Water Vascular System In Asteroidea SEM- II, cc - III

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Echinoderms



pentamerous radial symmetry







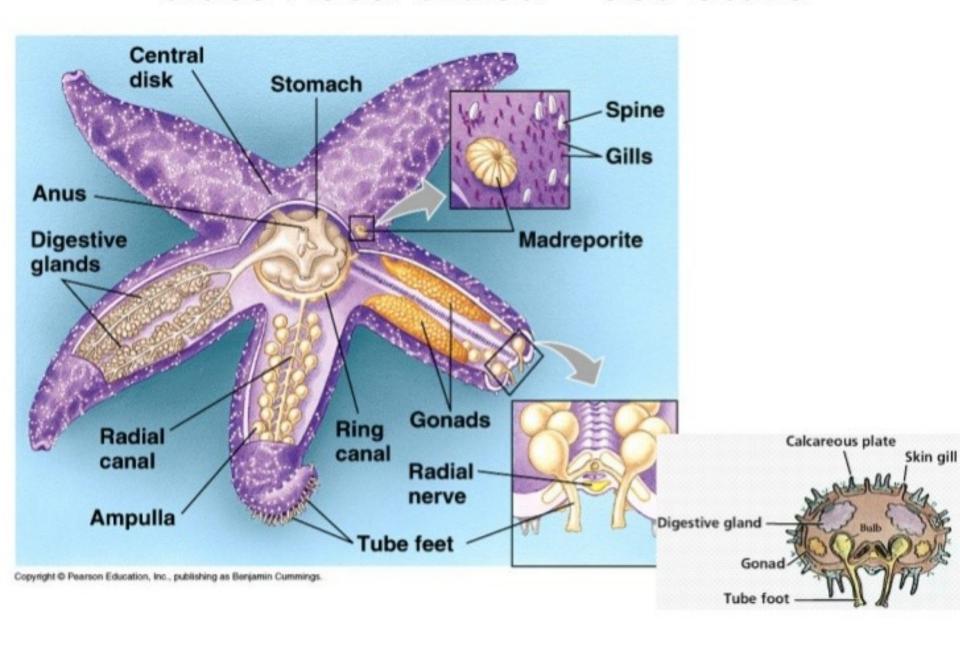


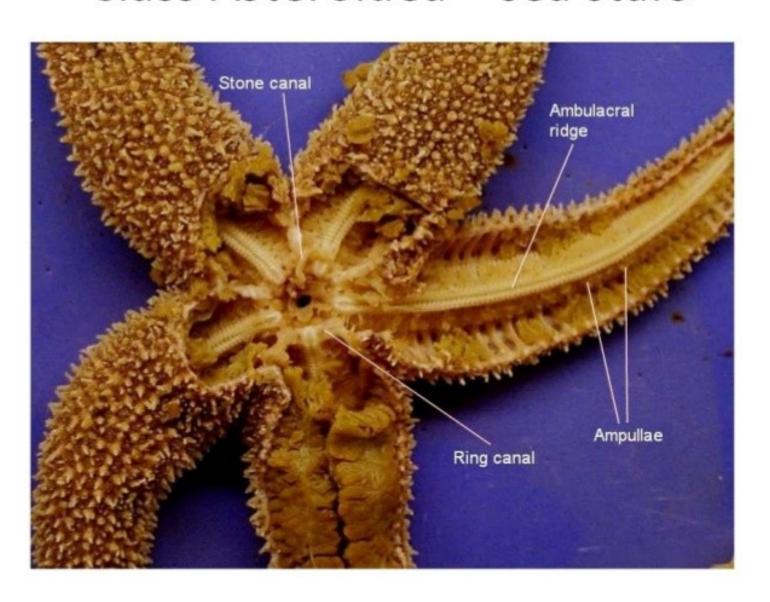










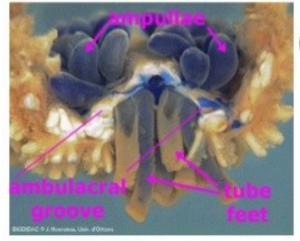


Water Vascular System

- A network of fluid filled canals
- Used for locomotion, food & waste transport, and respiration

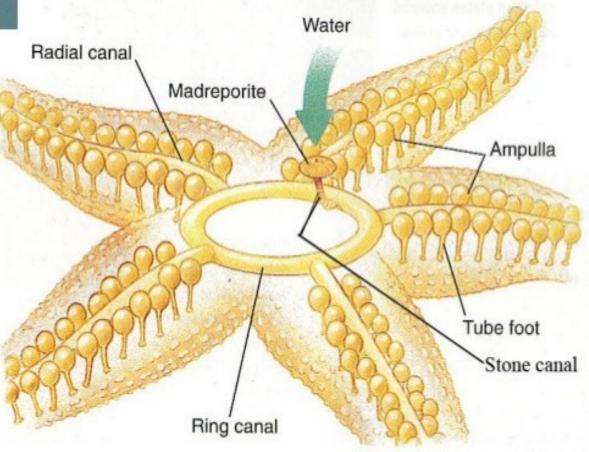






Class Asteroidea – sea stars water vascular system

The starfish's water vascular system provides the water pressure that operates the animal's tube feet. From the madreporite, water moves into the ring canal, then into the rays through radial canals, and finally to the tube feet. The canals are like a network of water pipes attached to the tube feet. Water also exits the body through the madreporite.



Water vascular system

- Water enters through the madreporite
- Water is then separated into five radial canals made of double rows of ampullae
- Ampullae are connected to suckerlike podia, the whole thing is called a tube foot
- Contraction of the ampullae causes the podia to move, thus overall locomotion





