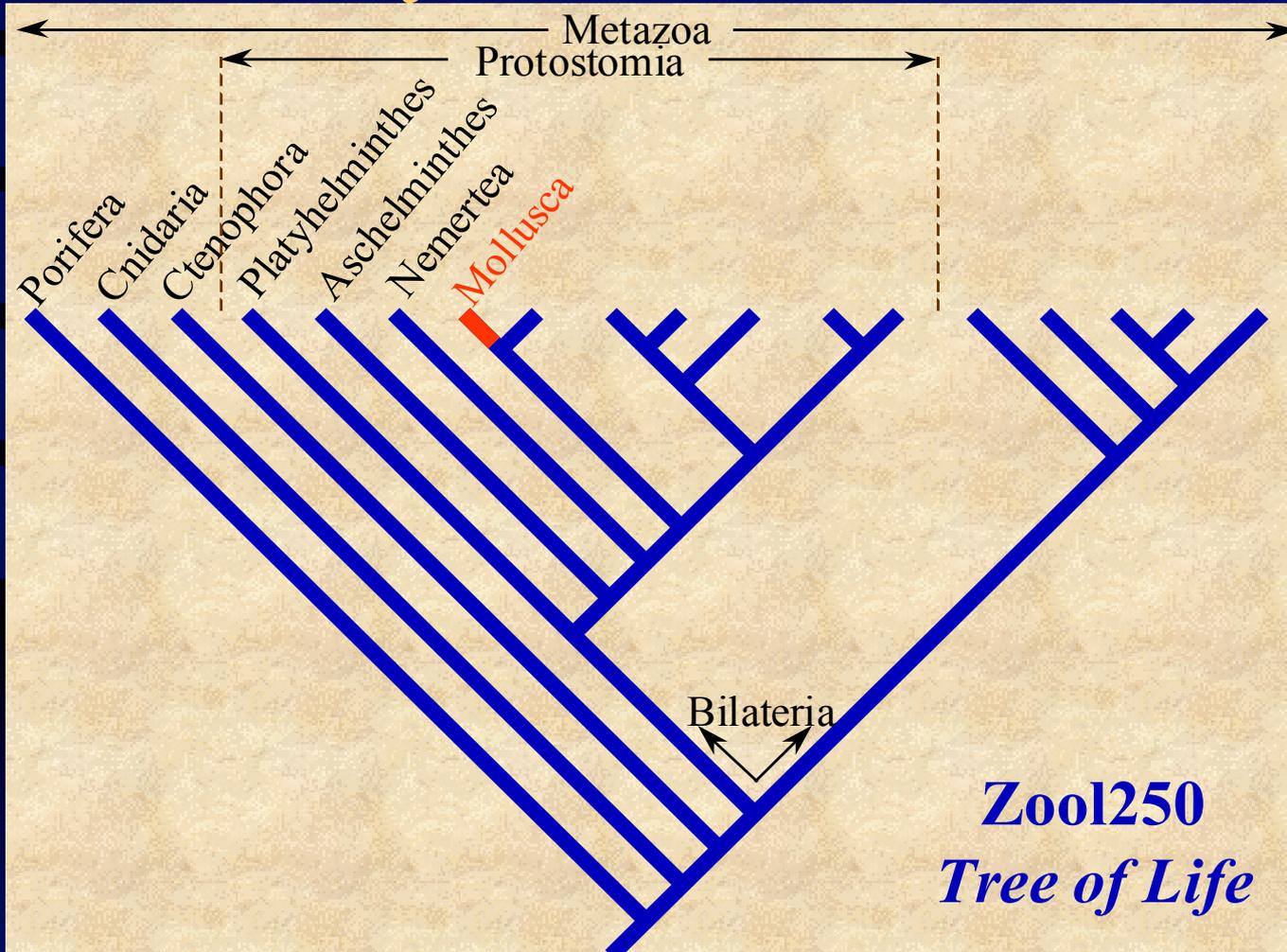
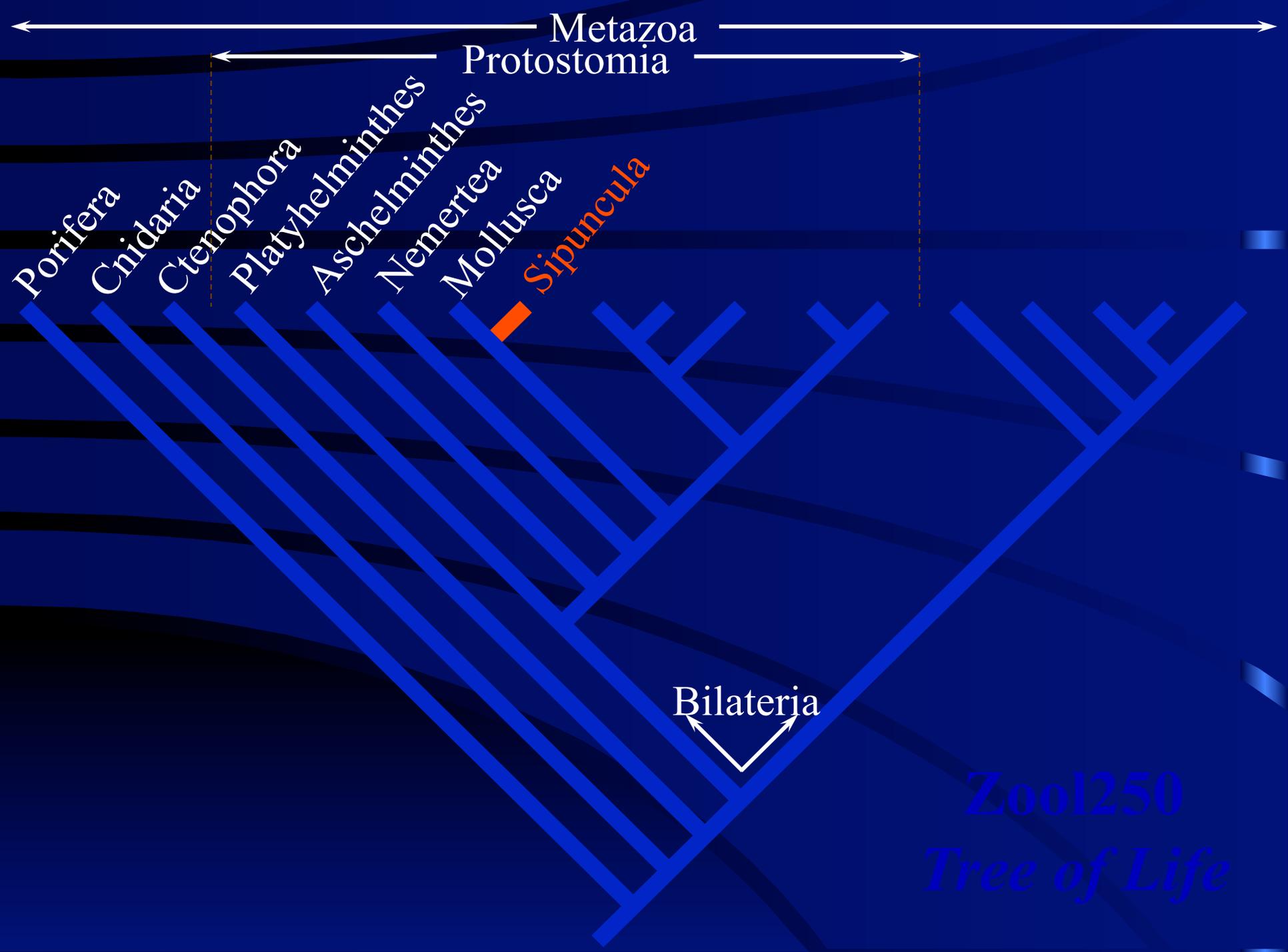


Phylum Mollusca





Metazoa

Protostomia

Porifera

Cnidaria

Ctenophora

Platyhelminthes

Aschelminthes

Nemertea

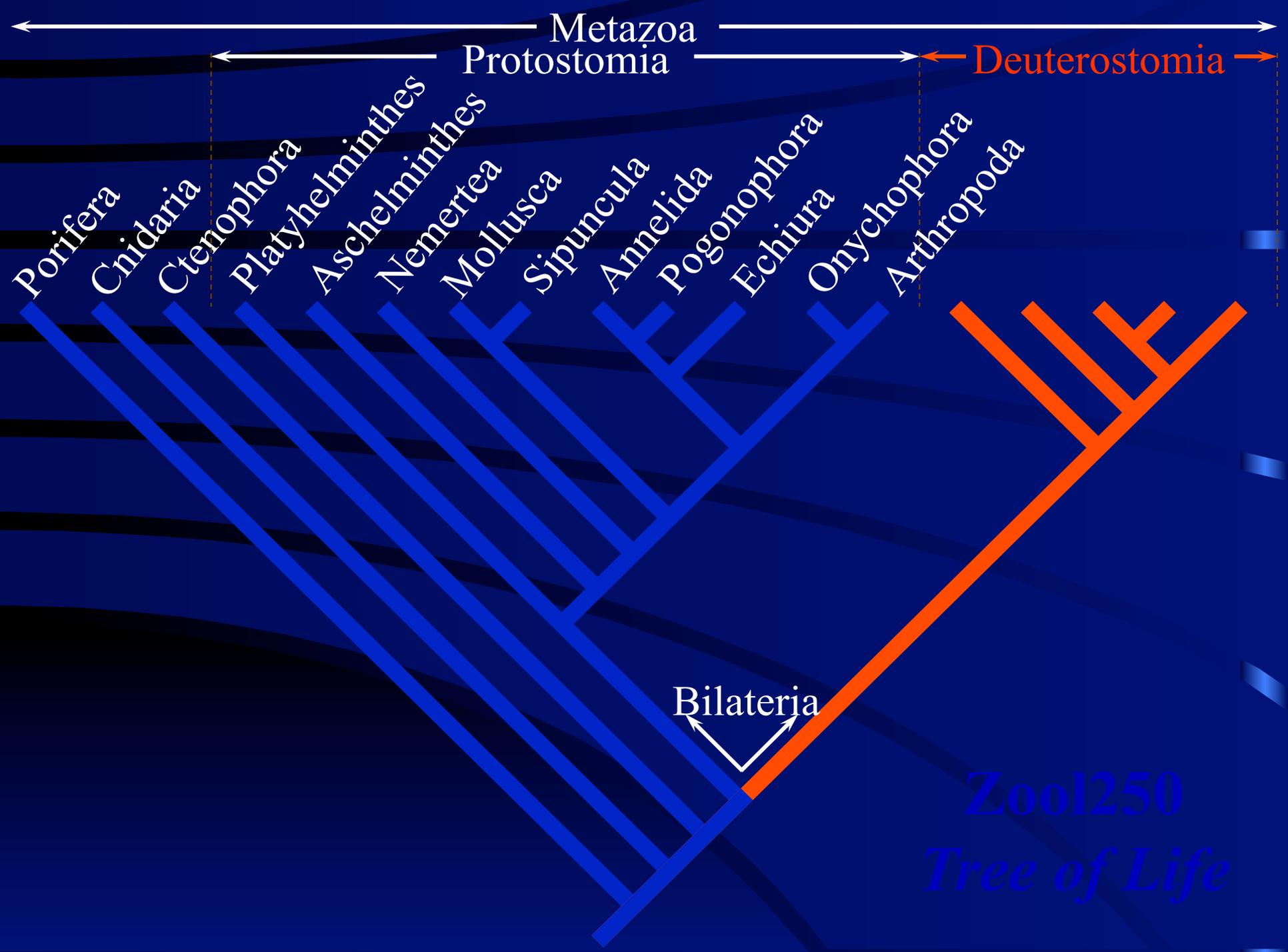
Mollusca

Sipuncula

Bilateria

Zool250

Tree of Life



Metazoa

Protostomia

Deuterostomia

Porifera

Cnidaria

Ctenophora

Platyhelminthes

Aschelminthes

Nemertea

Mollusca

Sipuncula

Annelida

Pogonophora

Echiura

Onychophora

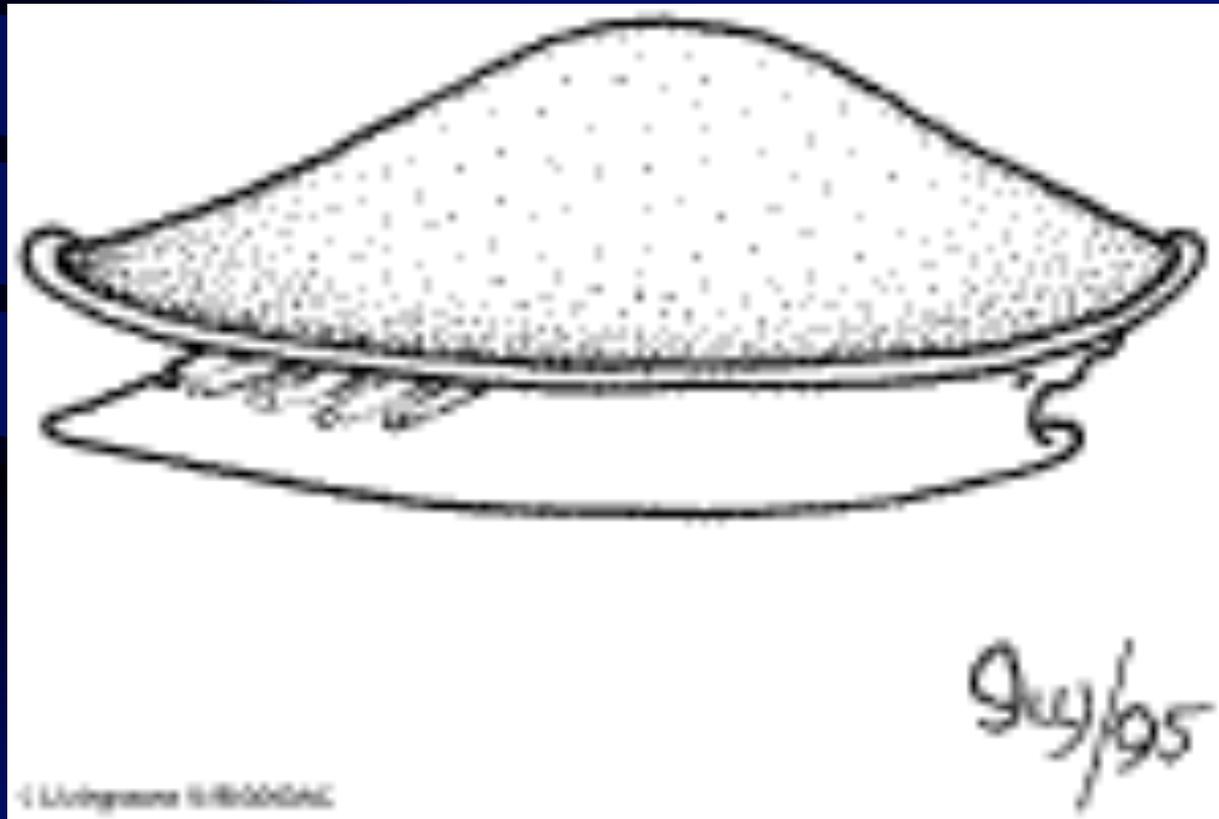
Arthropoda

Bilateria

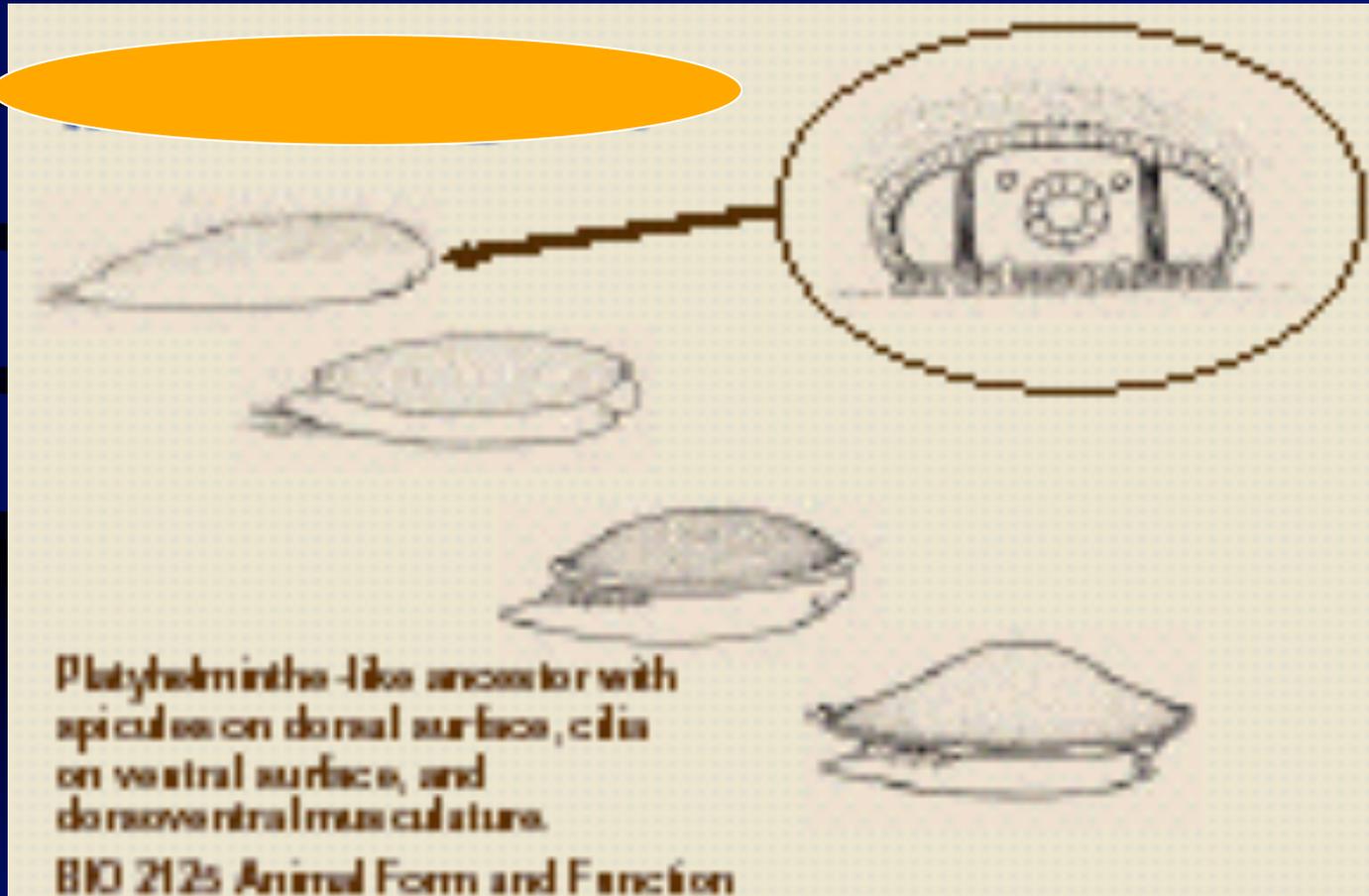
Zool250

Tree of Life

Molusco ancestral..?



Origen de los moluscos?



Novidades evolutivas del phylum

Molusco generalizado

Nefridiop

MANTO

Corazon bicameral

CONCHA

epidermis

Celoma

Ano

Aorta

Cav. paleal

Glan.
digestiva

Gónada

Branquia

Músculos

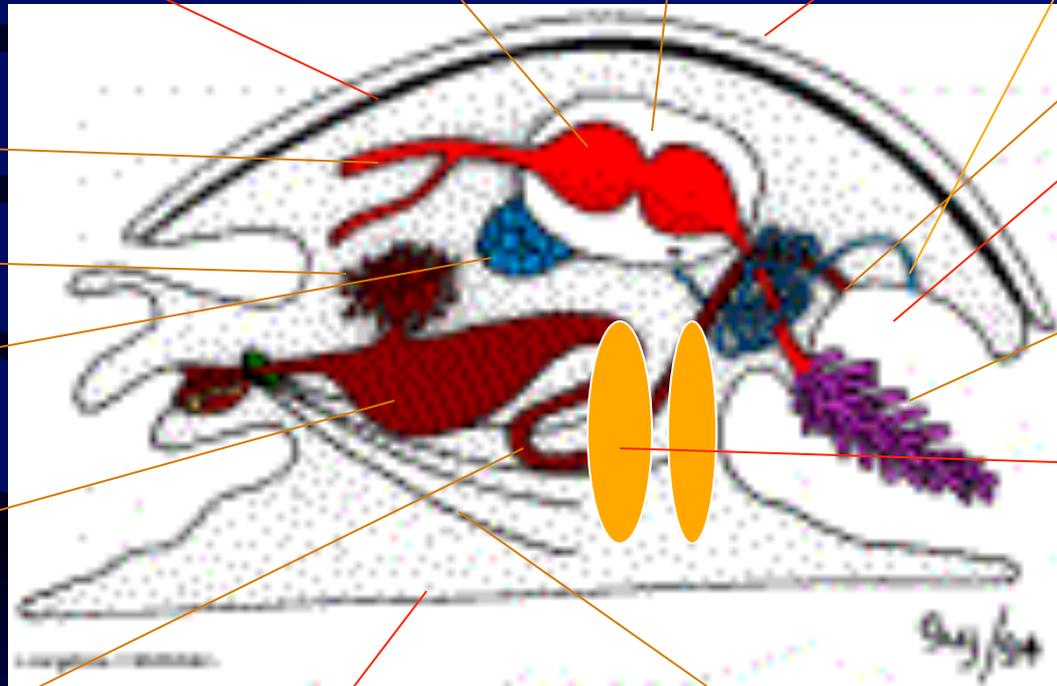
Saco estilo

Retractores

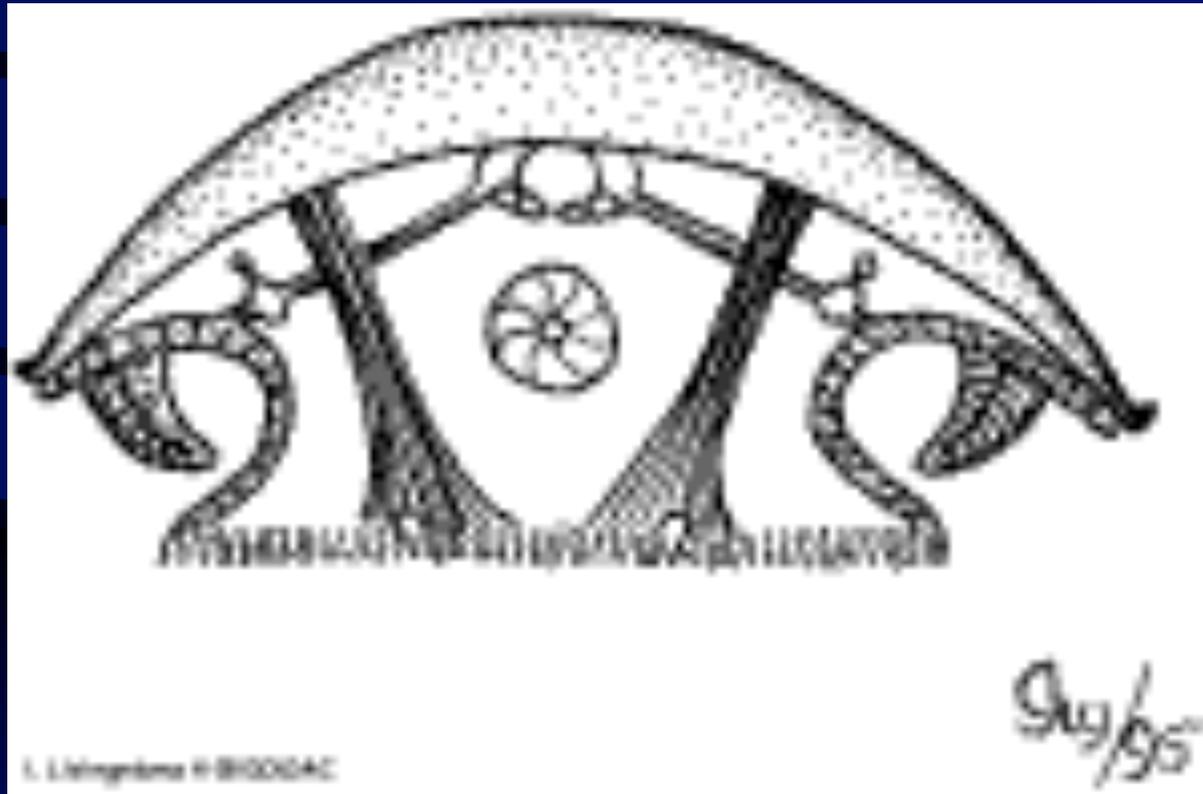
Intestino

Nervios pedales

PIE



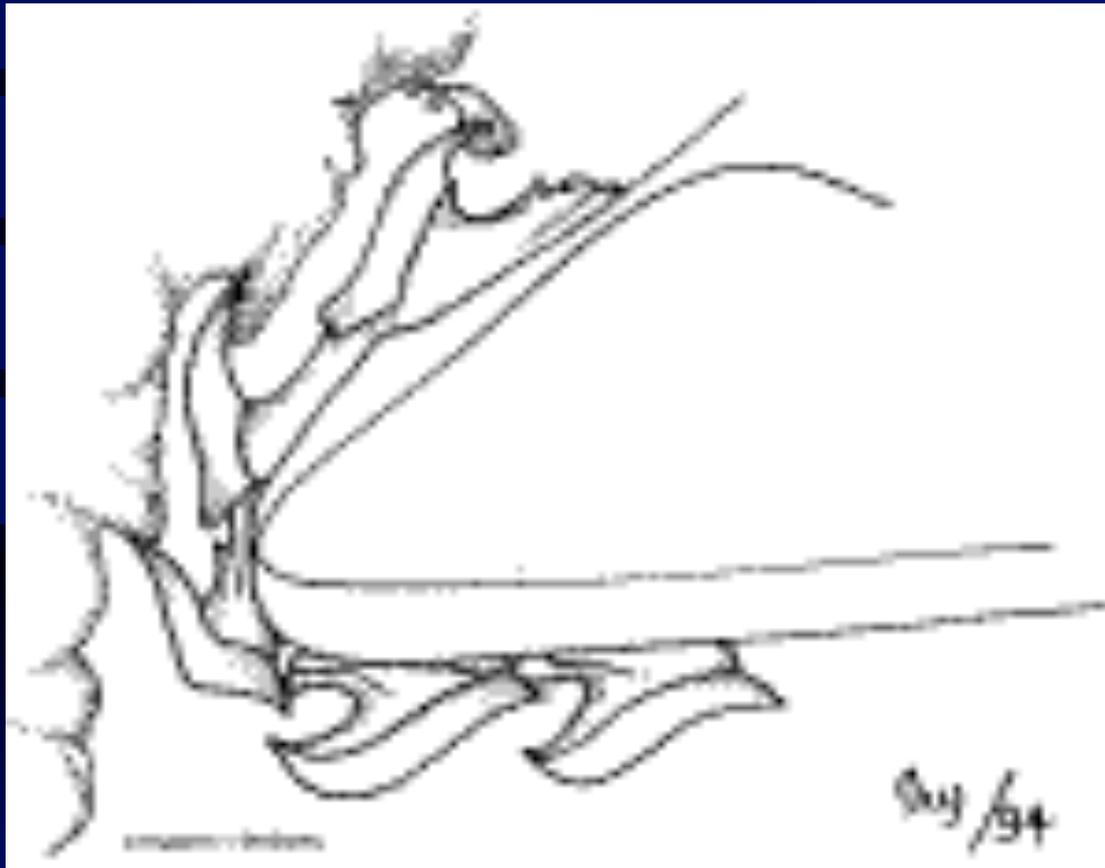
Músculos retractores: pie-manto



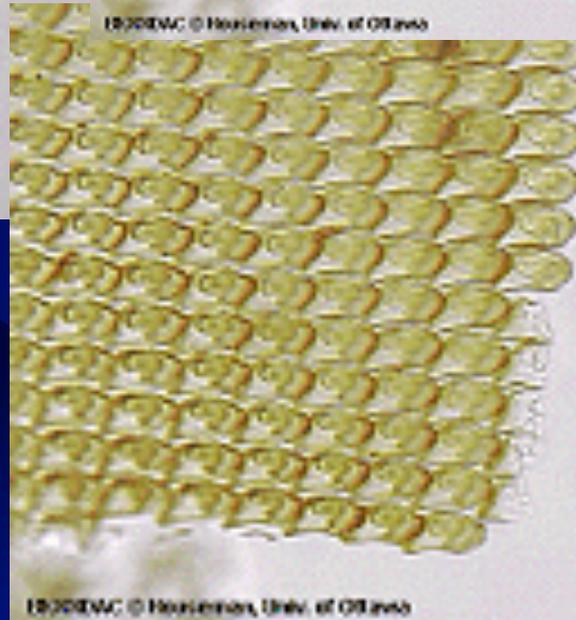
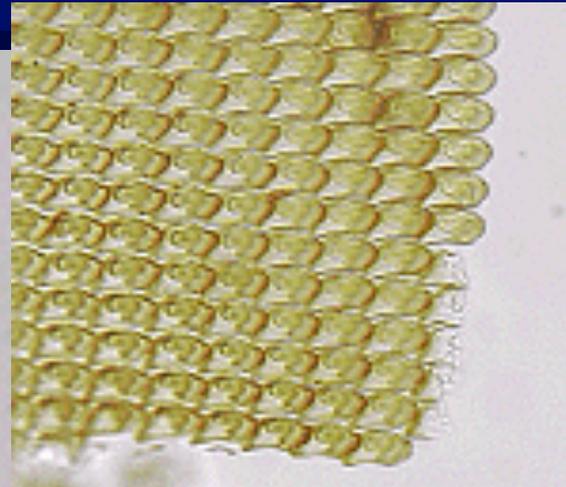
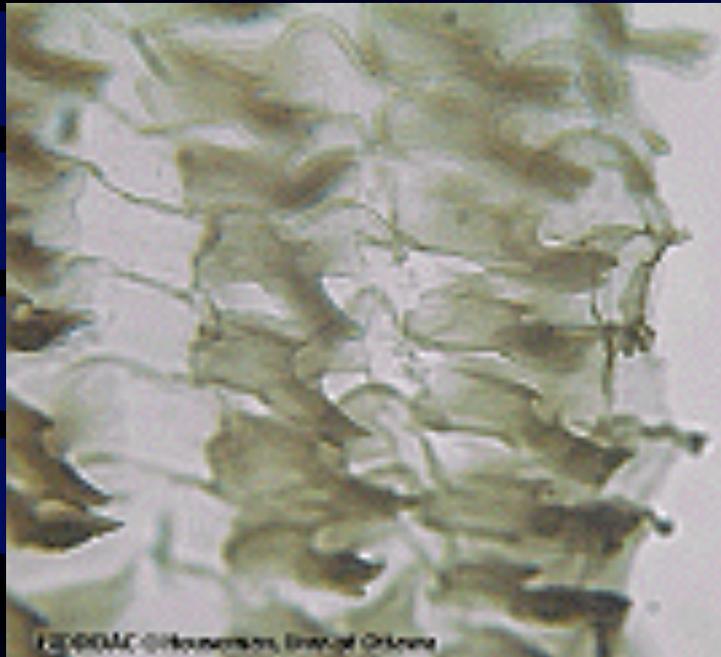
Cabeza con boca-odontoforo- rádula-músculos y glándulas



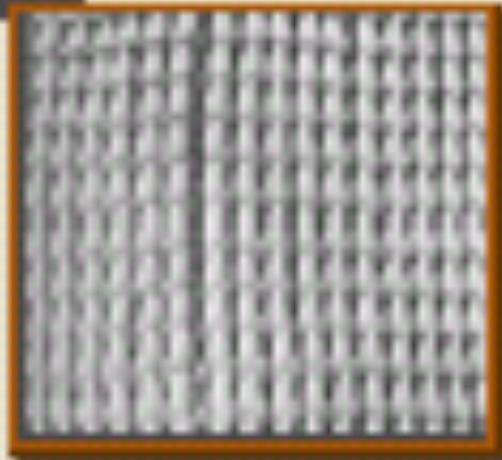
Acción de corte dientes-rádula



Rádula



Radula



Larva trocófora

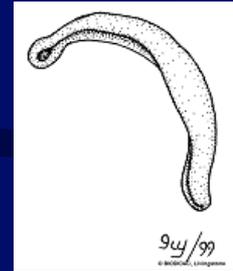
Diversidad dentro del phylum



Monoplacofora



Poliplacofora



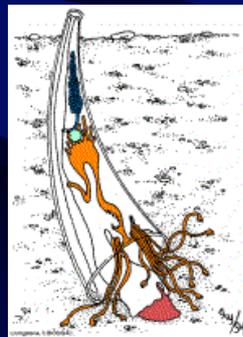
Aplacofora



Gastropoda



Bivalvia



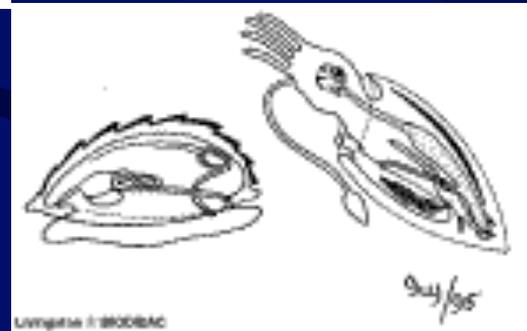
Scaphopoda



Cephalopoda



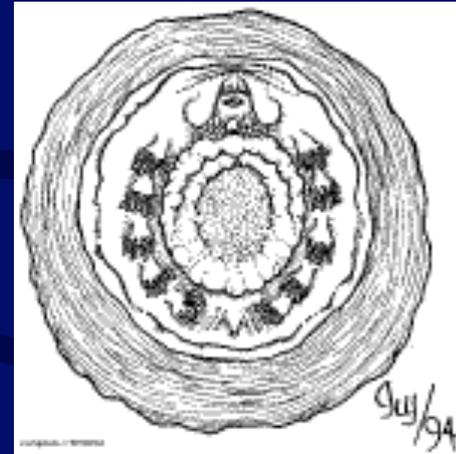
Modificaciones a mismo patrón corporal



Clase Monoplacophora



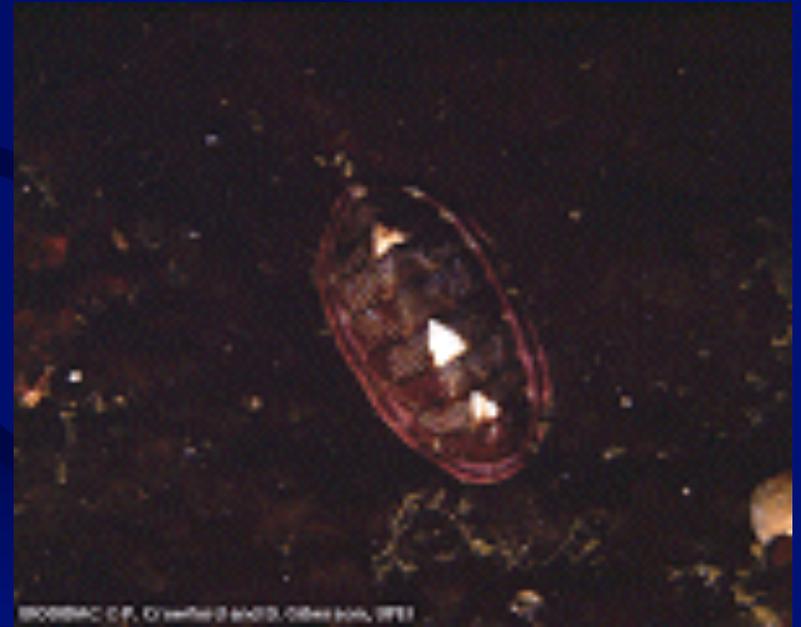
Dorsal



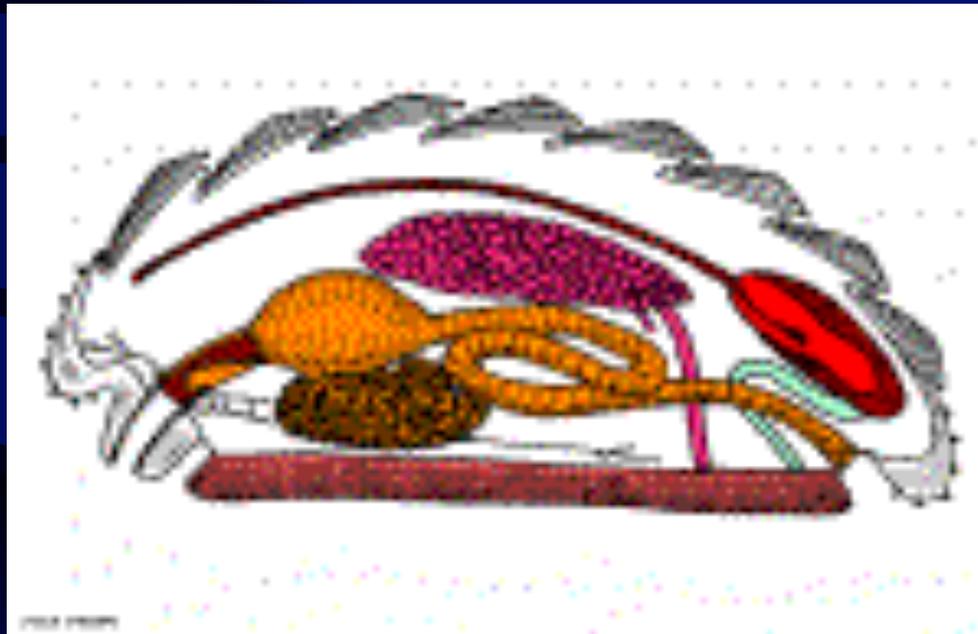
Ventral

Clase Aplacophora

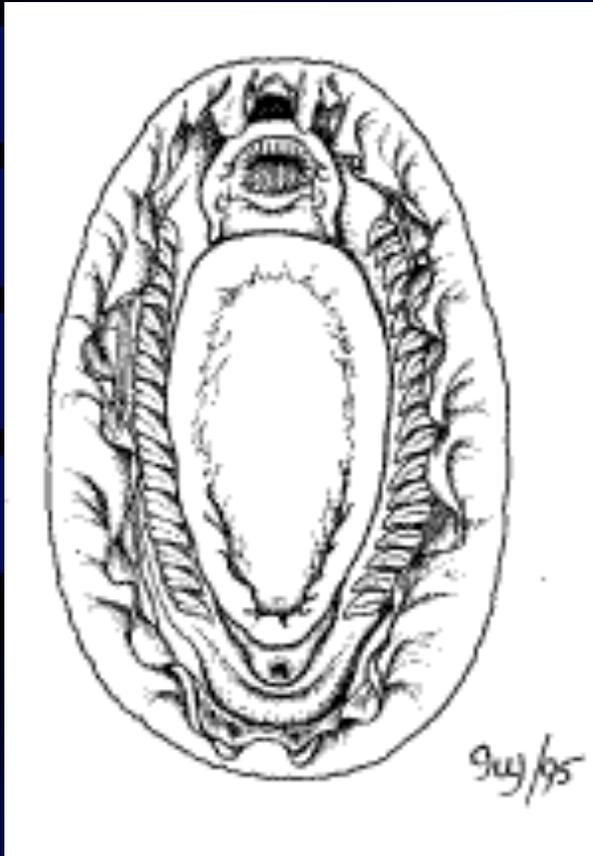
Clase Poliplacophora



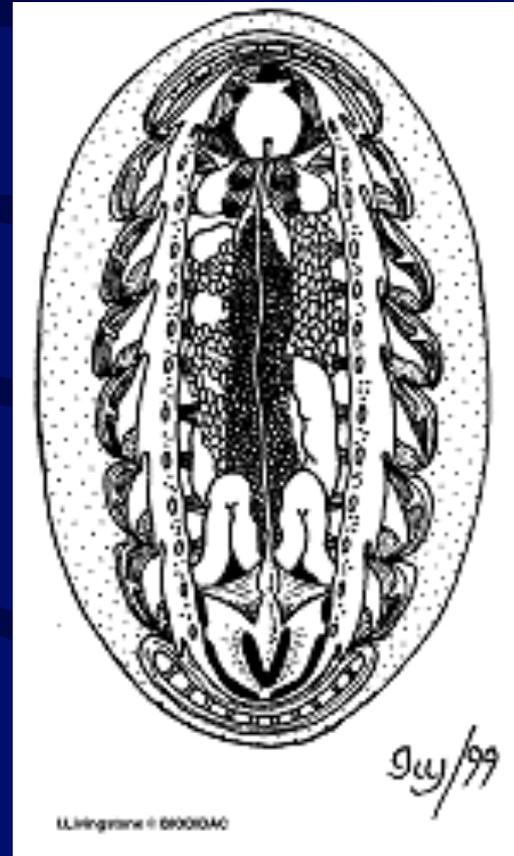
Vista lateral sistemas



Quiton

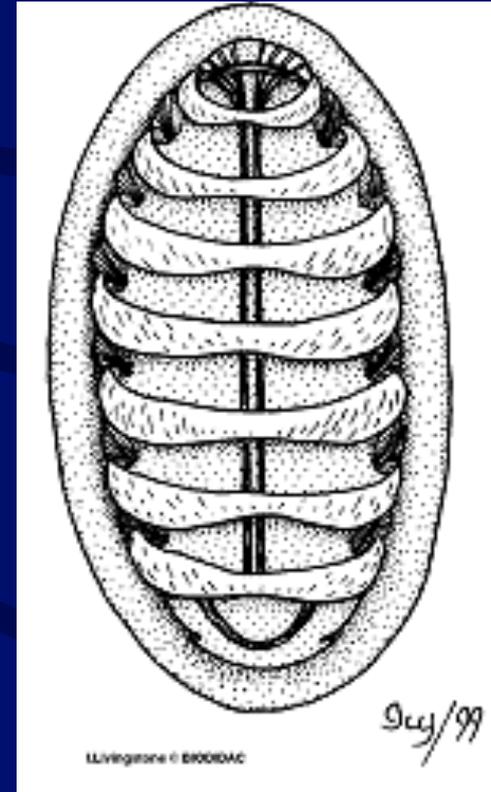
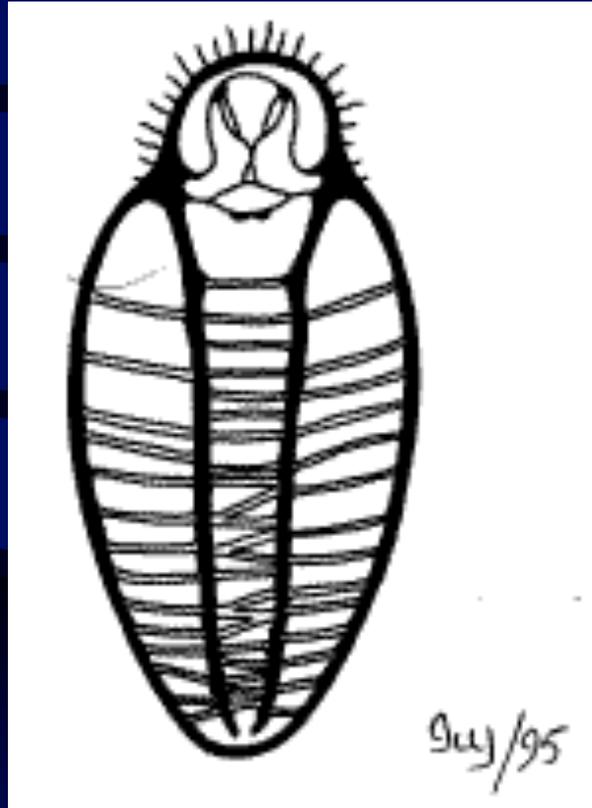


Vista ventral



Dorsal sin ceramas

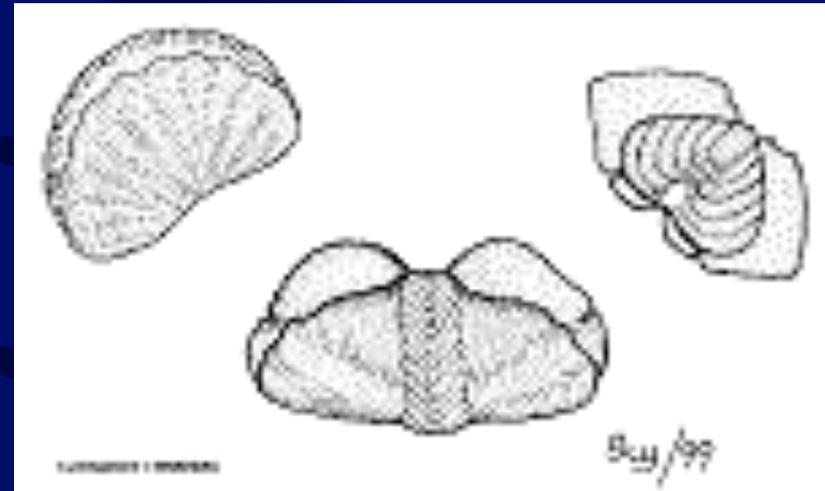
Sistema nervioso- Muscular



Corte transversal quiton



Ceramas generalmente 8



Clase Gasteropoda



**GASTEROPODA INCLUYE: LAPAS, LIEBRES
DE MAR, BABOSAS DE MAR, CARACOLES
TERRESTRES
CON:**

30.000 ESPECIES ACTUALES

15.000 ESPECIES FOSILES REPRESENTADAS POR

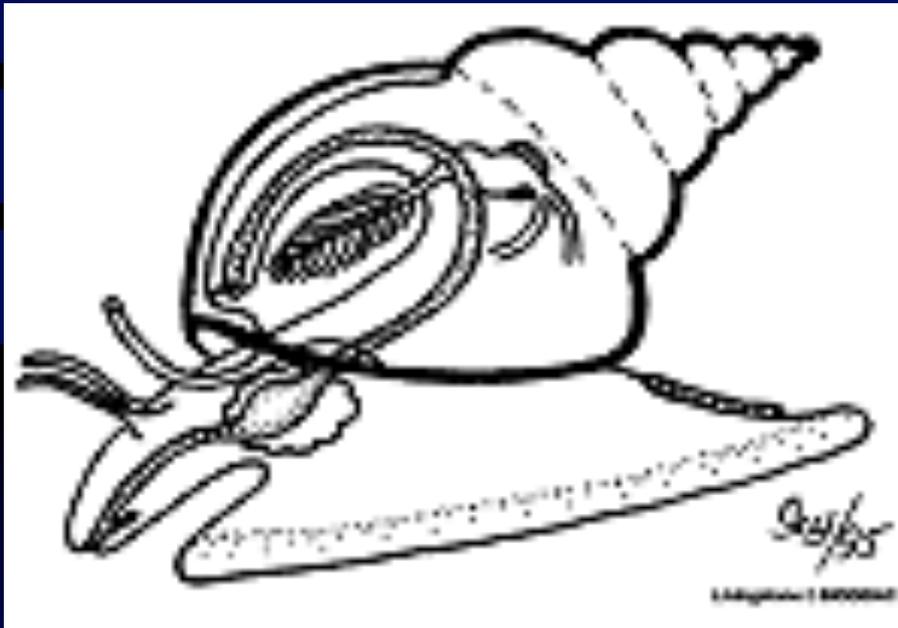
UN RICO RESGISTRO FÓSIL ININTERRUMPIDO

CAMBIOS EVOLUTIVOS IMPORTANTES:

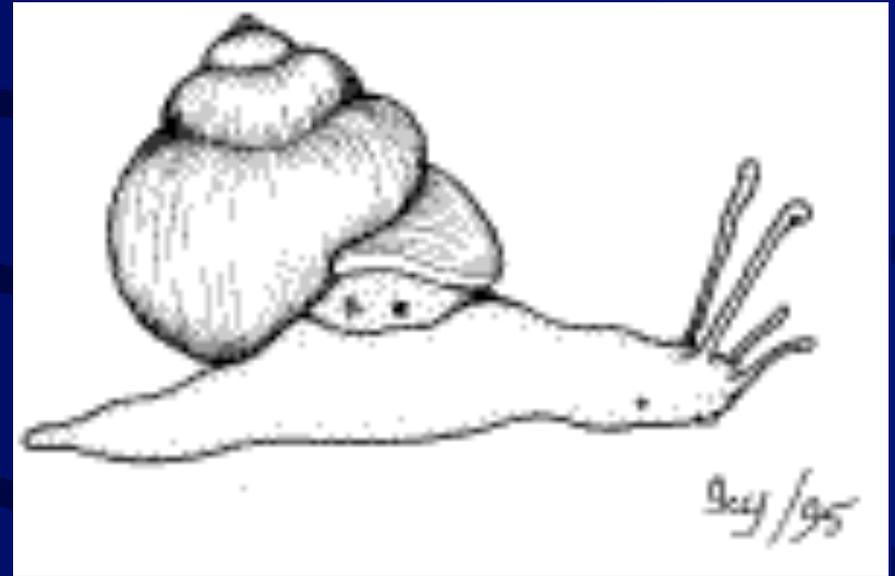
1. DESARROLLO DE UNA CABEZA
2. ALARGAMIENTO DEL CUERPO (DORSO VETRAL)
3. ESPIRALIZACIÓN DE LA CONCHA
4. TORSIÓN DEL CUERPO.

Evolución del grupo

1. Desarrollo de cabeza y alargamiento del cuerpo



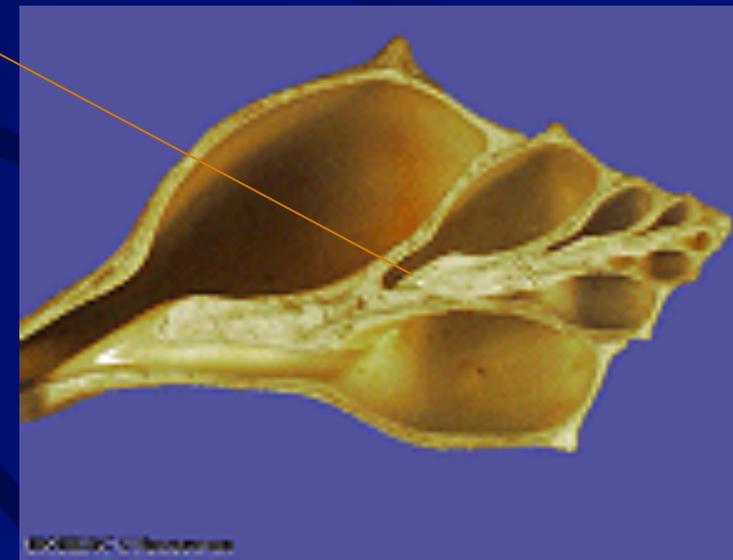
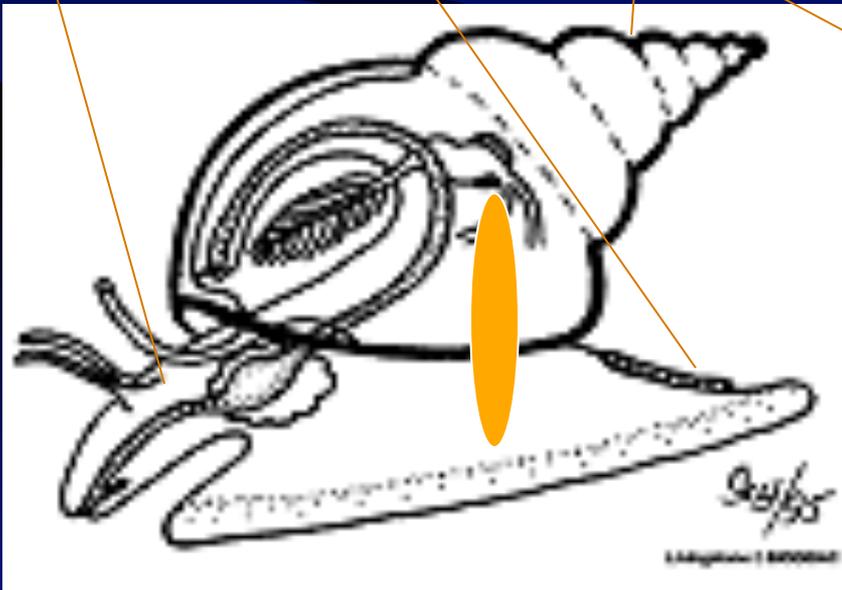
Cephalización



DESARROLLO PRIMITIVO

CABEZA- ESPIRALIZACION CONCHA
ASIMETRICA ALREDEDOR DE UNA
COLUMELA

MUSCULO RETRACTOR COLUMELAR
OPERCULO



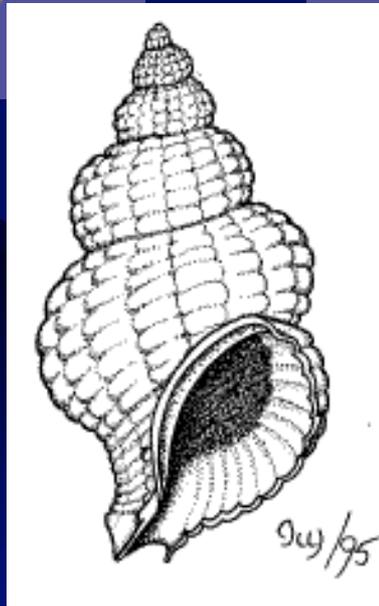
2. Espiralización de la concha



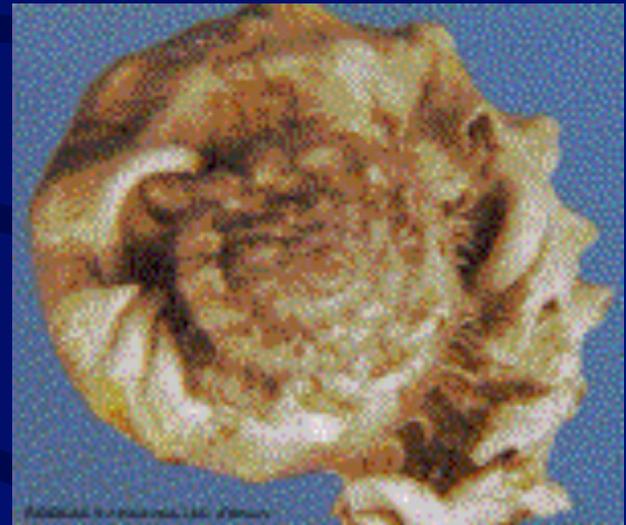
BOBILIC O. Invertebrat



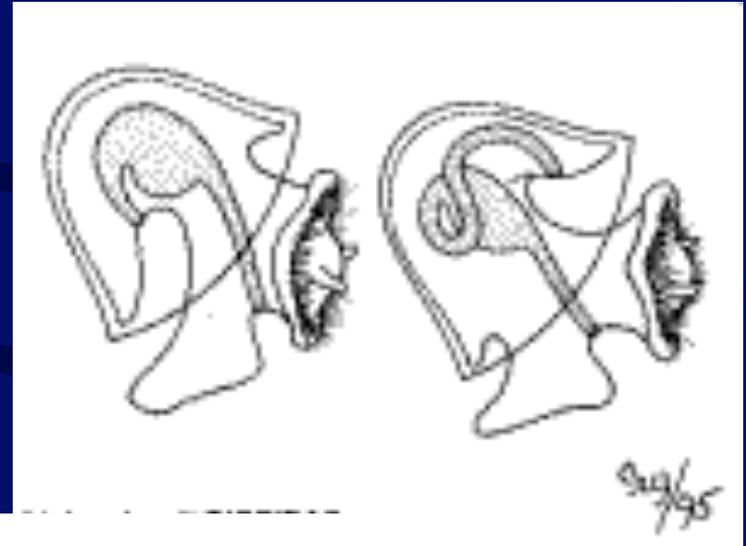
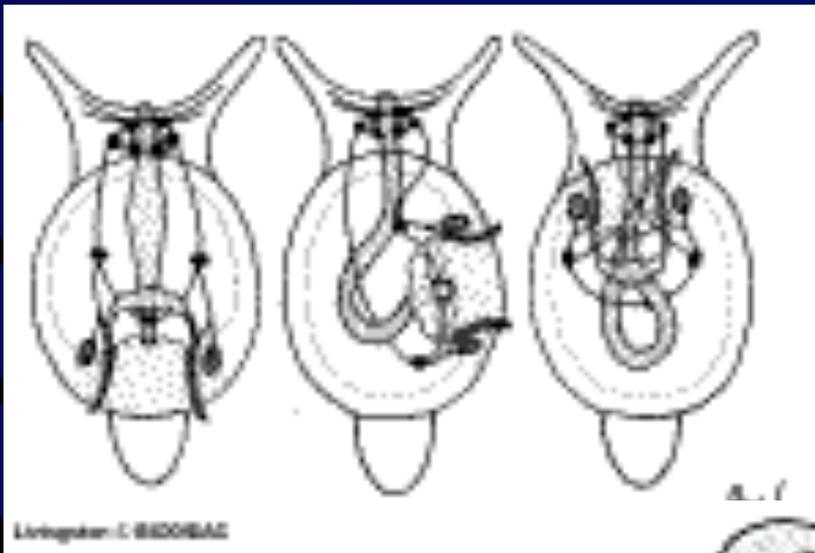
C. Invertebrat



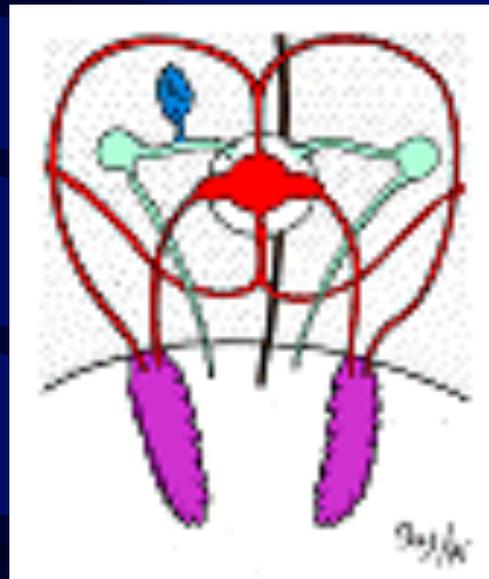
Espiralización abertura



3. Torsión corporal



Sistema circulatorio



Subclases de gasteropodos con base en la circulación del agua e intercambio gaseoso:

1. Prosobranquia
2. Opistobranquia
3. Pulmonata

1. PROSOBRANQUIA: 18.000 ESPECIES

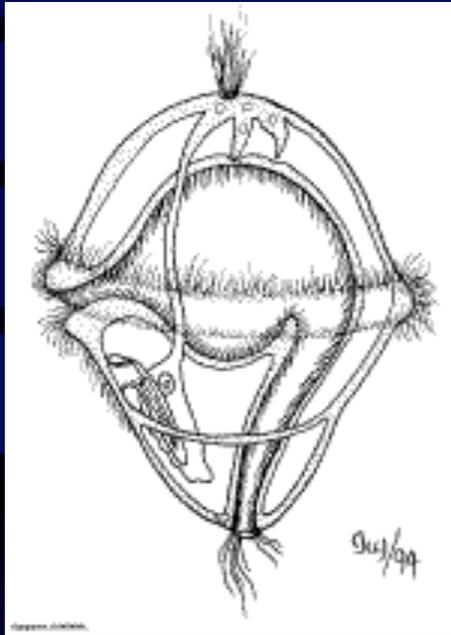
- Respiración por branquias –dos- – Torsión de 180*
- Conchas con hendiduras como solución a problemas higiénicos de la torsión.
- Sexos separados-dioicos- pocos hermafroditas.

ARCHEOGASTEROPODA: Con concha hendida DOS
BRANQUIAS BIPECTINADAS-MENOR No.
Otros.. BRANQUIAS MONOPECTINADAS-EXCAVADORES-
HERVIBOROS,CARNIVOROS **Nerita sp**

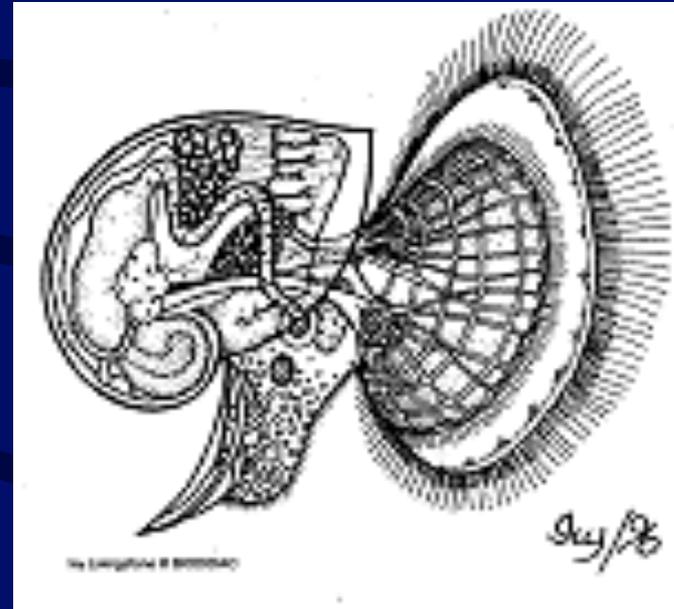
MESOGASTEROPODA: Marinos,dulceaquícolas,terrestres
con opérculo.

NEOGASTEROPODA: Desarrollo de un sifón inhalante

Larva de arqueogasteropoda



Trocophora



Larva Veliger

2. OPISTOBRANQUIA

CIERTA DETORSIÓN DEL cuerpo 90* -

HERMAFRODITAS

REDUCCIÓN DE LA CONCHA - MAYOR. MARINOS

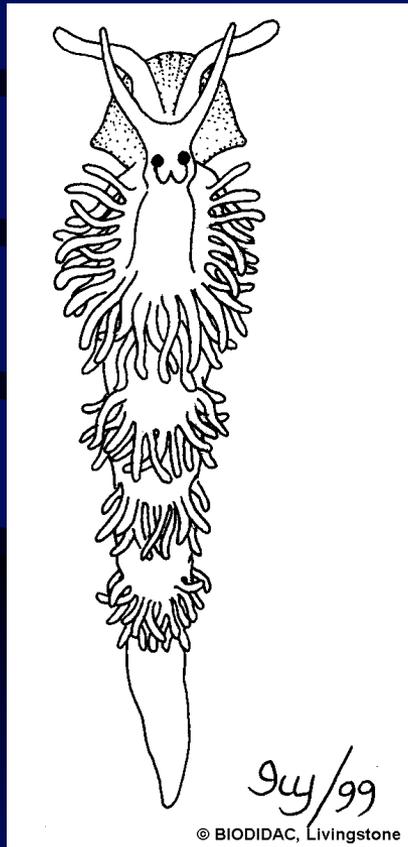
BRANQUIAS TIPO PLEGADO

ADULTOS SIN OPERCULO

ORDEN NUDIBRANQUIA : CARNIVOROS

CON CNIDOSACOS

Nudibranchia

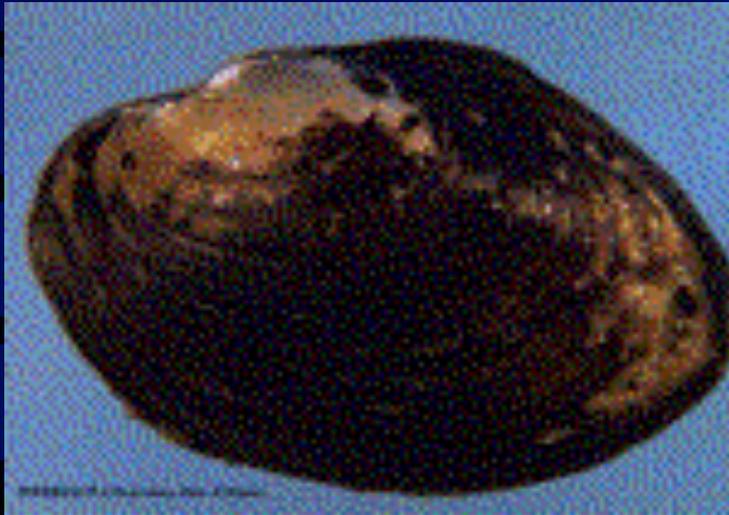


PULMONATA: 16.000ESP.

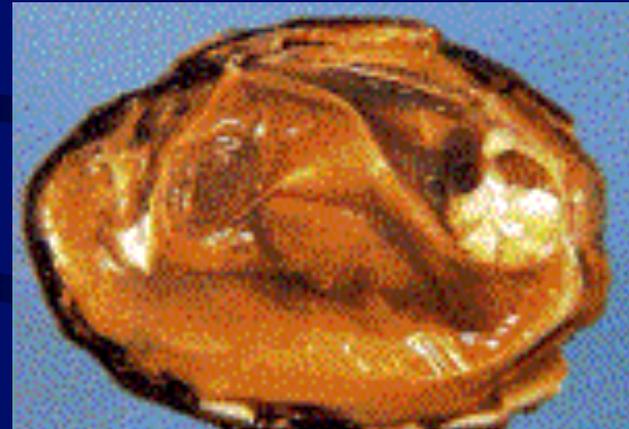
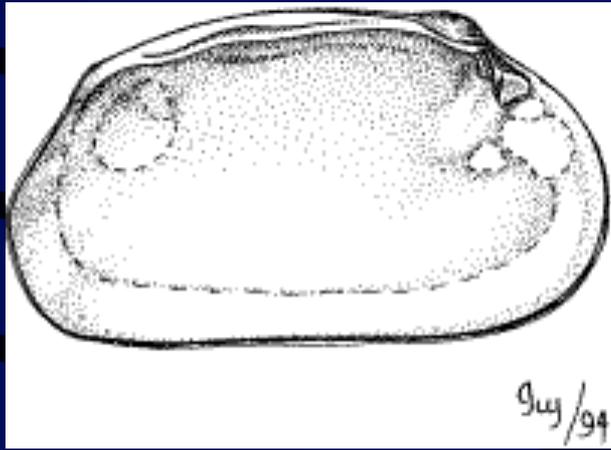
HERMAFRODITAS- DETORSIÓN-
CAVIDAD PALEAL TRANSF. EN
PULMON-PNEUMOSTOMA-
HERVIBOROS.



Clase Bivalvia



Concha : dos valvas simétricas



Antes de la disección



Anatomía interna de bivalvo



Cavid. pericardica

Corazón

Músculo aductor

Ctenidio

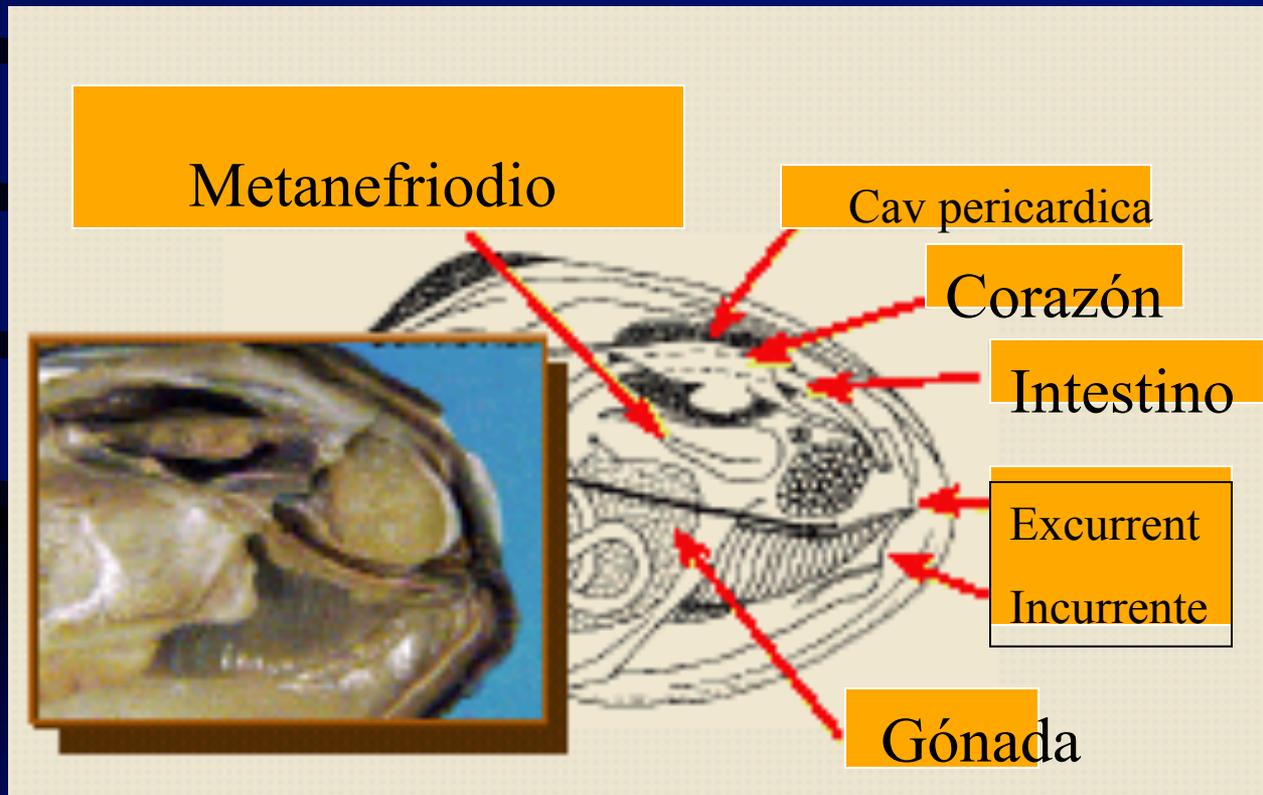
Gónada

Intestino

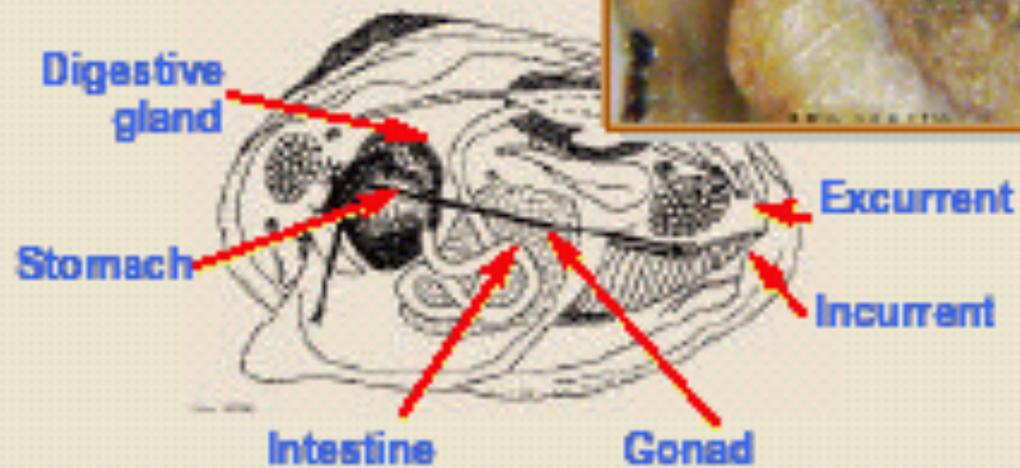
Pie

Estómago

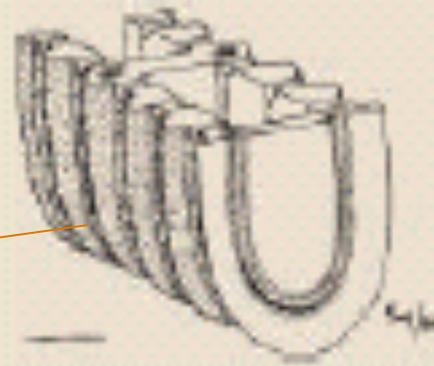
Anatomía bivalvo



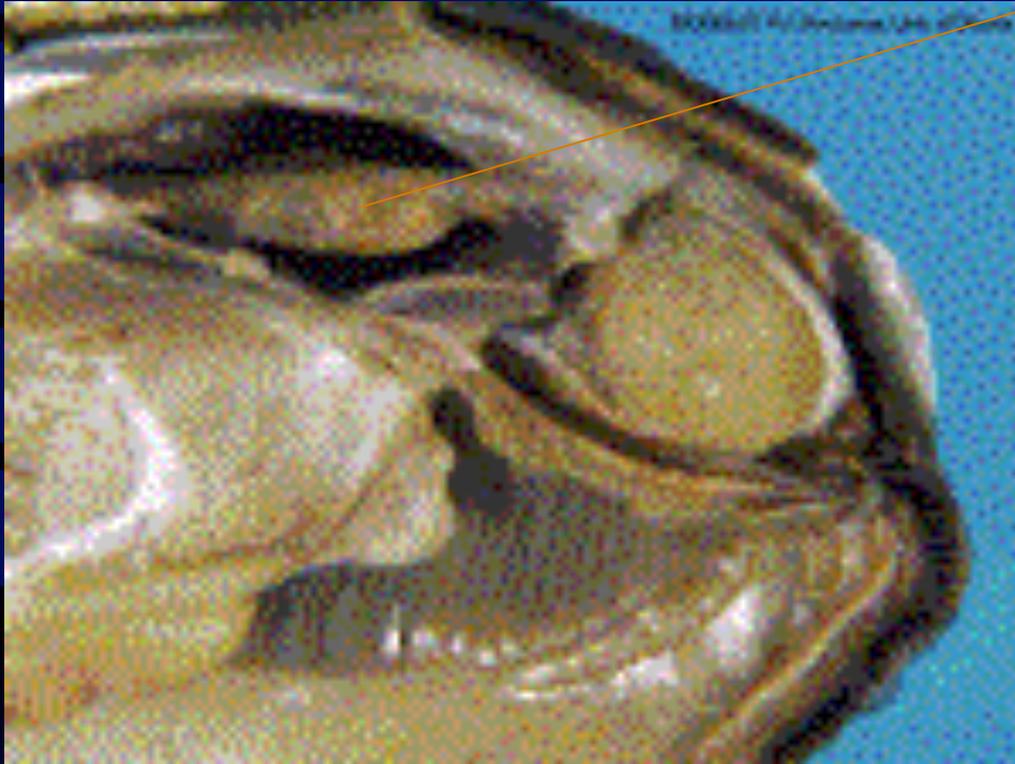
Clam anatomy



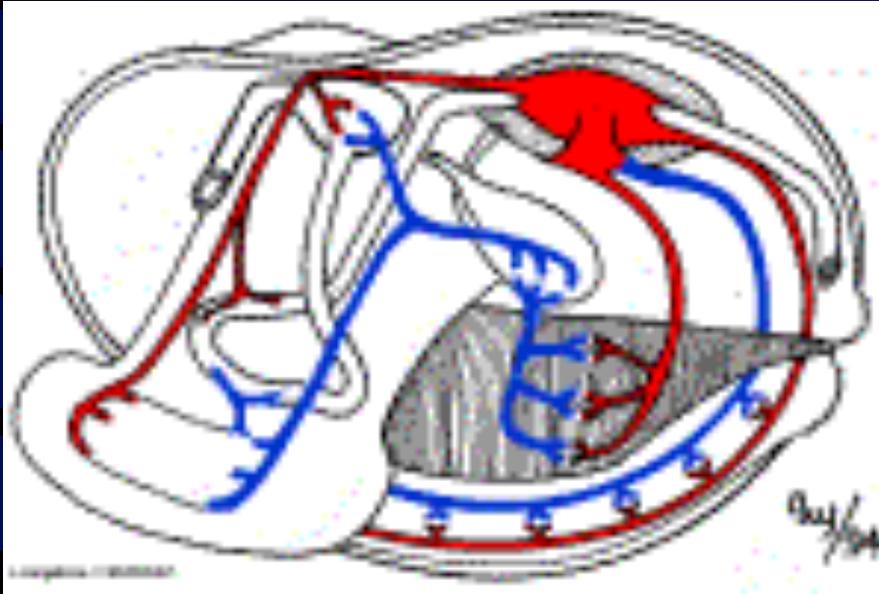
Ctenidios



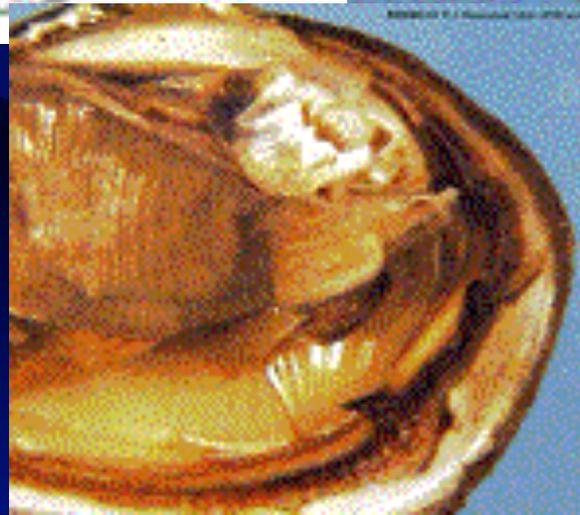
Corazón



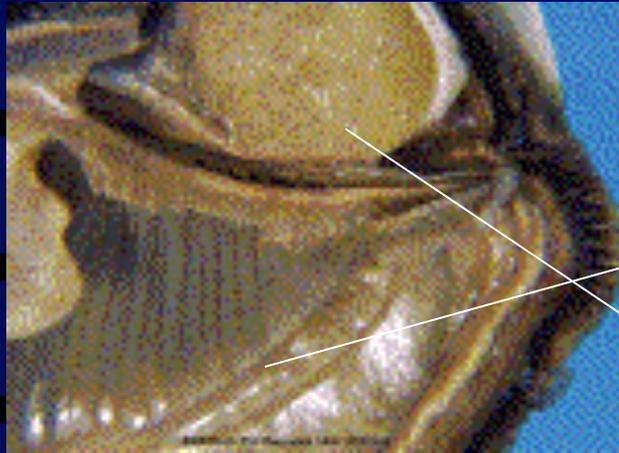
Sistema circolatorio



Bivalvos estructura interna



Músculos aductores



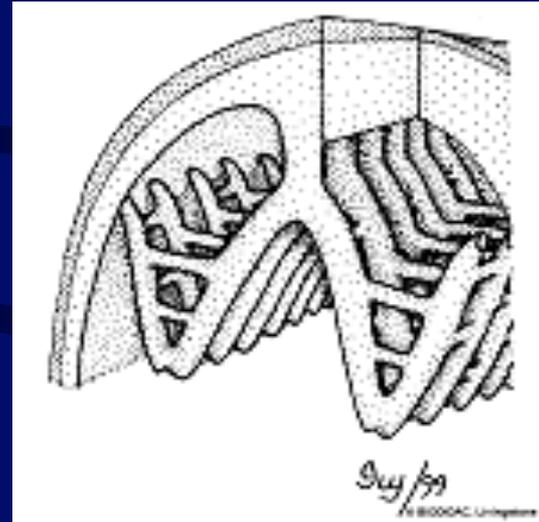
Branquias

Músculos

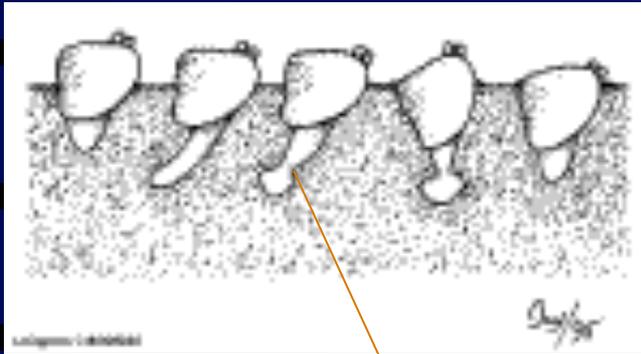


Estómago

Lamelibranquios filtradores

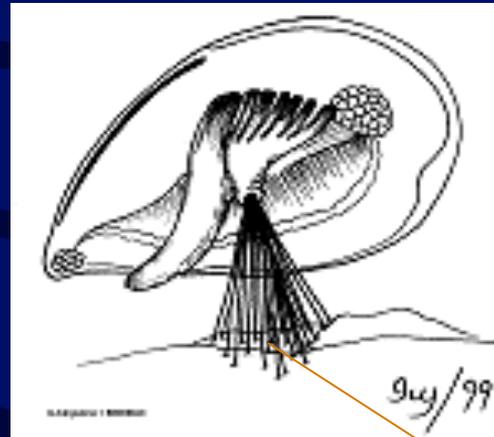


Hábitos y hábitat



Donax sp

Pie
excavador

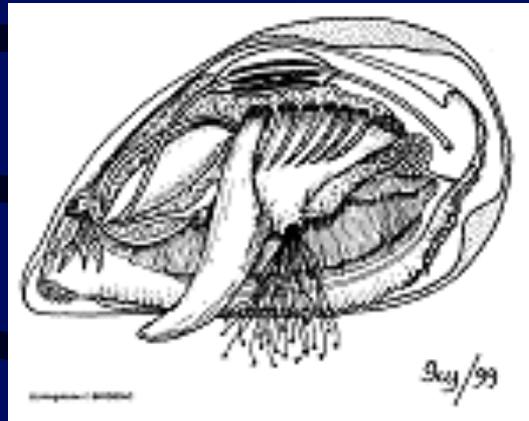


Mytilus: mejillones

Biso

Excavadores de fondos blandos

Mecanismo de filtración



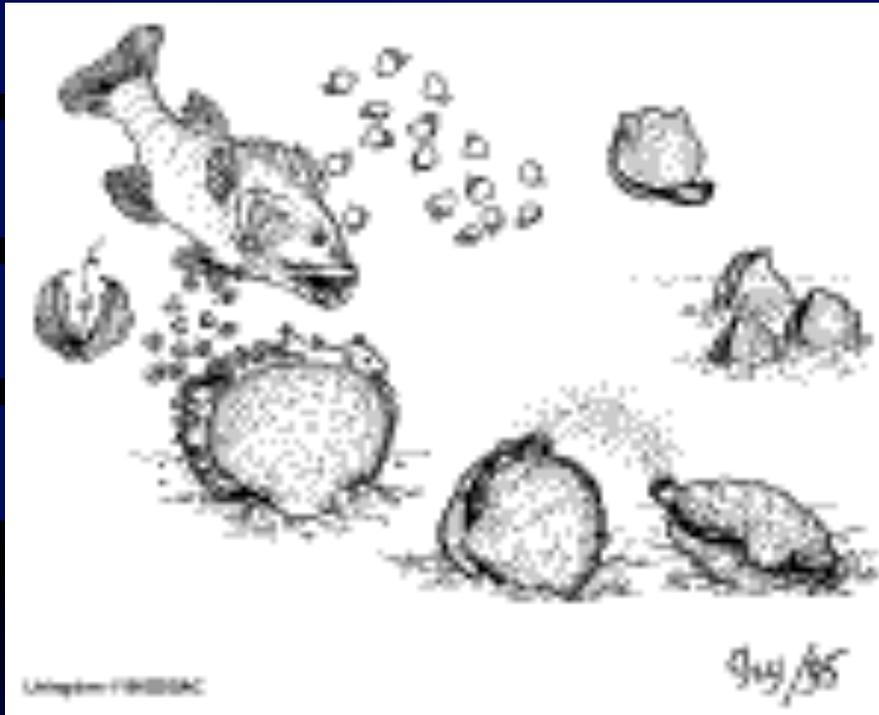
FilbranchBivalve.exe

En excavadores..



Clam.exe

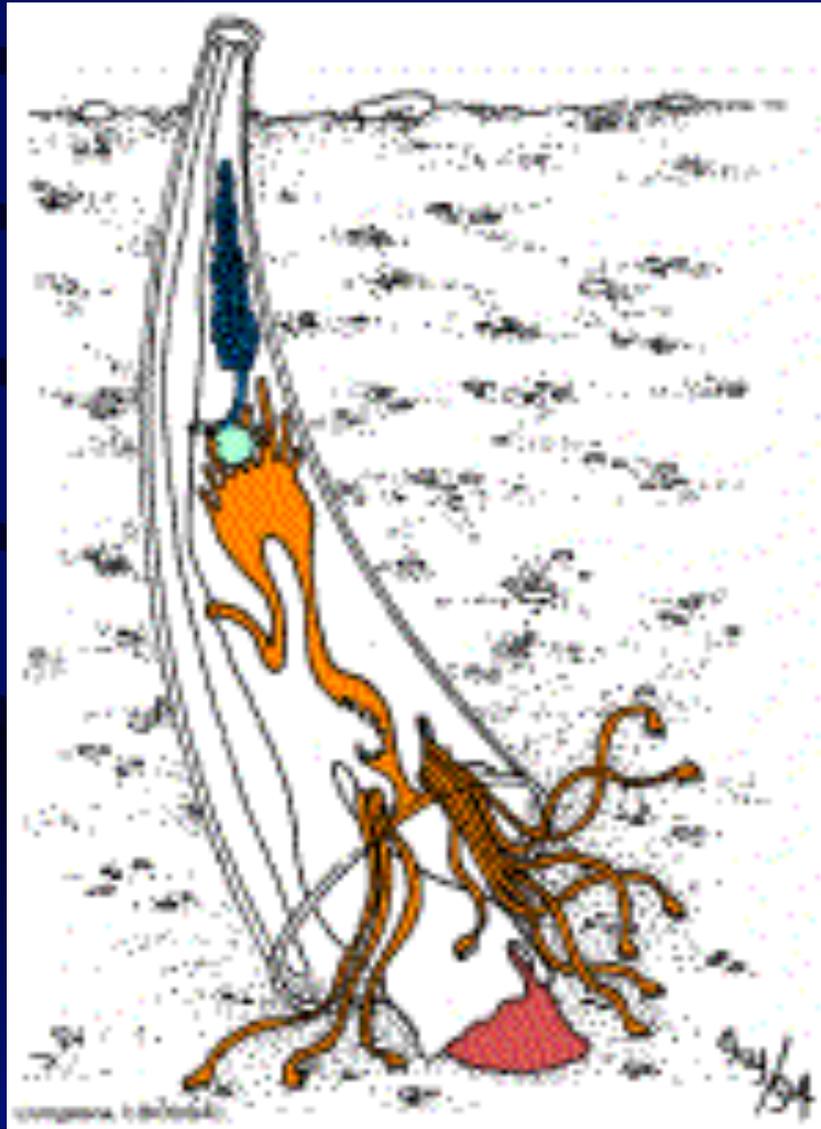
Estrategias de reproducción



Larva gloquidio



Clase Scaphopoda

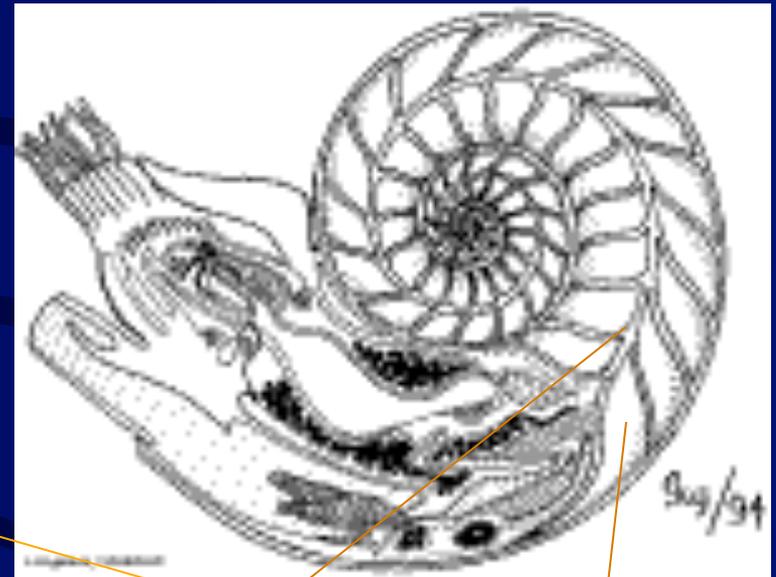
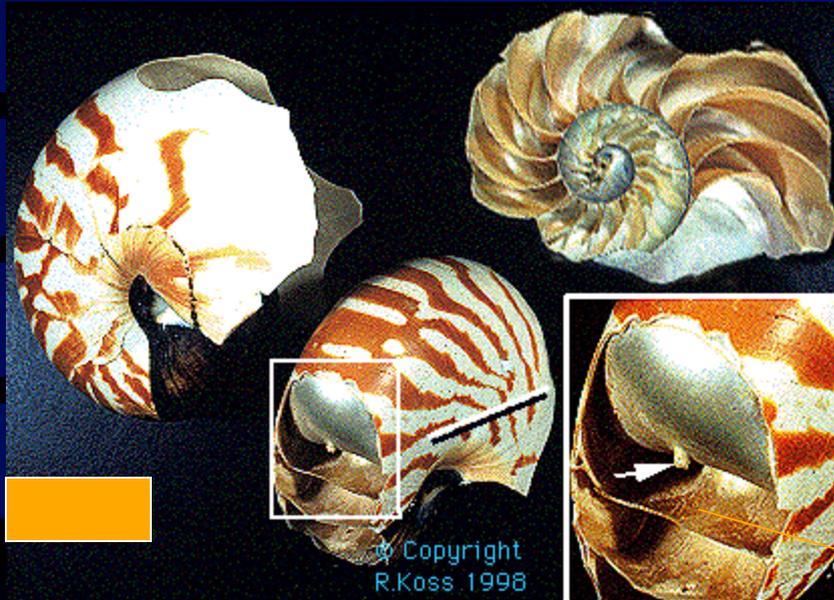


Clase Cephalopoda





Nautilodea



Sifunculo

Cámara