

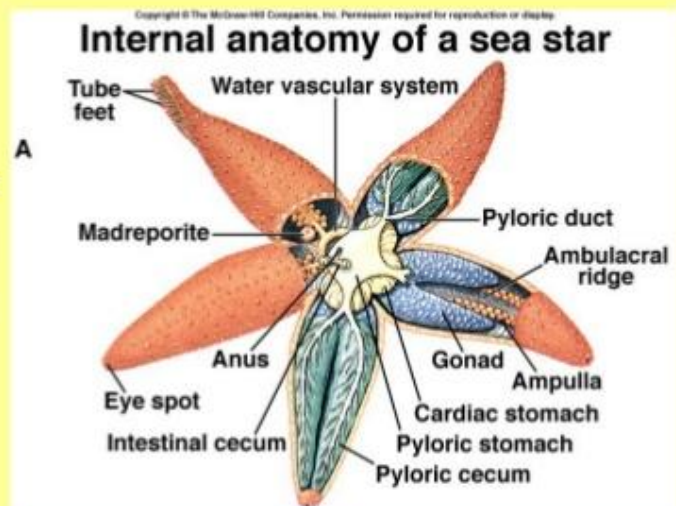
CLASSIFICATION OF ECHINODERMATA

- Class Asteroidea
- Class Ophiuroidea
- Class Echinoidea
- Class Holothuroidea
- Class Crinoidea

Class Asteroidea True Starfishes

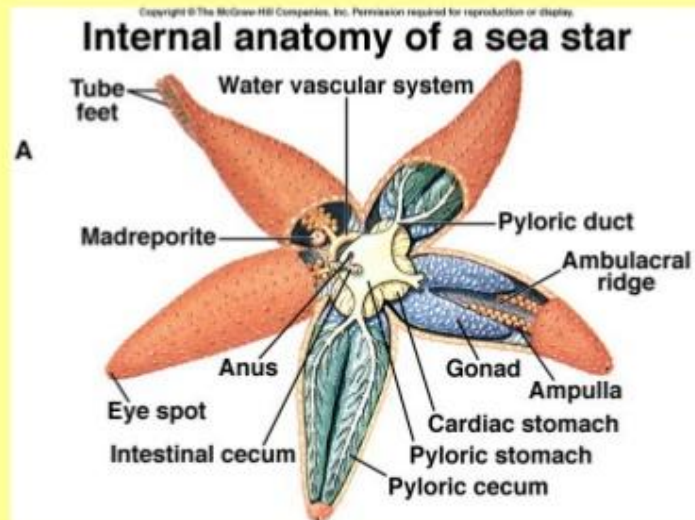
- **Feeding**
 - Mouth
 - cardiac stomach- can be extruded
 - pyloric stomach
 - pyloric caecae
 - Anus

- feed primarily on sessile organisms



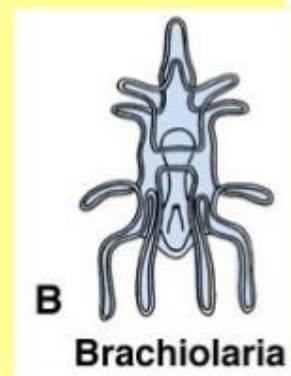
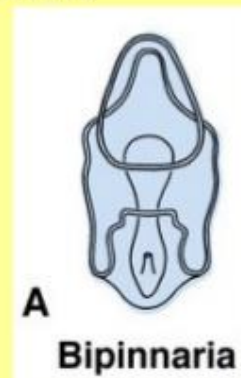
Class Asteroidea True Starfishes

- arms not sharply delineated from central disc
- tube feet with suckers; used for
 - Locomotion
 - obtaining food
- madreporite and anus aborally located
- some have pedicellariae - jawlike appendages of epidermis



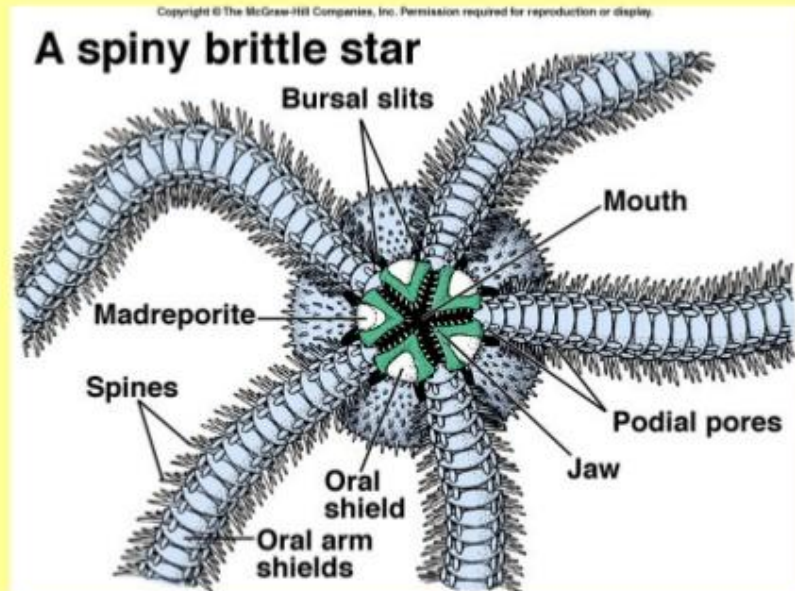
Asteroidea Reproduction

- free living larvae
- bipinnaria- first larval form develops into
- brachiolaria - shows development of arms



Class Ophiuroidea Brittle Starfishes and Basket Stars

- 5 arms usually
- central disc well marked off, no branches of gut in arms



Class Ophiuroidea Brittle Starfishes and Basket Stars

- no anus, no ambulacral groove
- madreporite on oral surface
- no suckers on tube feet, no ampullae (have a valve to control pressure)
- no pedicellariae
- able to move quickly and snake like hence their class name

