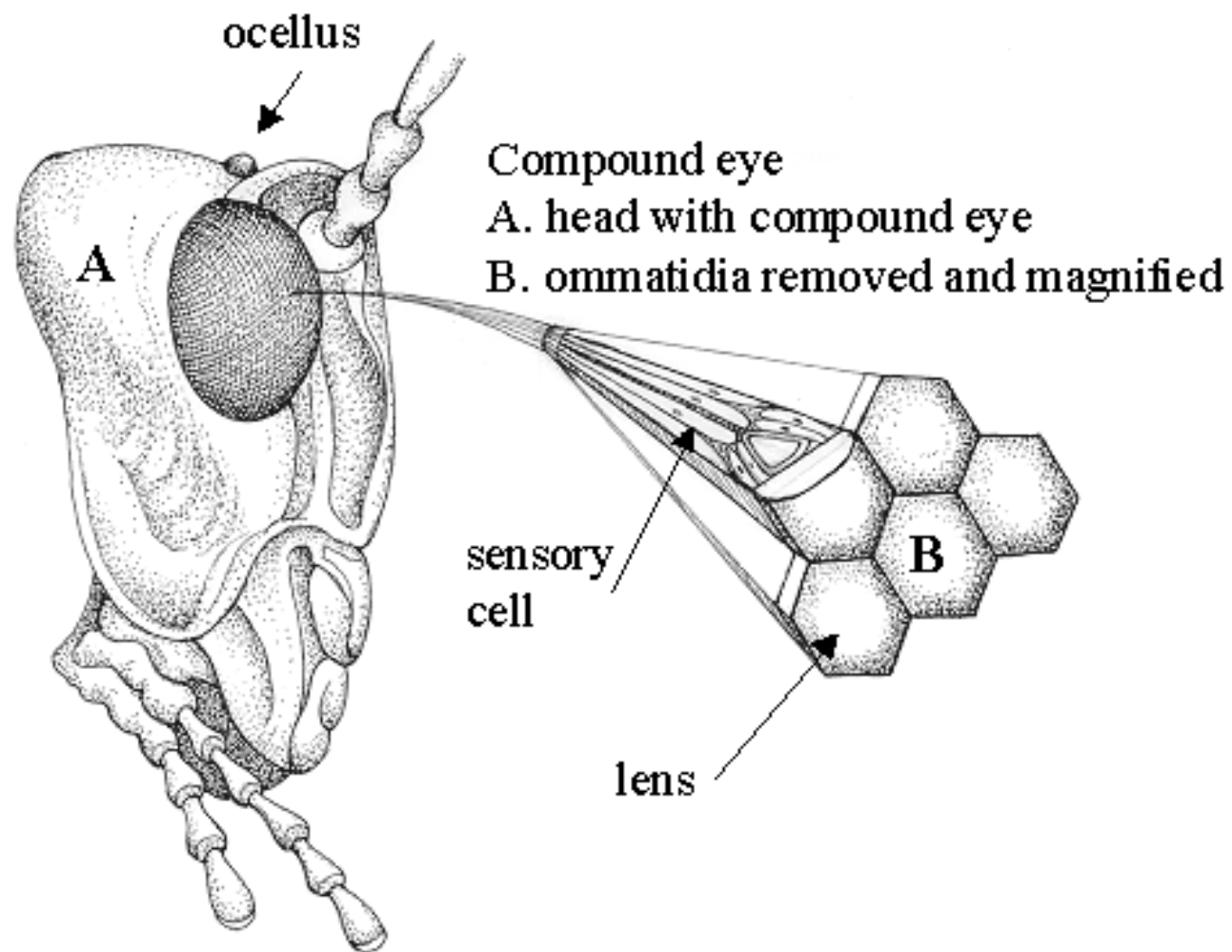


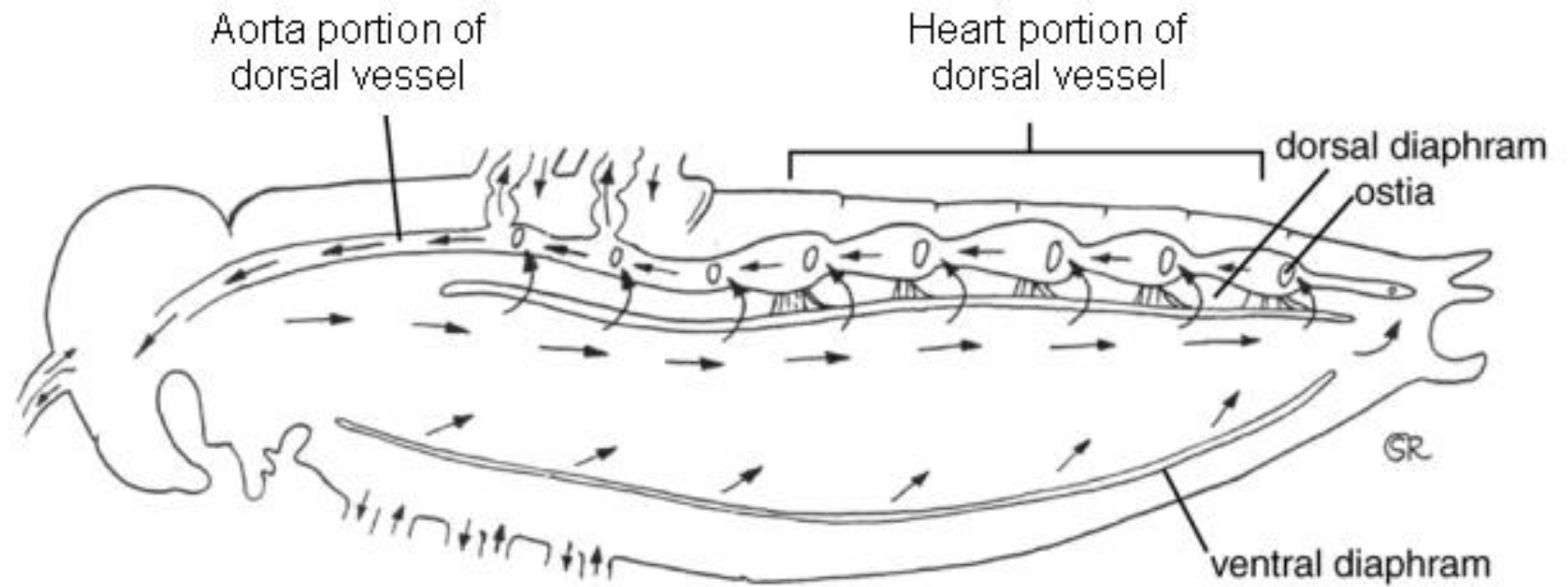
Klasis : Pauropoda

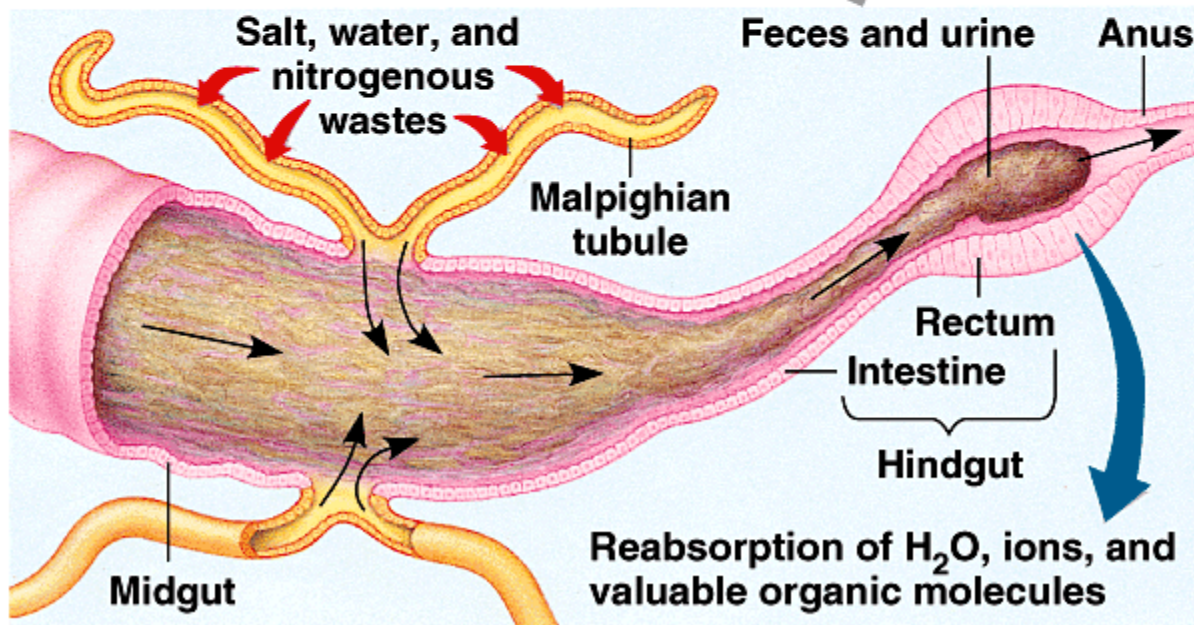
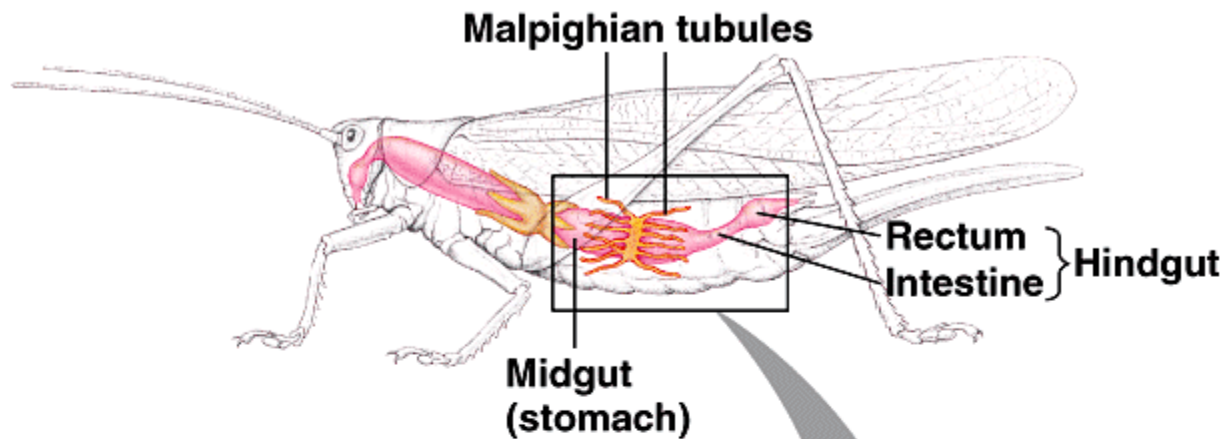


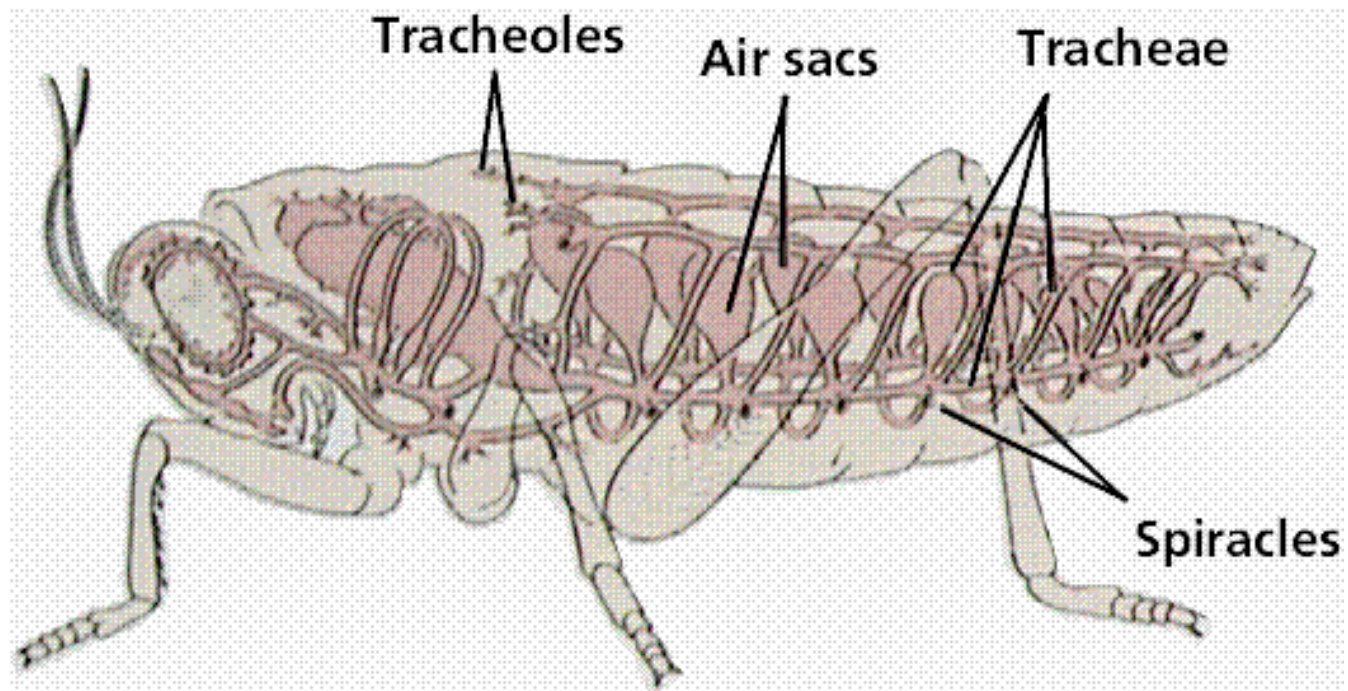
Klasis : Symphyla

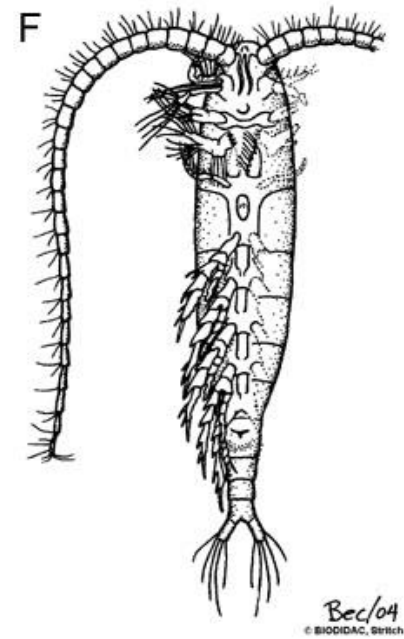
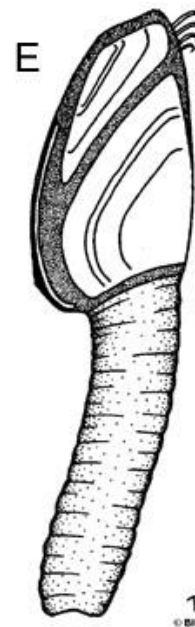
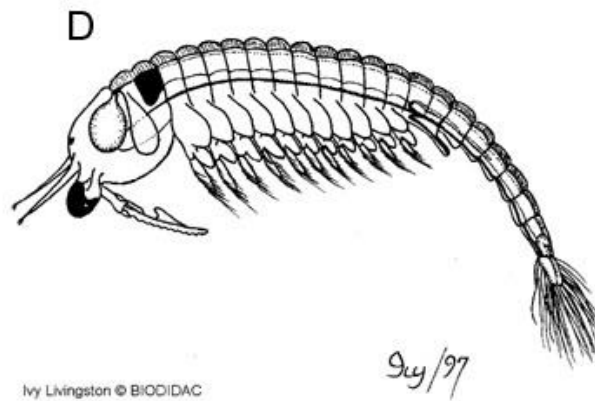
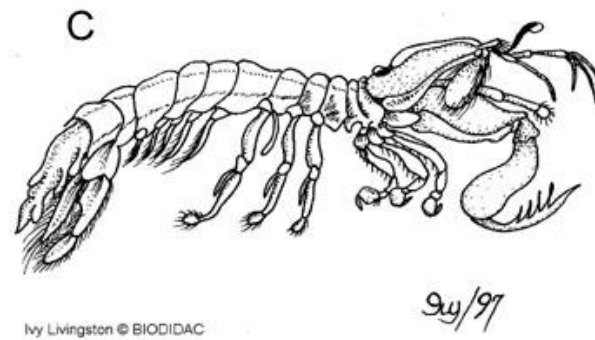
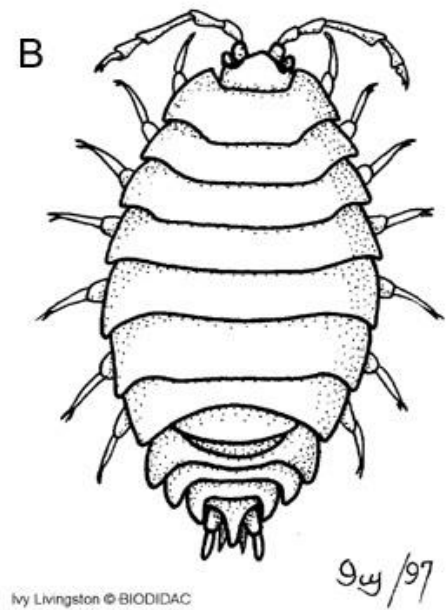
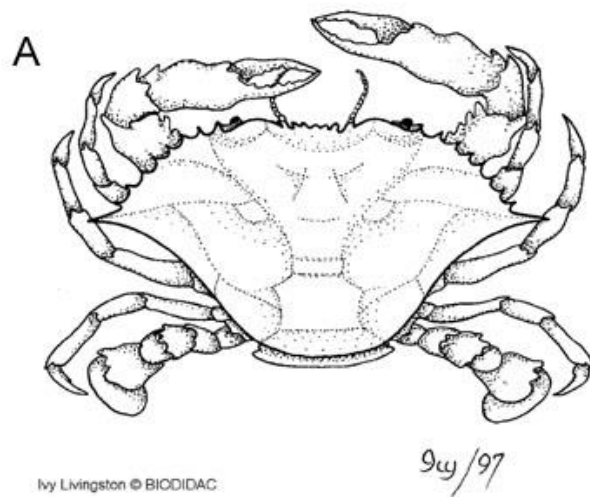


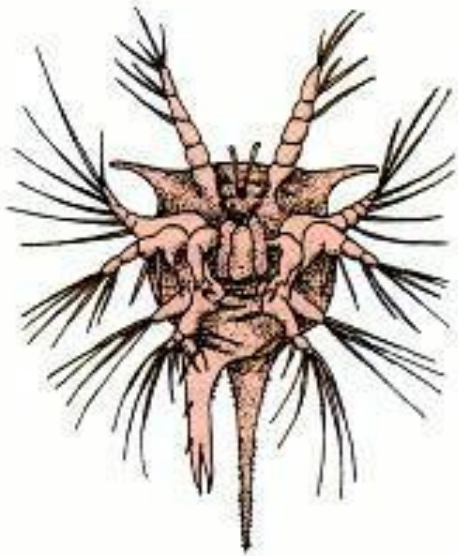




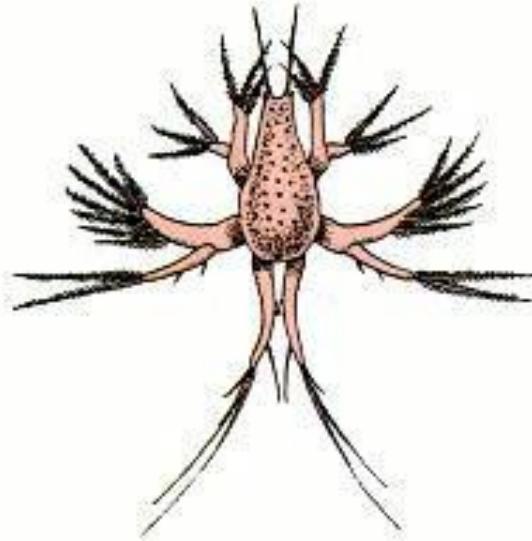








(A) *Tetracelata*



(B) *Penaeus*

Nauplius larvae

Characteristic larvae of the meroplankton: (a) chaetate larva of the annelid *Platynereis agassizi*; (b) zoea of sand crab, *Emerita analoga*; (c) cyphonautes larva of bryozoa; (d) tadpole larva of sessile tunicate; (e) pilidium larva of nemertean worm; (f) advanced pluteus larva of sea urchin; (g) fish egg with embryo; (h) trochophore larva of scaleworm; (i) veliger larva of snail; (j) pluteus larva of brittle star; (k) nauplius larva of barnacle; (l) cypris larva of barnacle; (m) planula larva of coelenterate; (n) medusa of hydroid.

