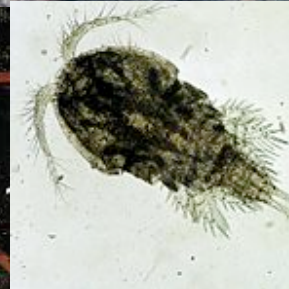
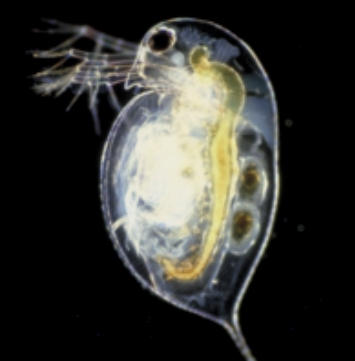


ST.0203 Paläontologie
ST.0218 Paläontologie Praktikum

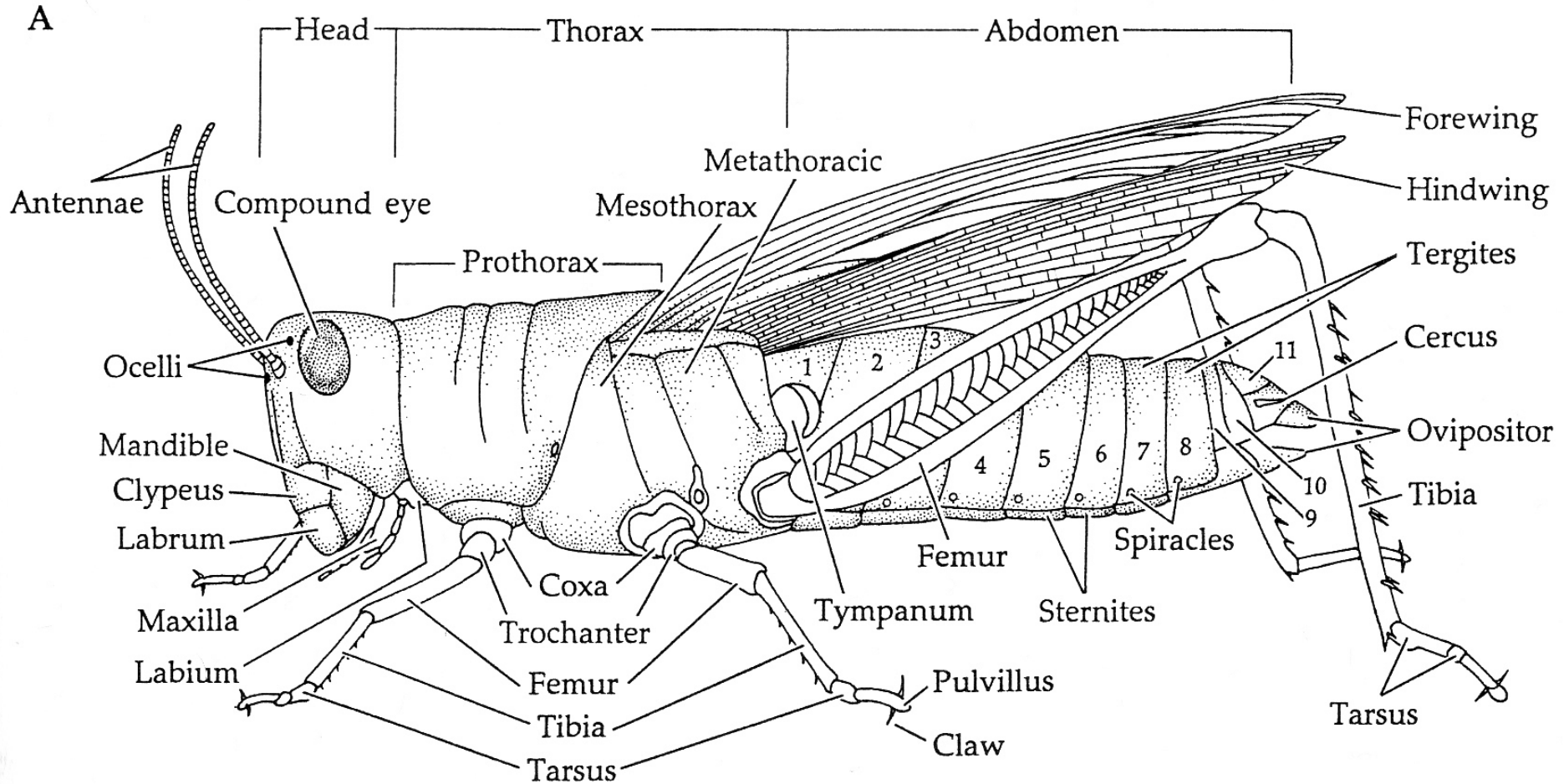
5. Taxonomie + Arthropoda

Arthropoda: Diversität



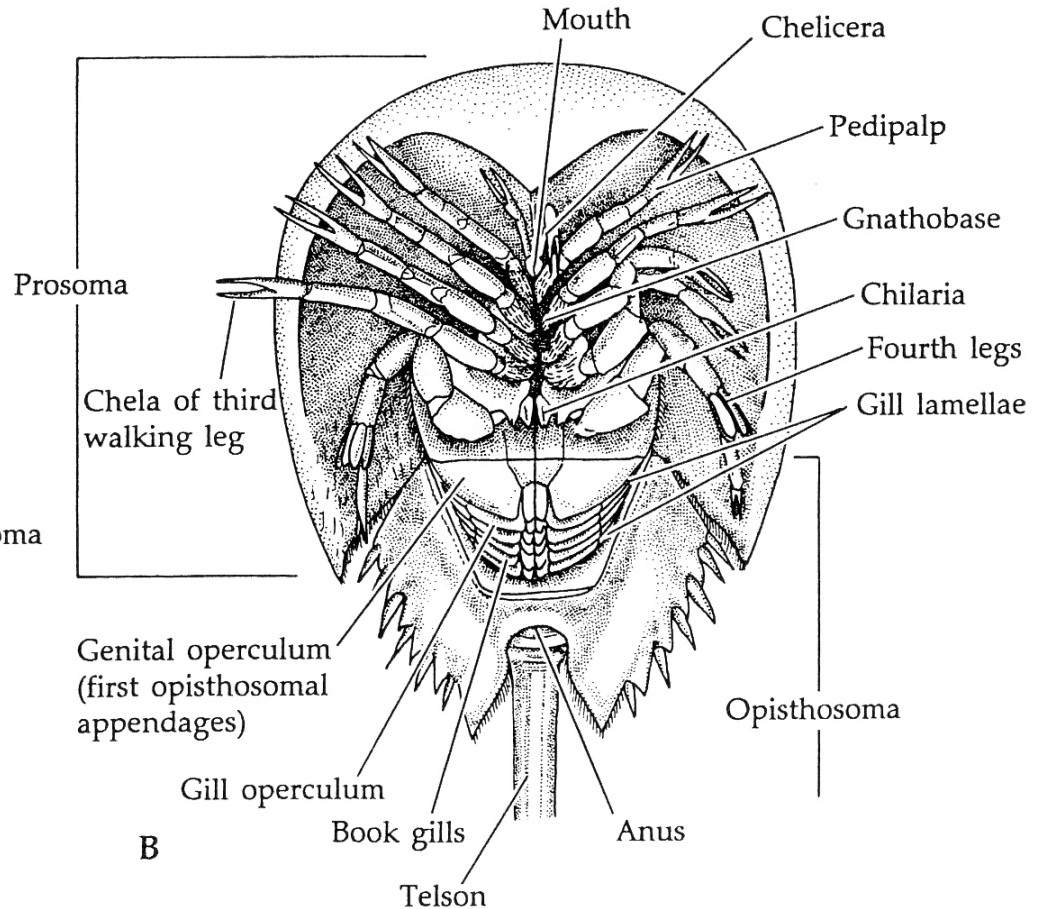
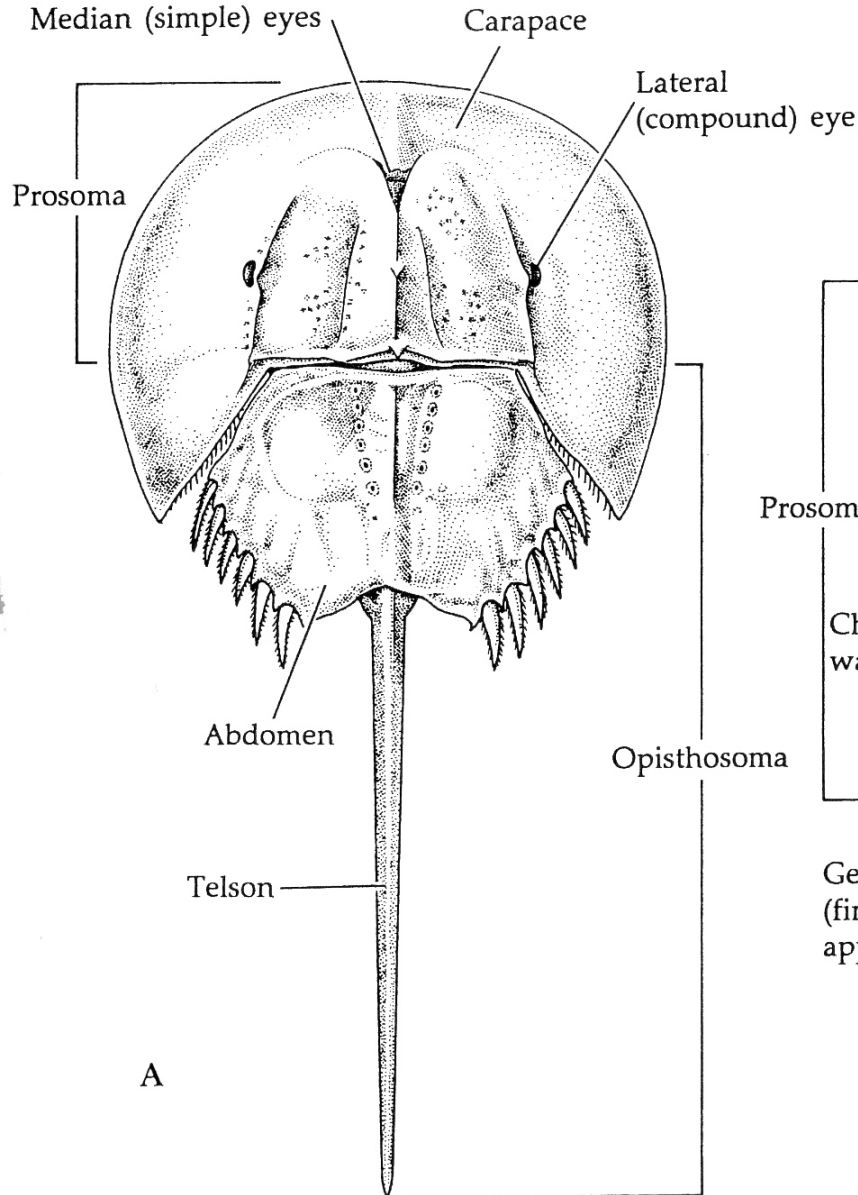
Arthropoda: Gliederung des Körpers in Segmente und Tagmata

THE UNIRAMIAN BAUPLAN



Arthropoda: Gliederung des Körpers in Segmente und Tagmata

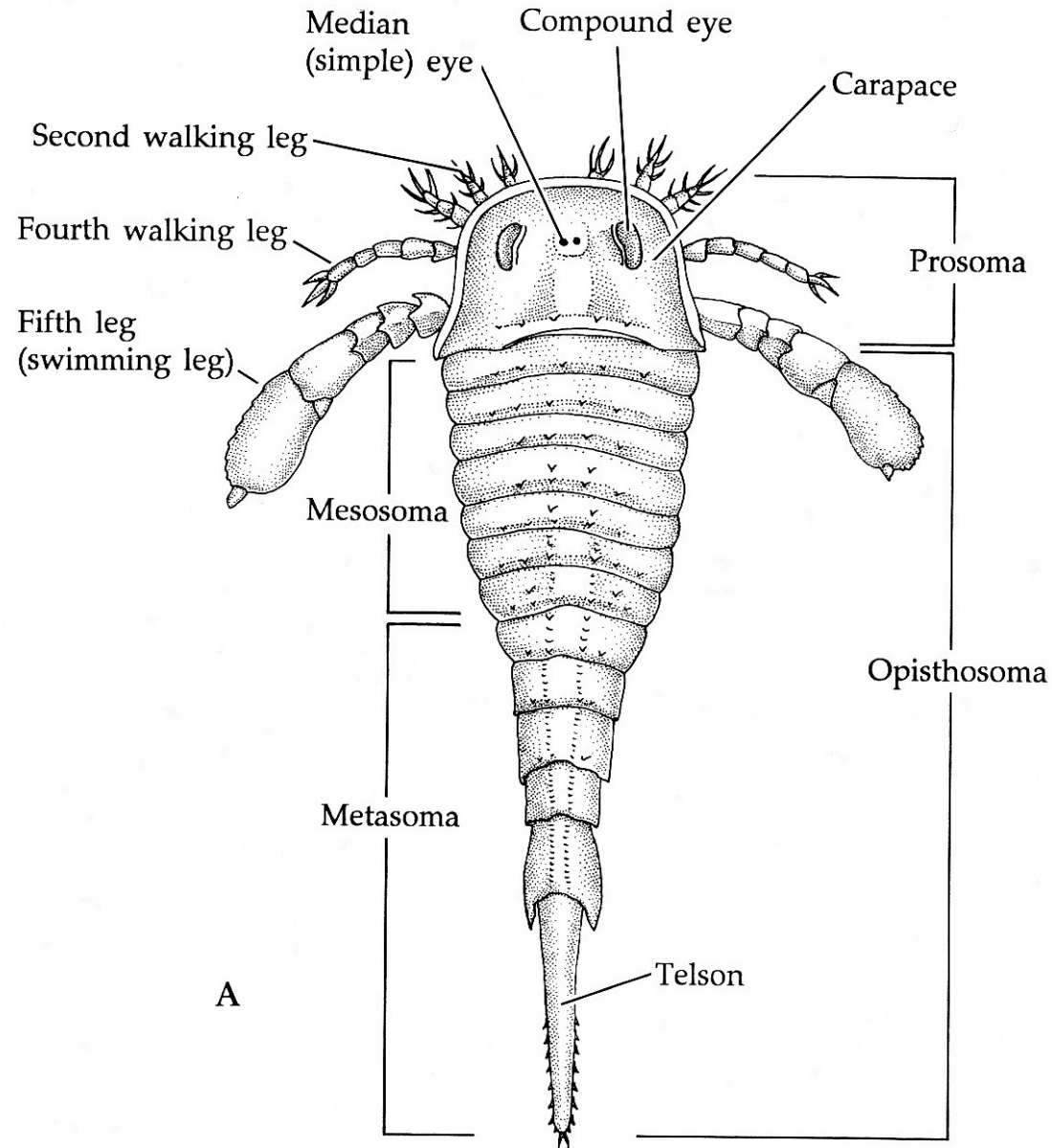
The horseshoe crab, *Limulus* (subclass Merostomata, class Xiphosura). A, Dorsal view. B, Ventral view. (After various sources.)



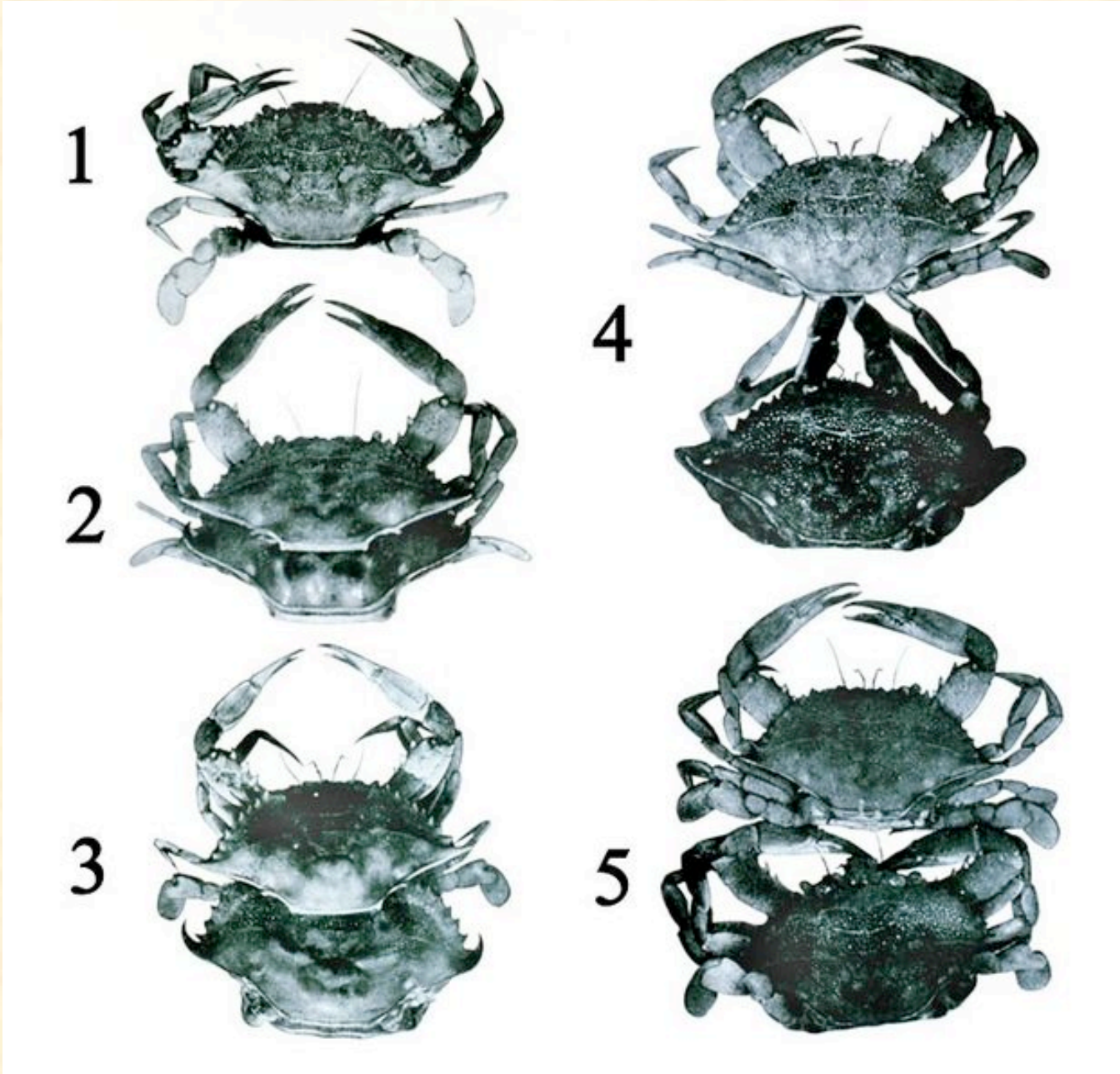
A

B

Arthropoda: Gliederung des Körpers in Segmente und Tagmata



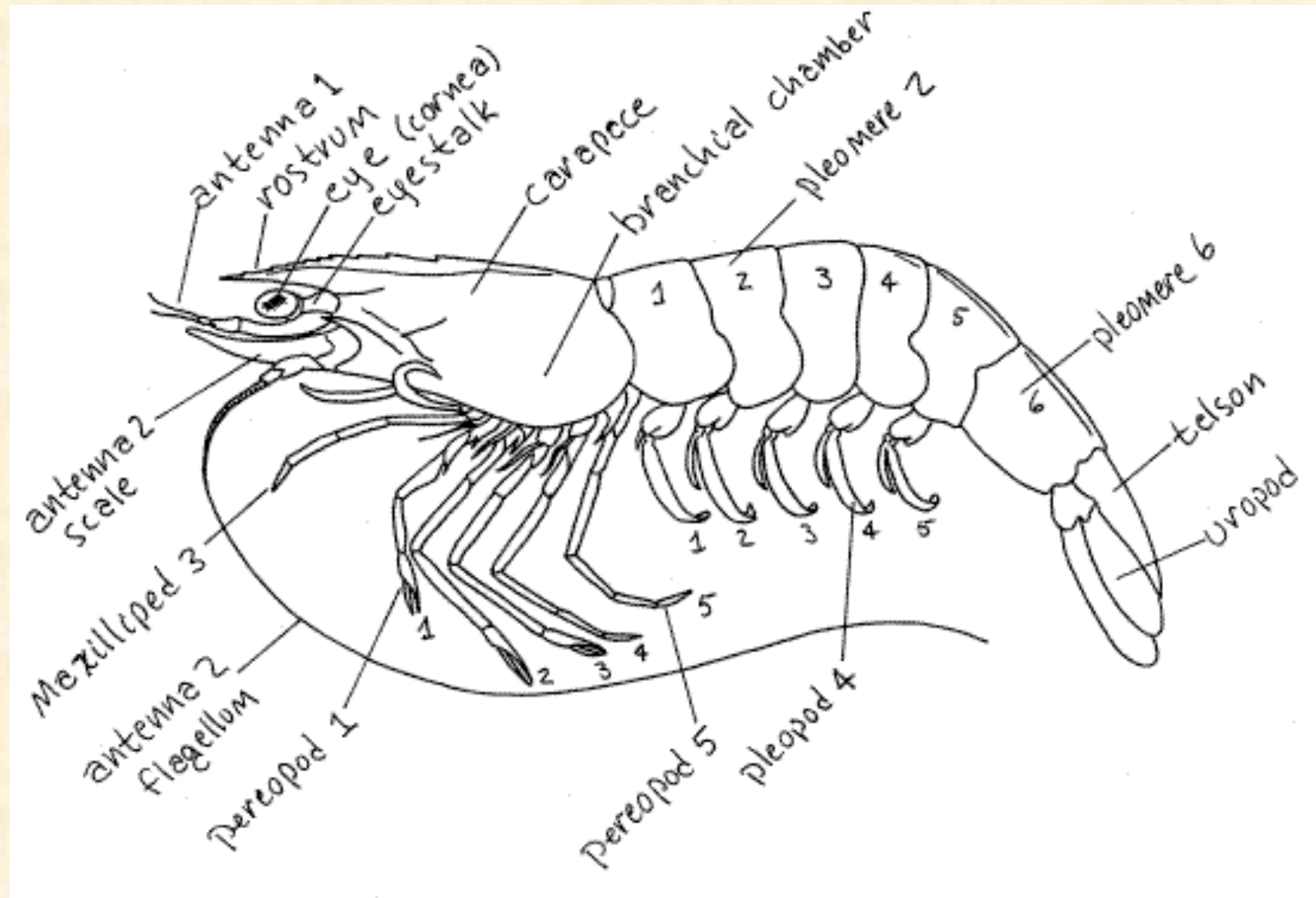
Arthropoda: Wachstum und Häutung



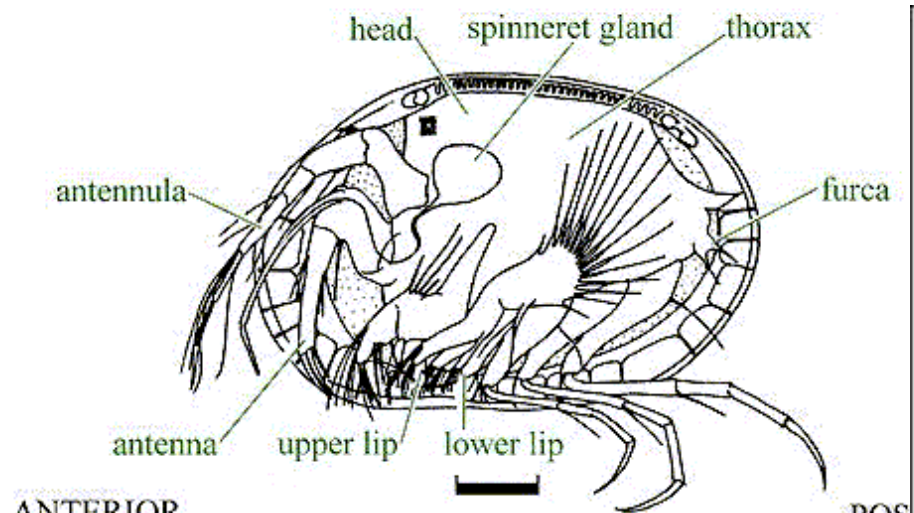
Ostracoda: Lebensbild



Ostracoda: Generelle Morphologie von Krebstieren (Crustacea)

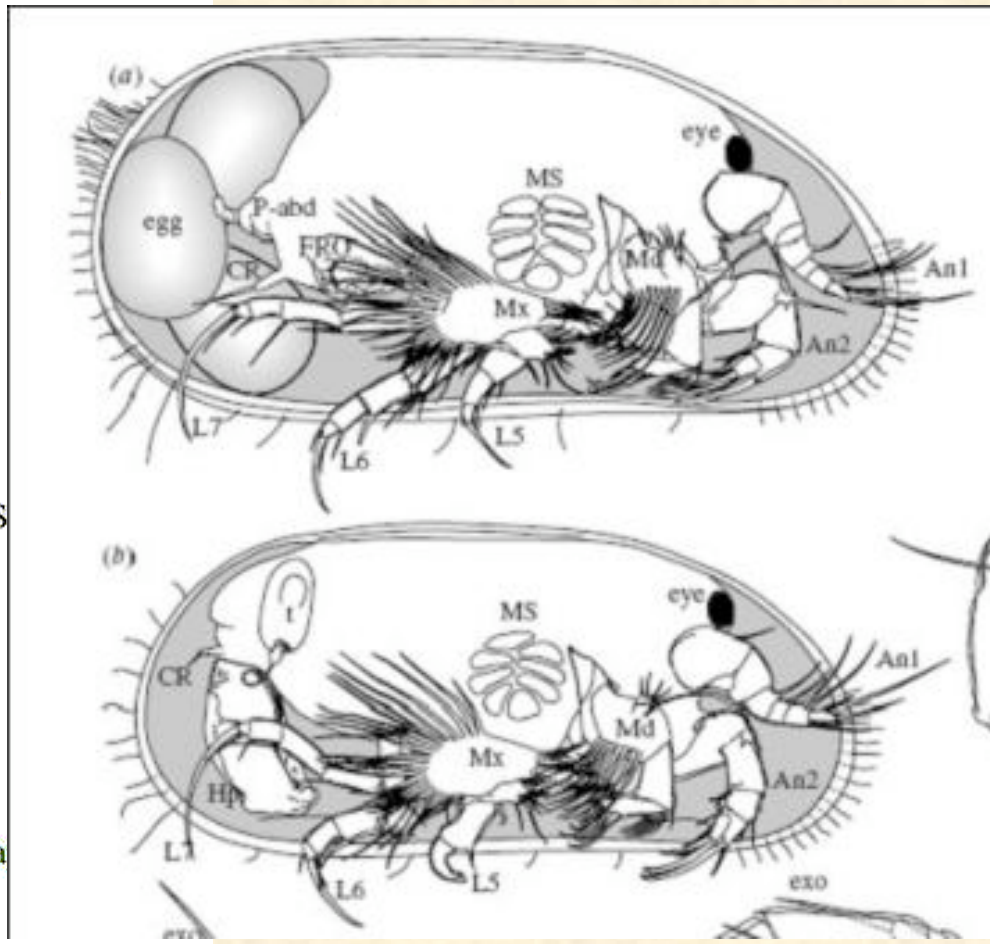
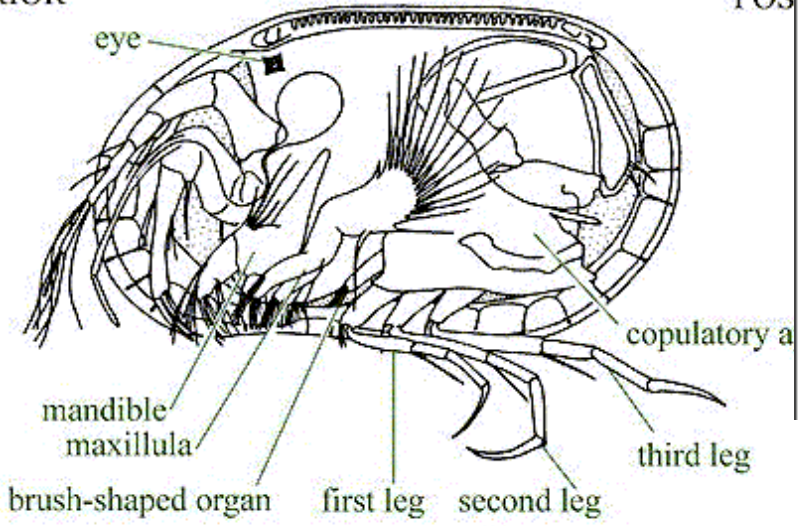


Ostracoda: Generelle Morphologie von Ostracoden

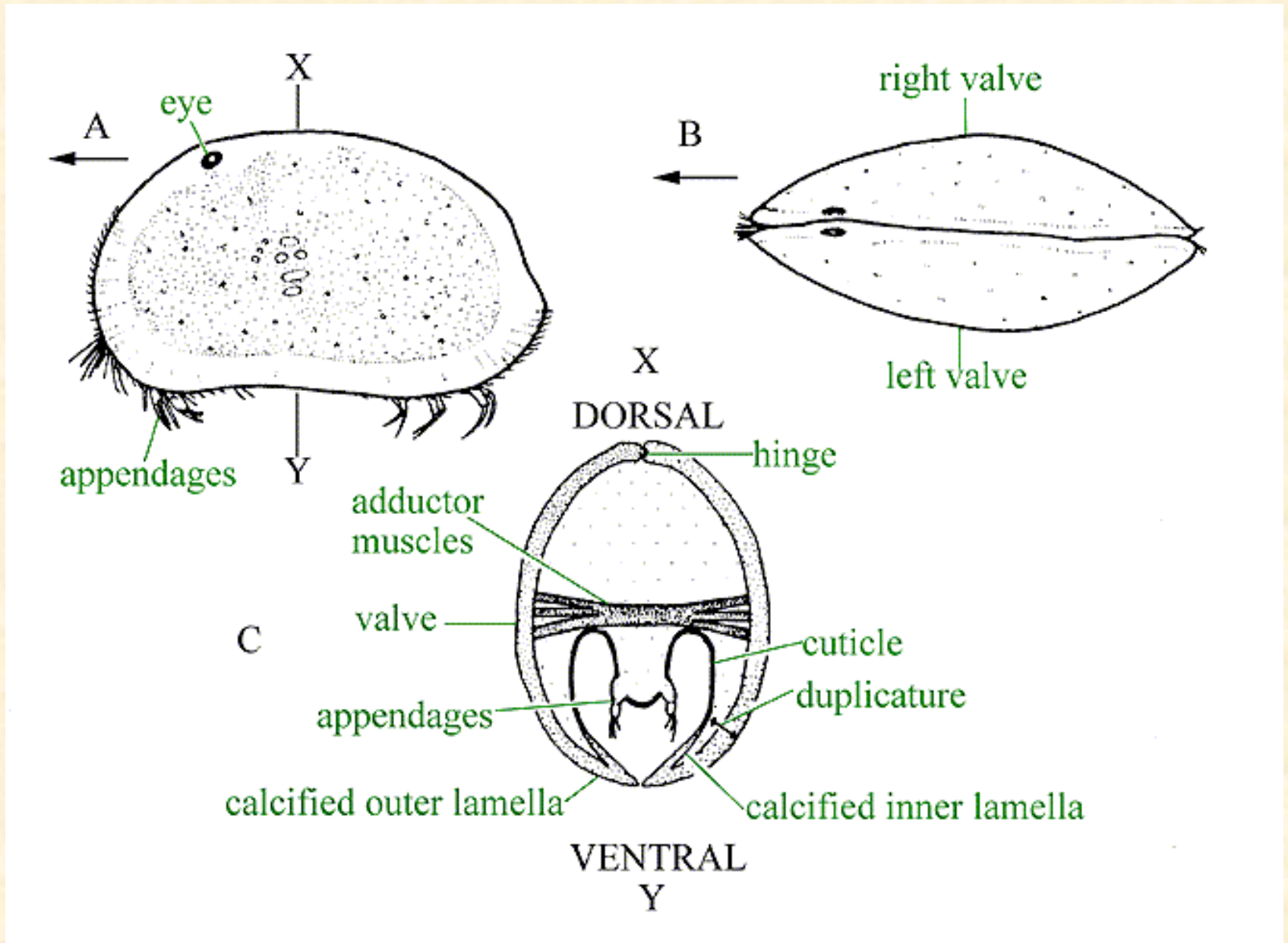


ANTERIOR

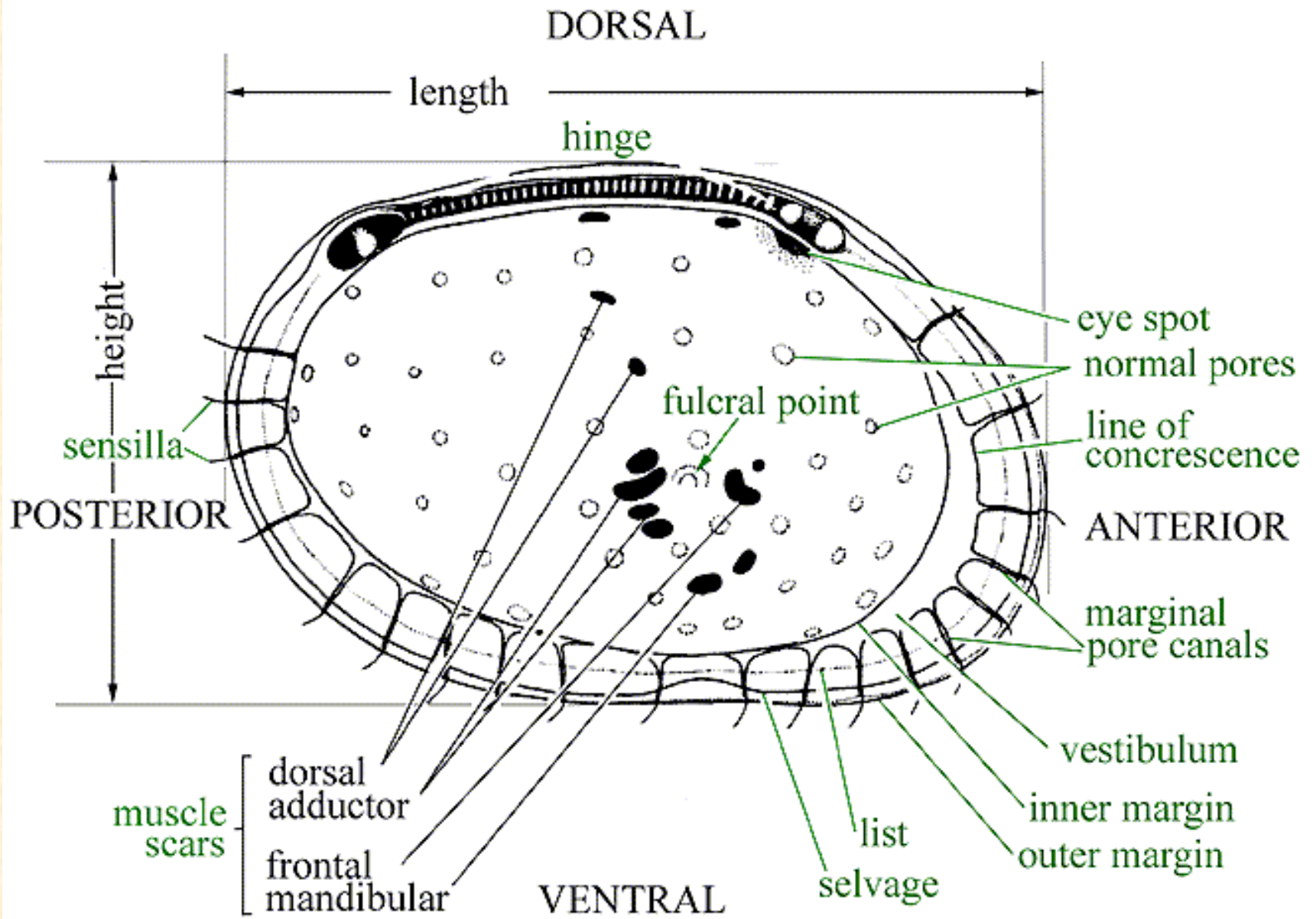
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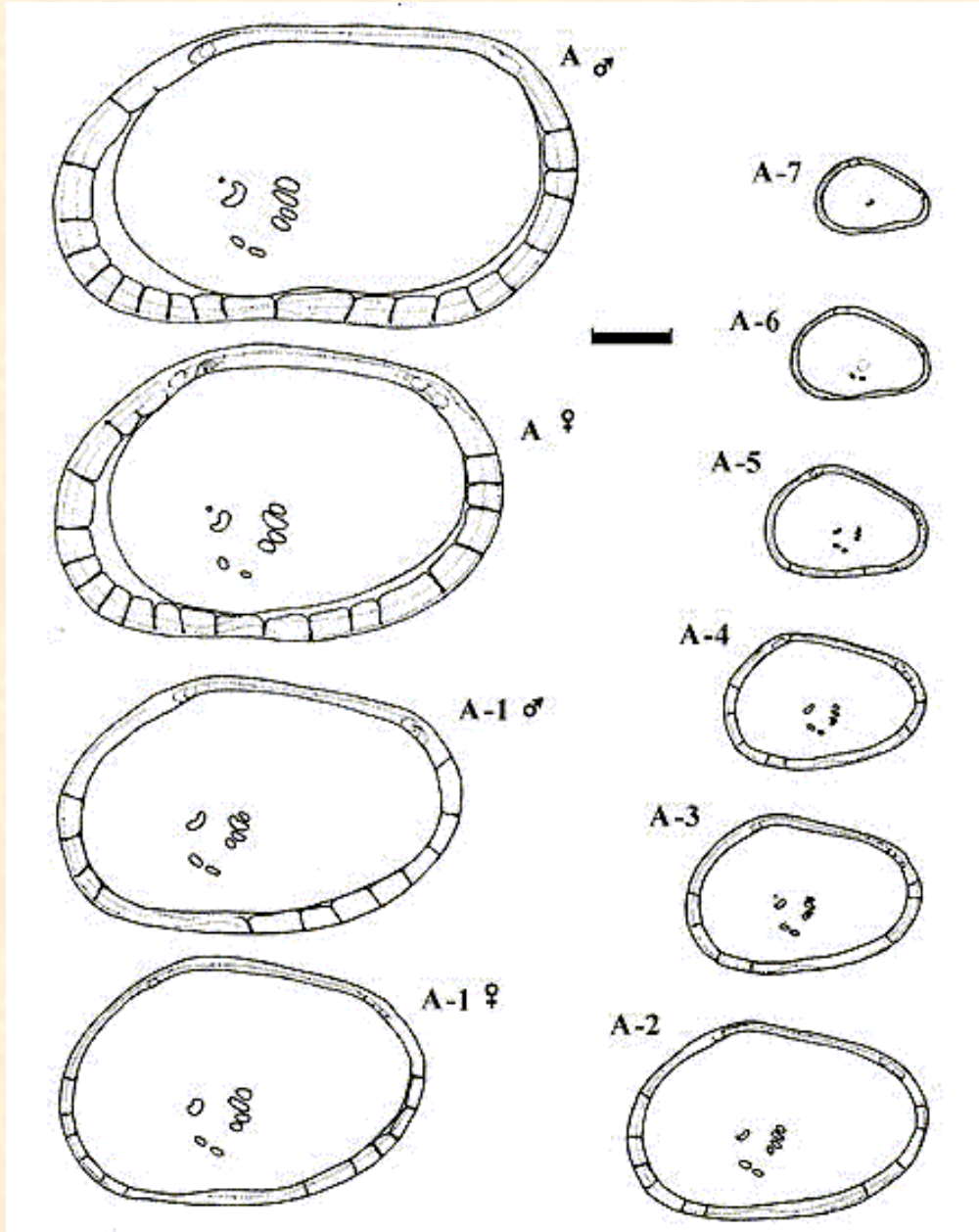
Ostracoda: Schalenmorphologie



Ostracoda: Schalenmorphologie



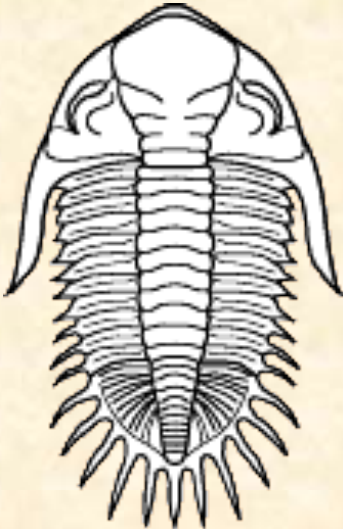
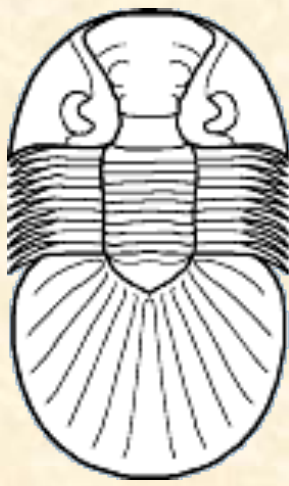
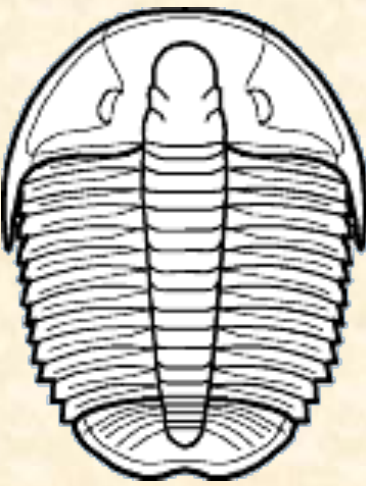
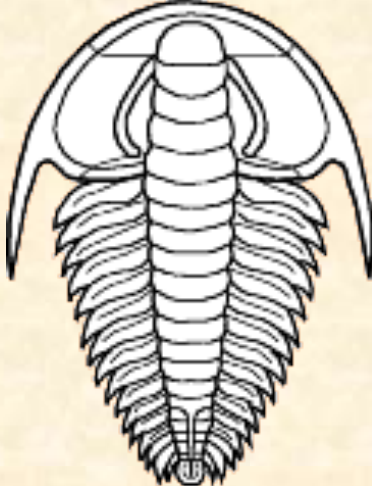
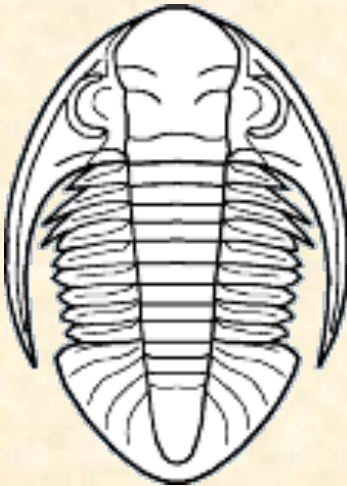
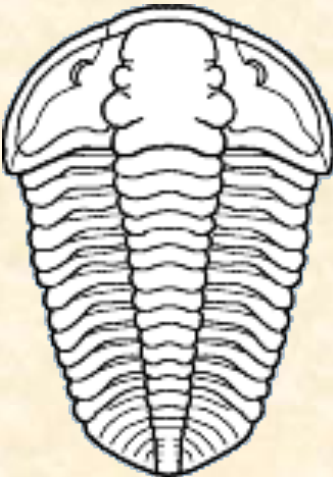
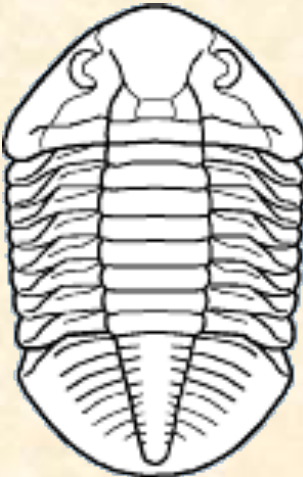
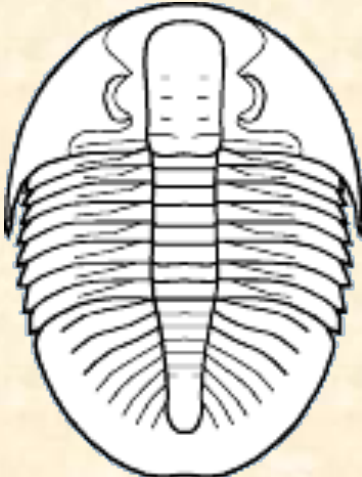
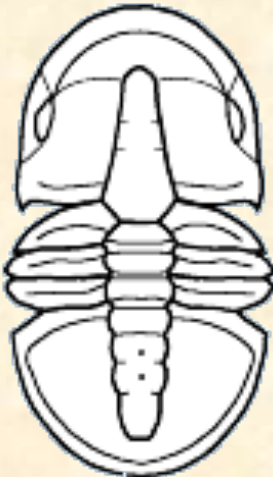
Ostracoda: Wachstum und Sexualdimorphismus



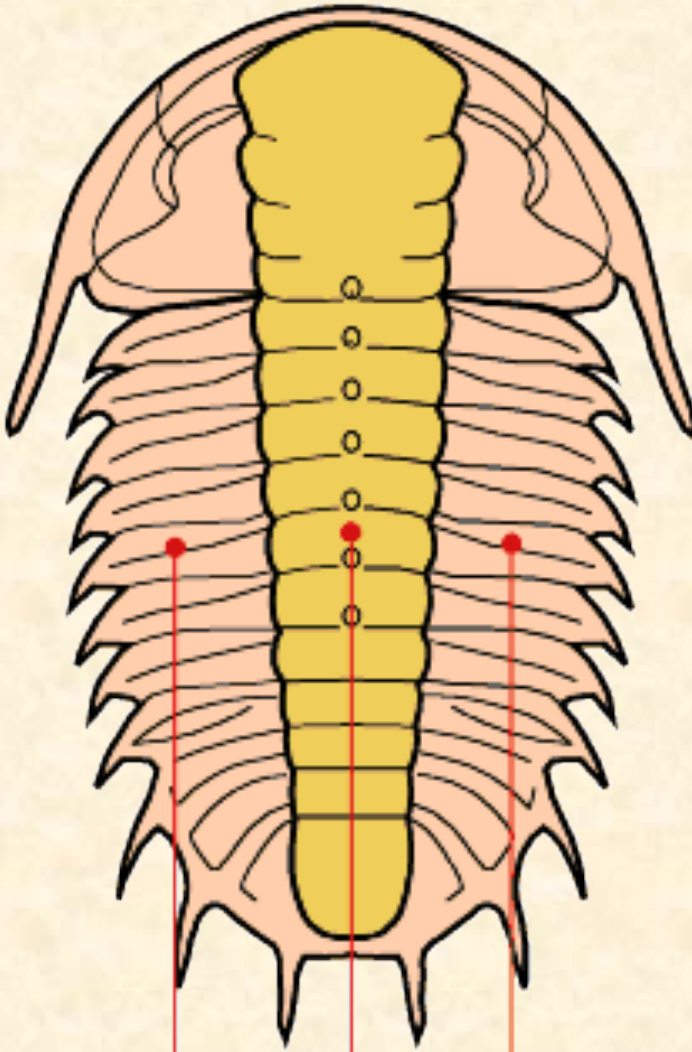
Trilobita



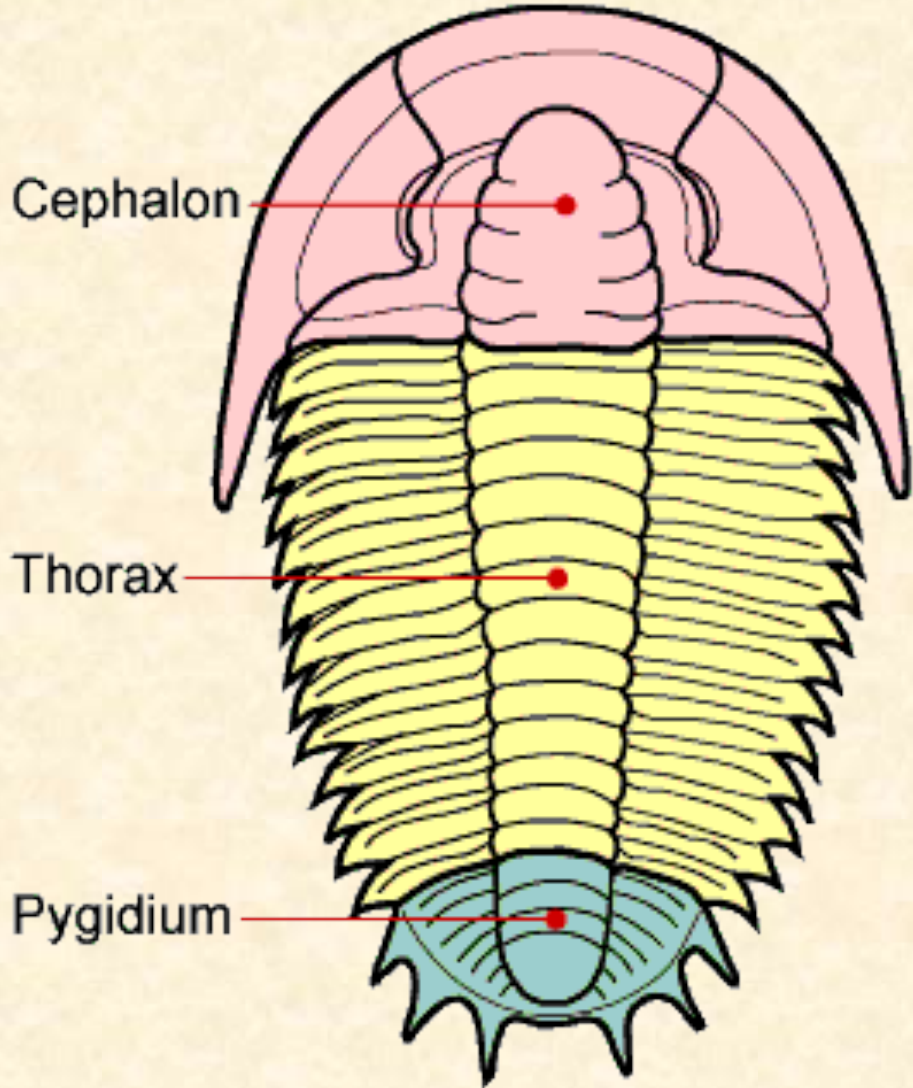
Trilobita: Formenvielfalt



Trilobita: Schalenmorphologie



Left Pleural Lobe Axial Lobe Right Pleural Lobe

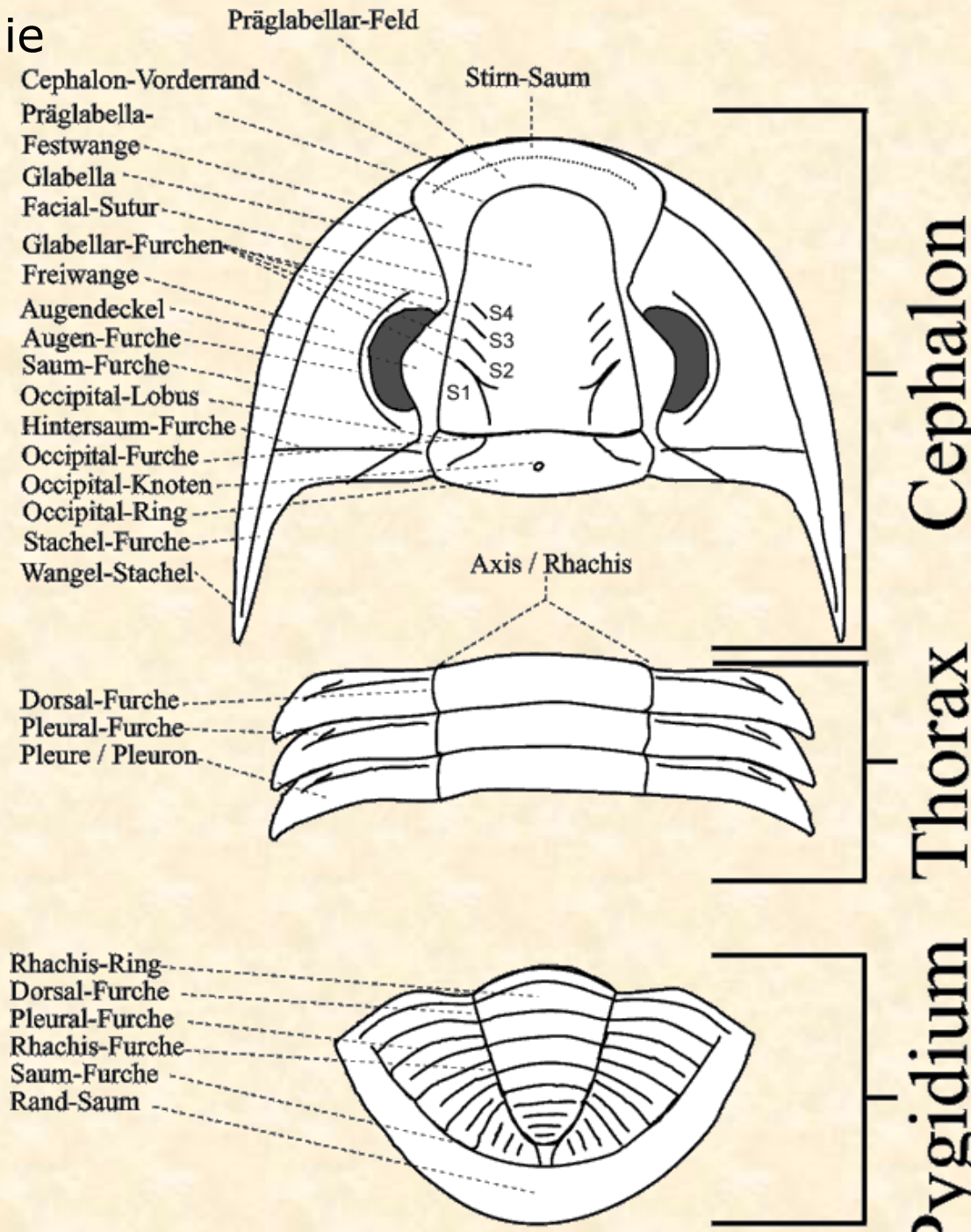


Cephalon

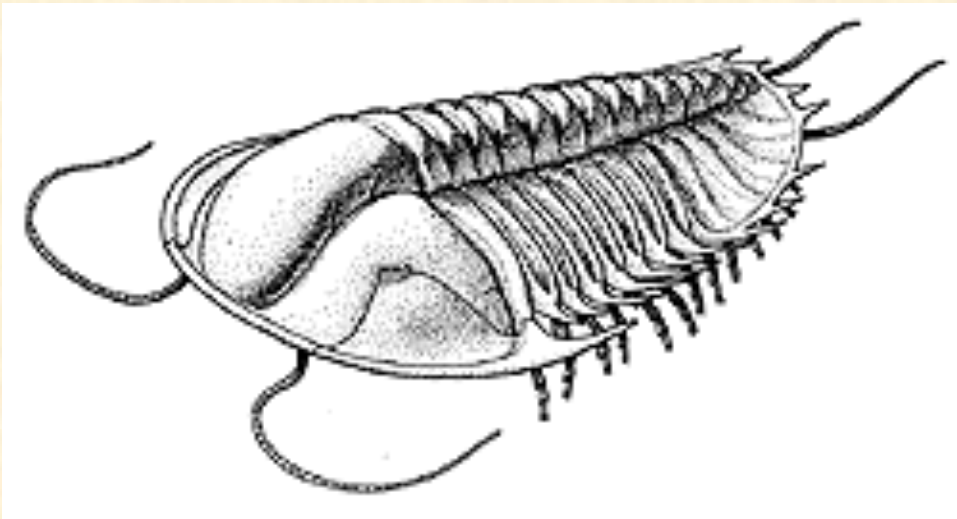
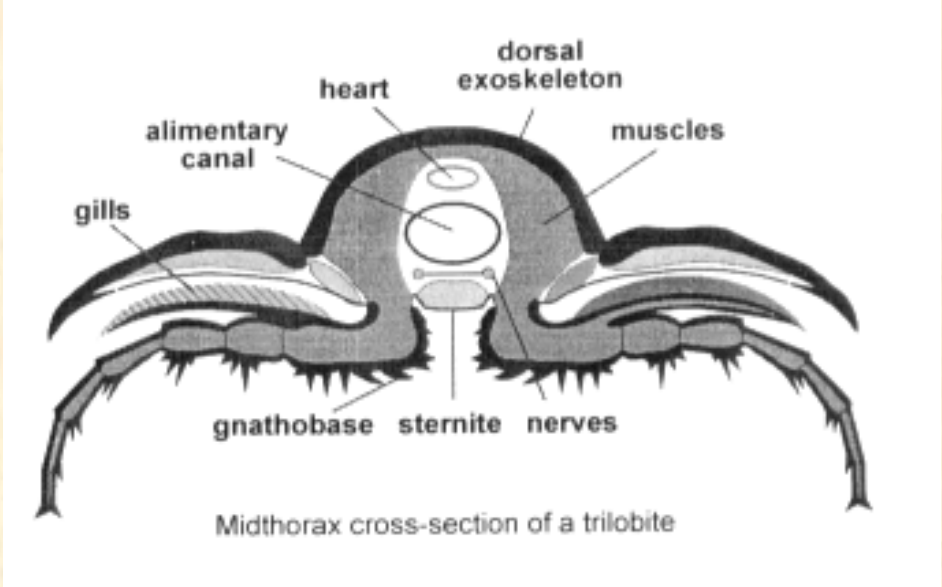
Thorax

Pygidium

Trilobita: Schalenmorphologie

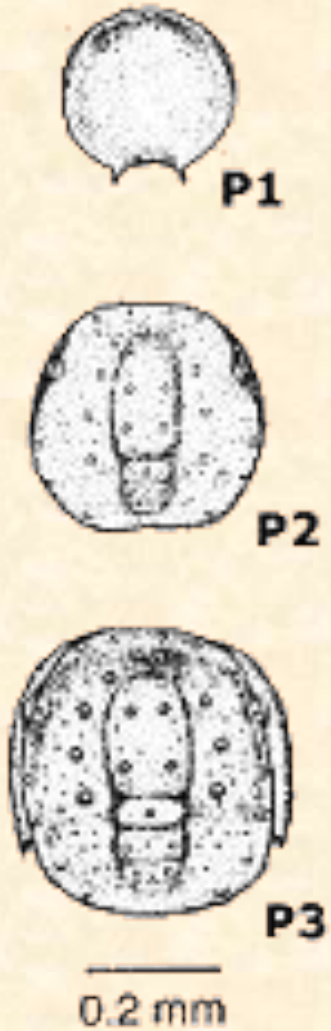


Trilobita: Weichteilanatomie

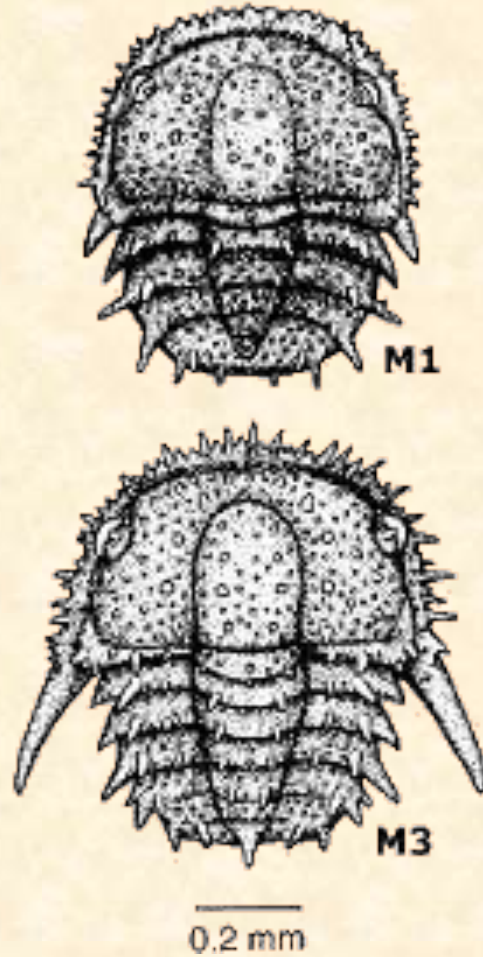


Trilobita: Wachstum

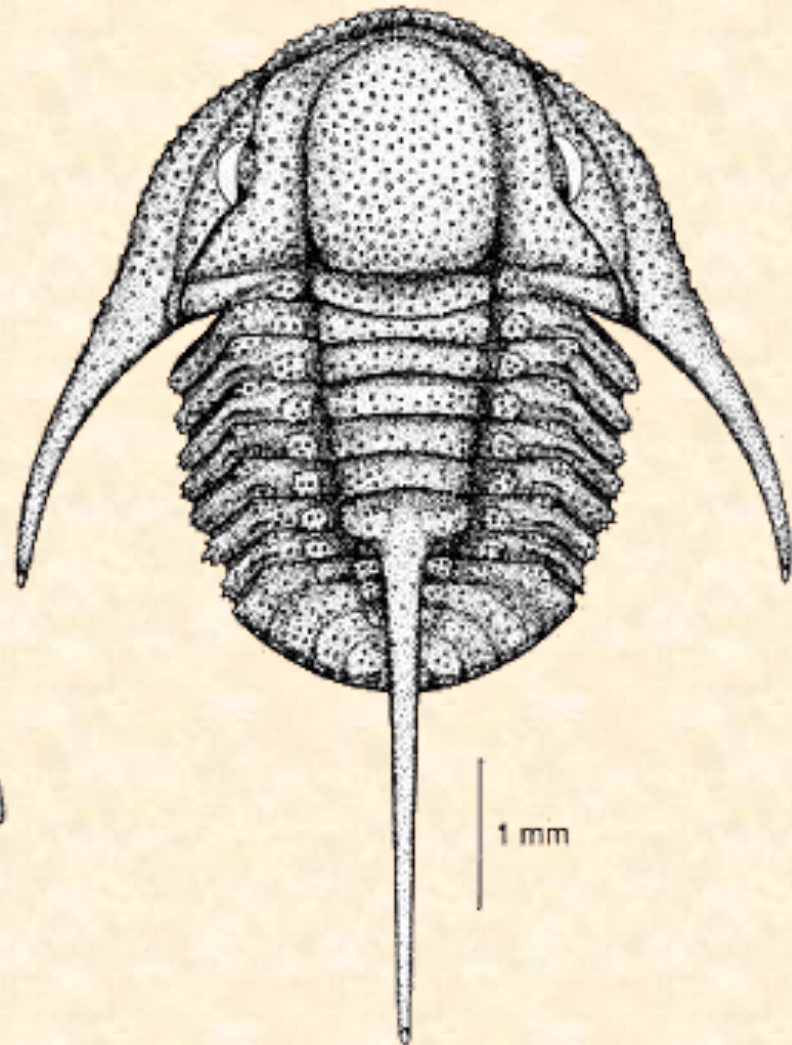
Protaspis



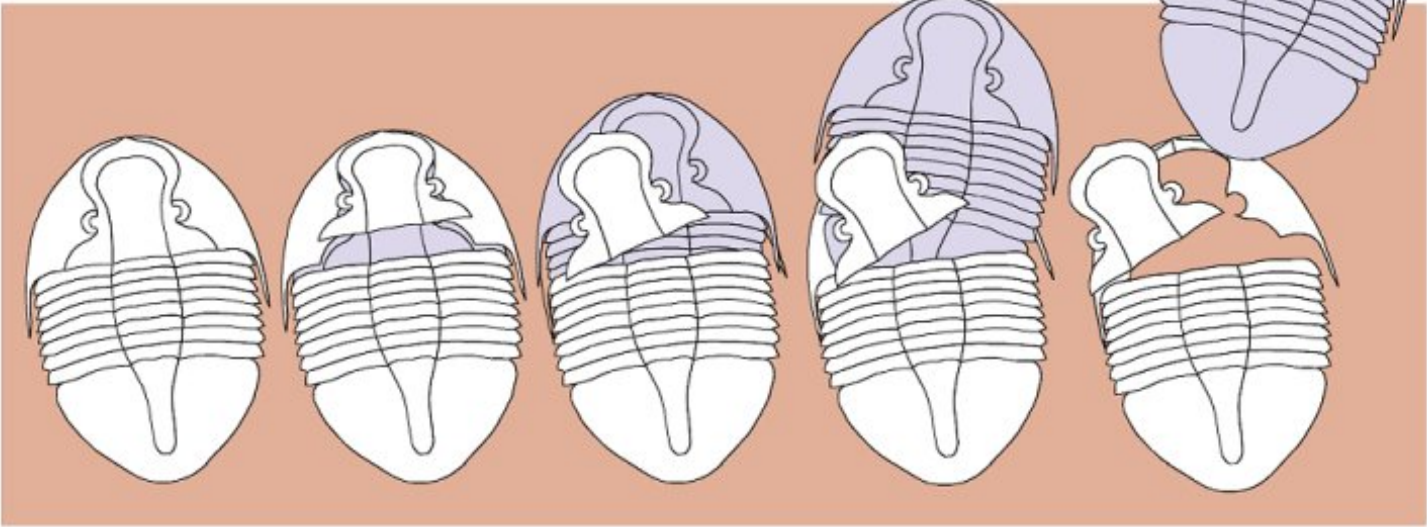
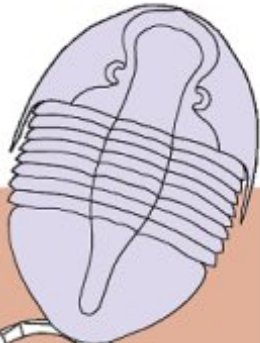
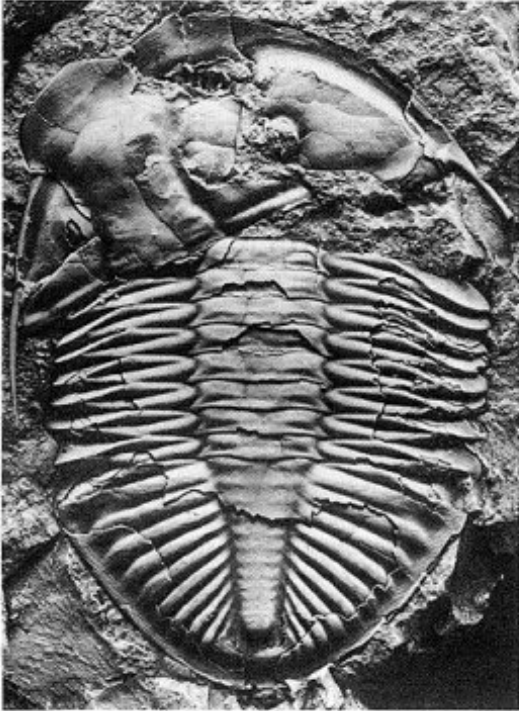
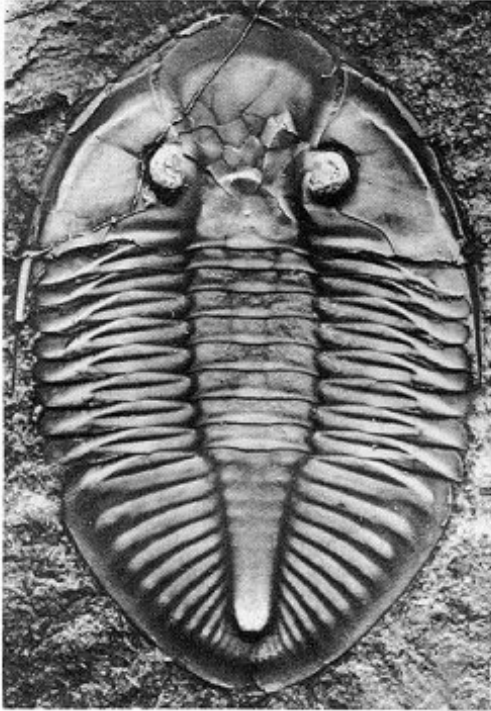
Meraspis



Holaspis

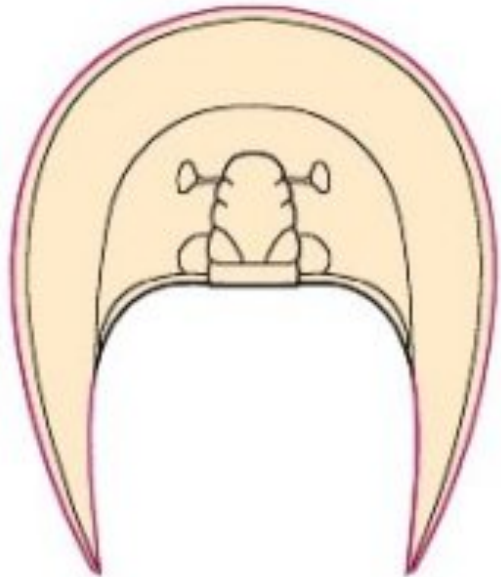


Trilobita: Häutung

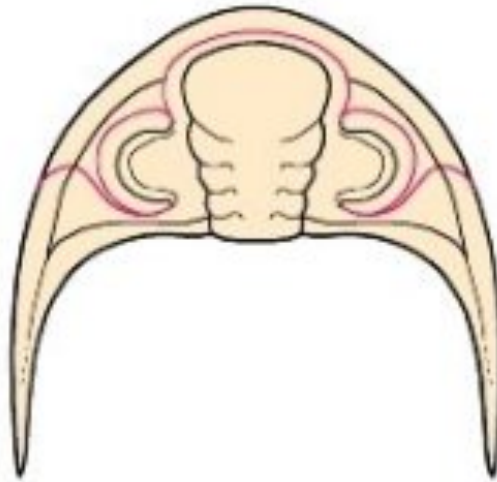


Trilobita: Gesichtsnähte

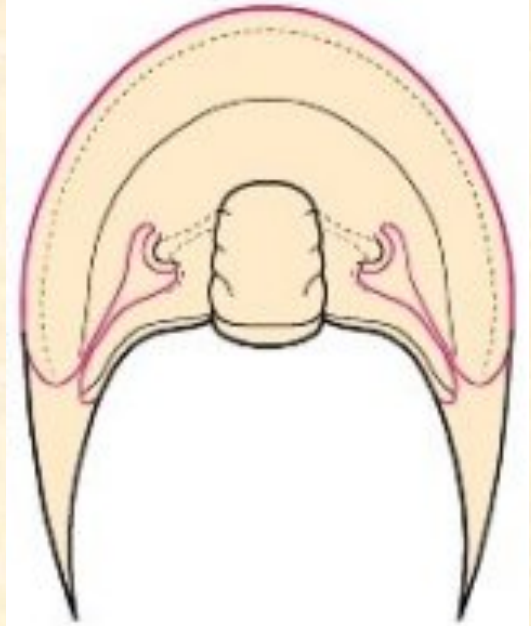
harpid
Harpes



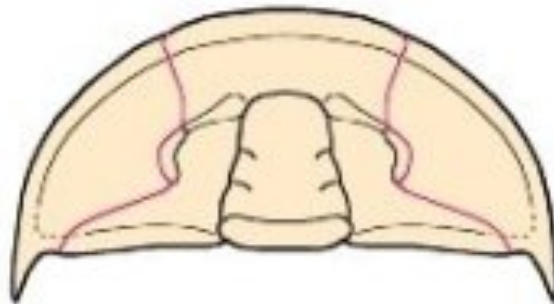
dalmanitidiform
Odontochile



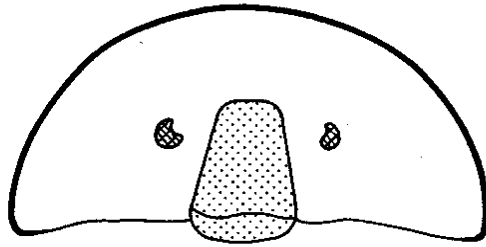
entomaspidiform
Entomaspis



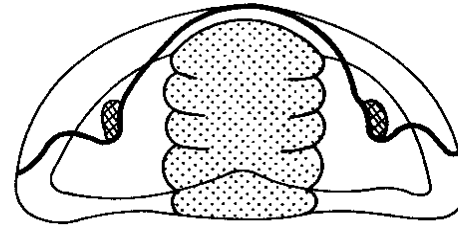
ptychopariiid
Elrathia



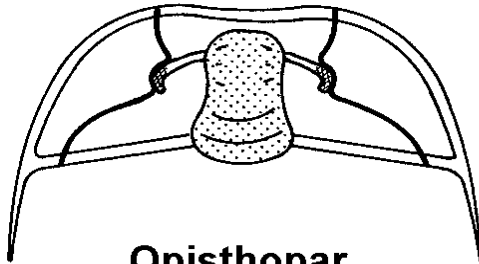
Trilobita: Gesichtsnähte



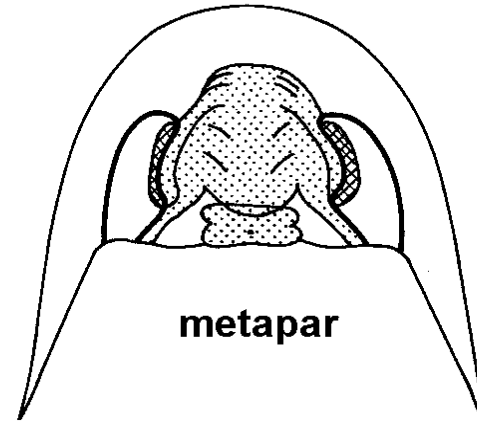
**Protopar bzw.
hypopar**



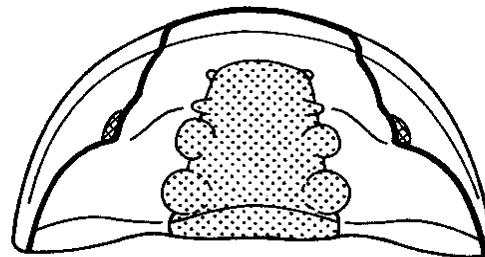
propar



Opisthopar

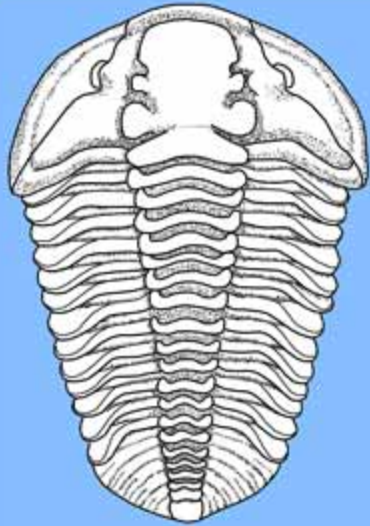


metapar

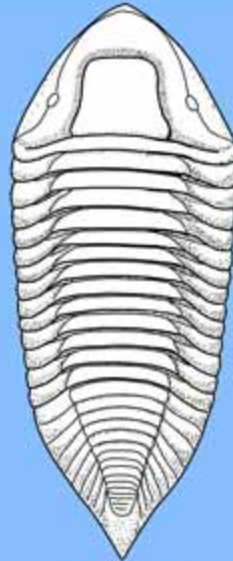


gonatopar

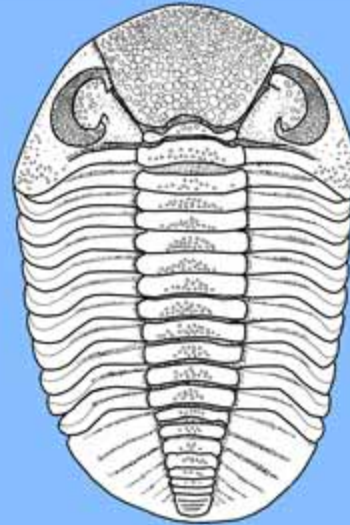
Trilobita: Augen



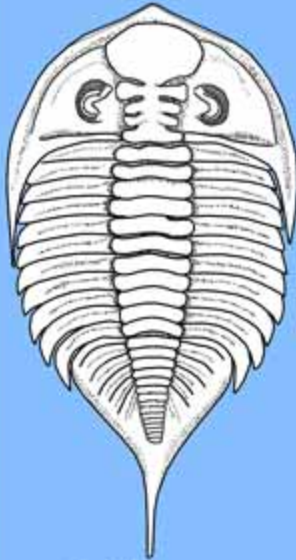
Calymene



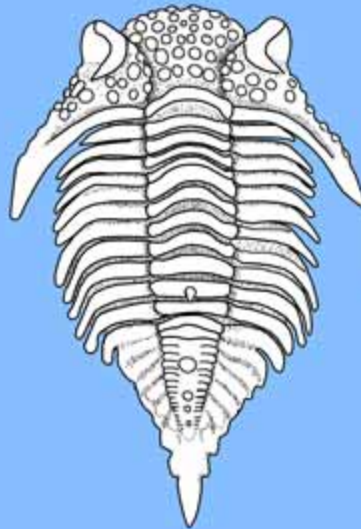
Trimerus



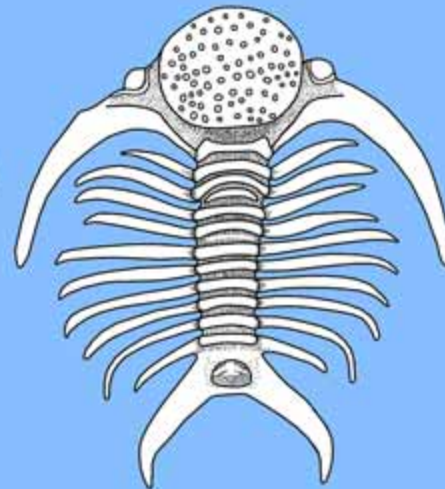
Phacops



Dalmanites



Encrinurus



Deiphon

Trilobita: Augentypen

Platyantyx
had holochroal eyes



Comura
had schizochroal eyes



Pagetia
had abathochroal eyes

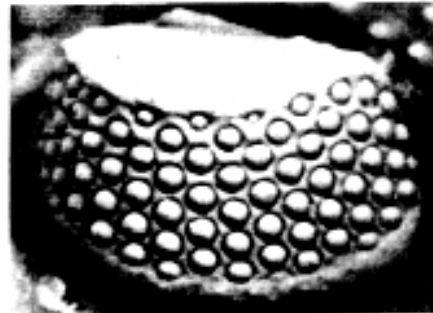


Holochroal eye



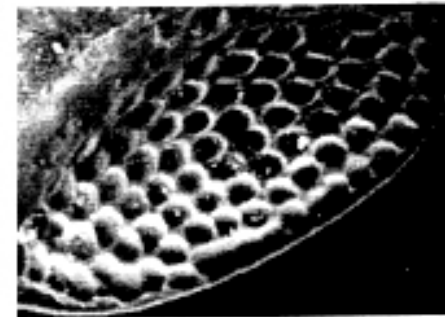
from Clarkson 1975

Schizochroal eye

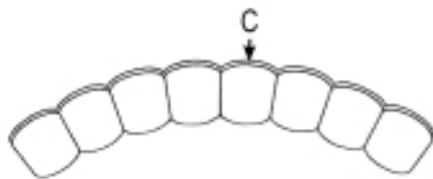


from Levi-Setti 1993

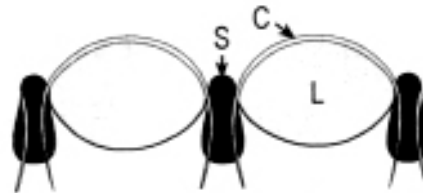
Abathochroal eye



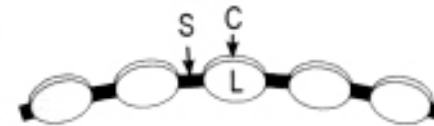
from Zhang & Clarkson 1990



cross section reveals:
no sclera between lenses (L)
single cornea (C) covers all lenses
corneal membrane on surface only

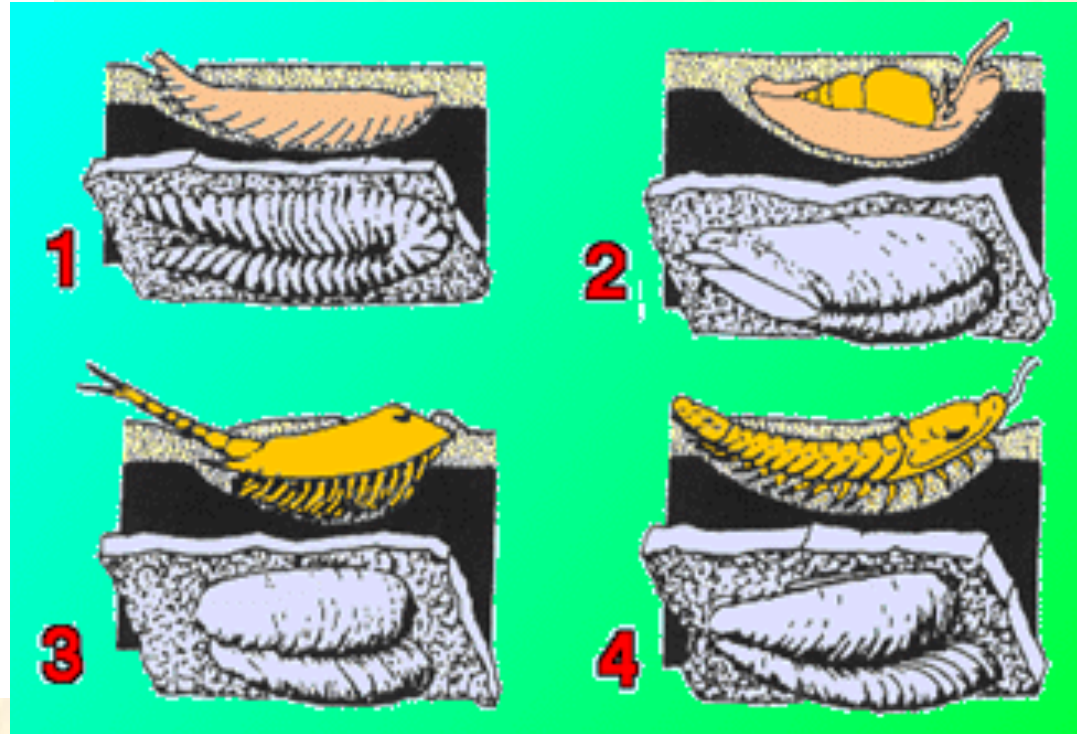


cross section reveals:
sclera (S) between lenses very deep
one cornea (C) per lens (L)
corneal membrane extends into sclera



cross section reveals:
sclera (S) not deeper than lenses
one cornea (C) per lens (L)
corneal membrane ends at lens edge

Trilobita: Spurfossilien, Rusophycus



Trilobita: Spurfossilien, Cruciana

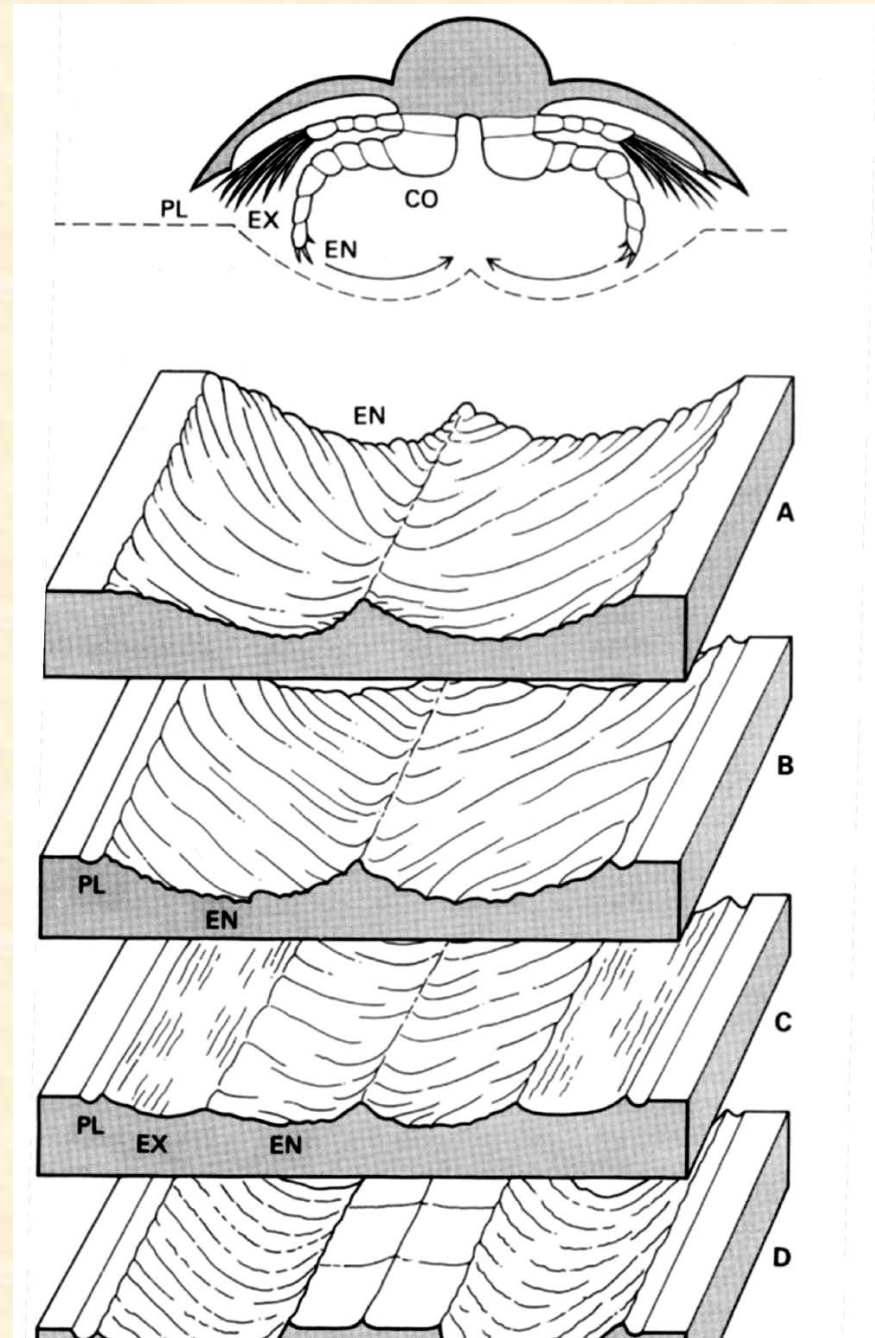
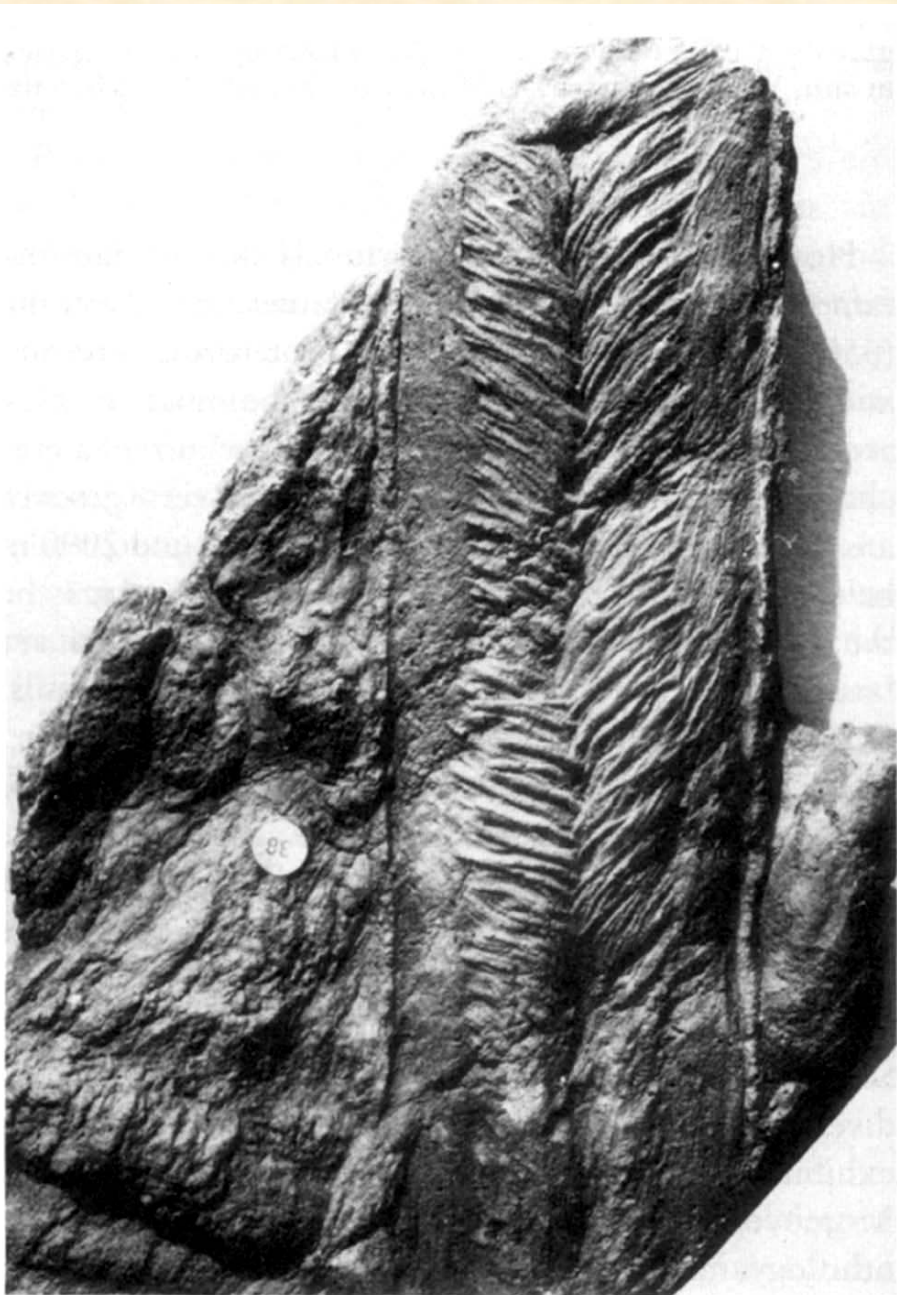
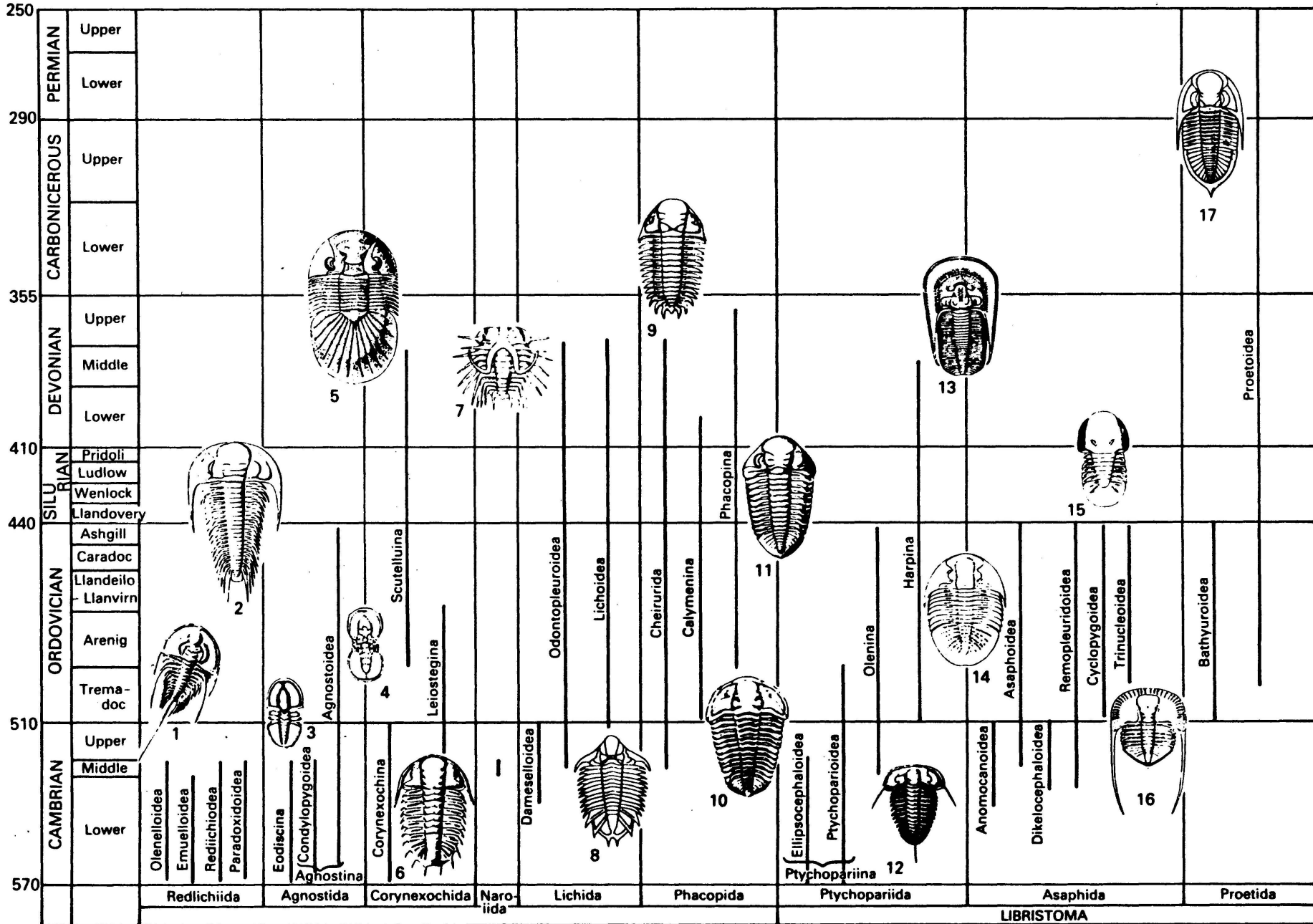


Figure 31.15. *Cruciana* (Lower Cambrian, northern Wales)

Trilobita: Leitfossilien



Trilobita: Diversität

