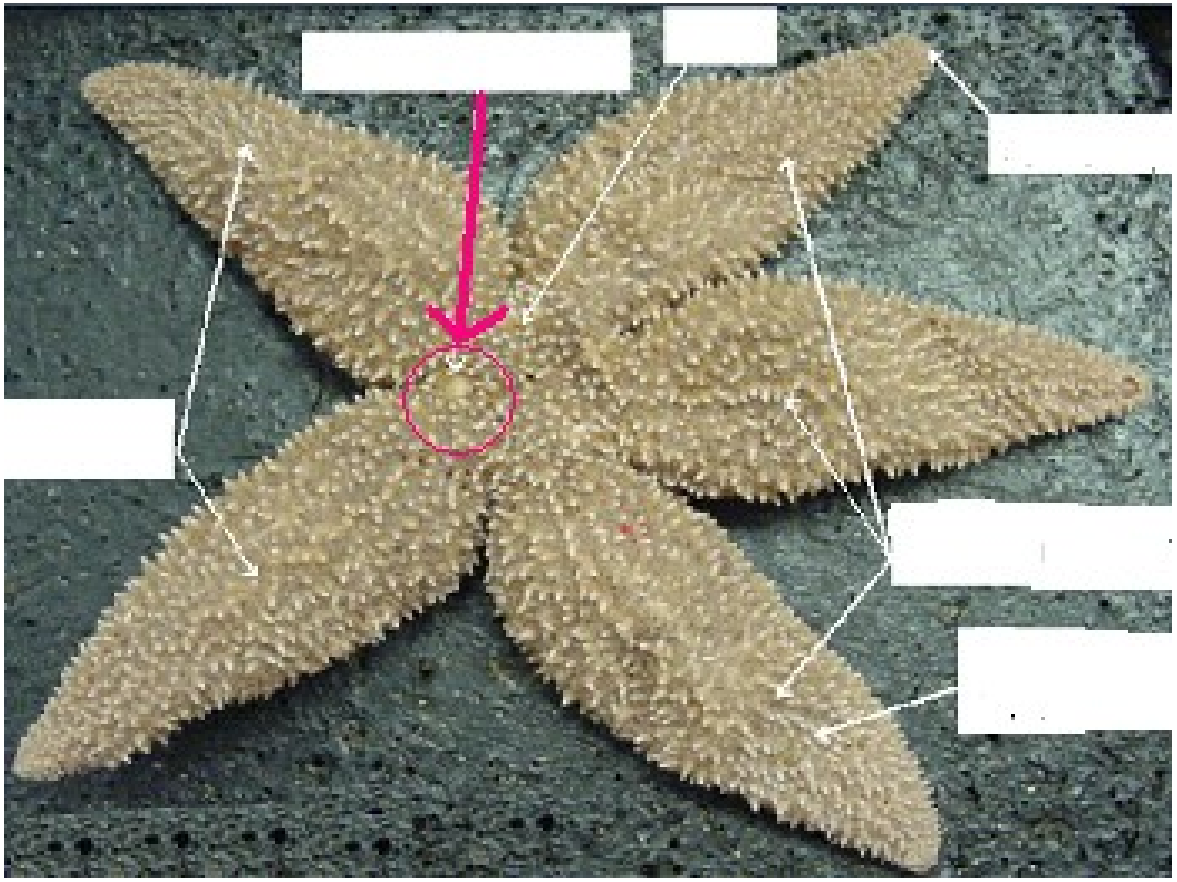
Starfish Parts



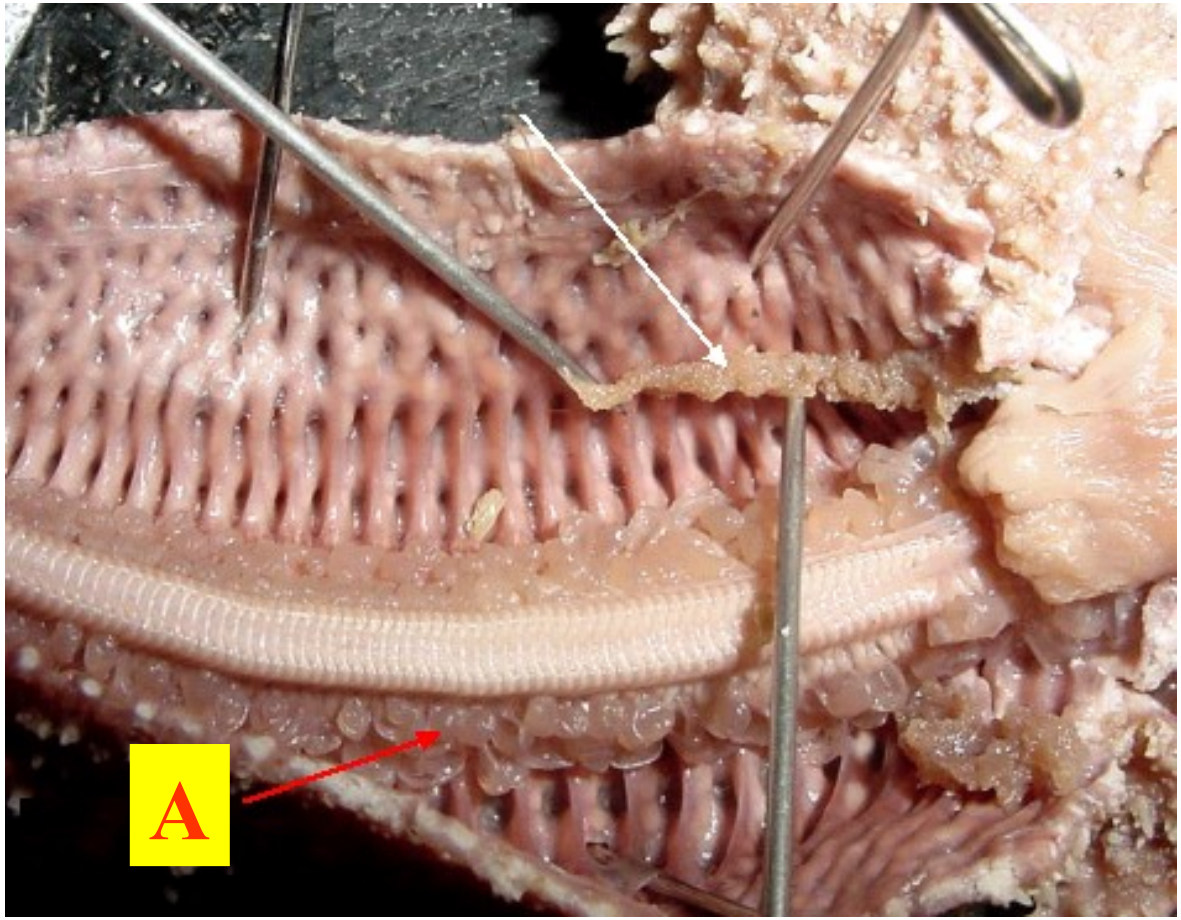
This white disc on the aboral surface is the

Madreporite

Its function is Let water into water vascular system

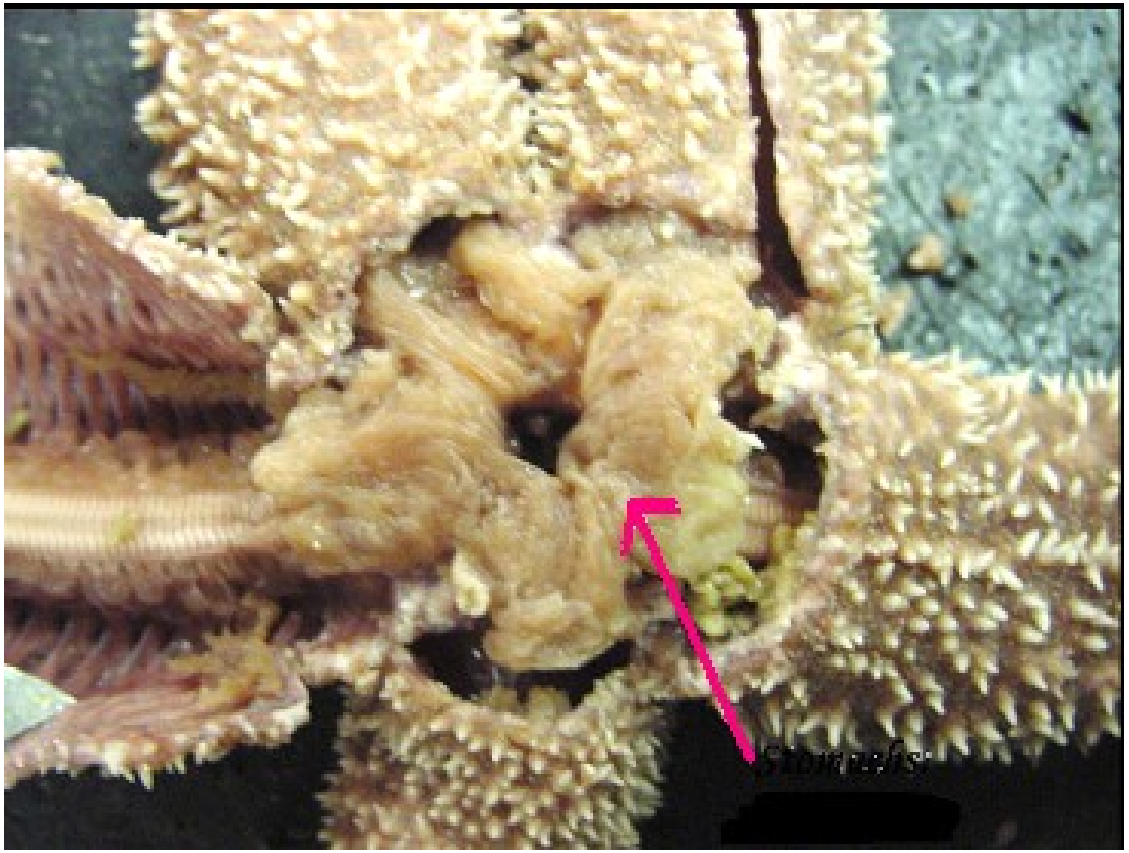
A=?

ampulla



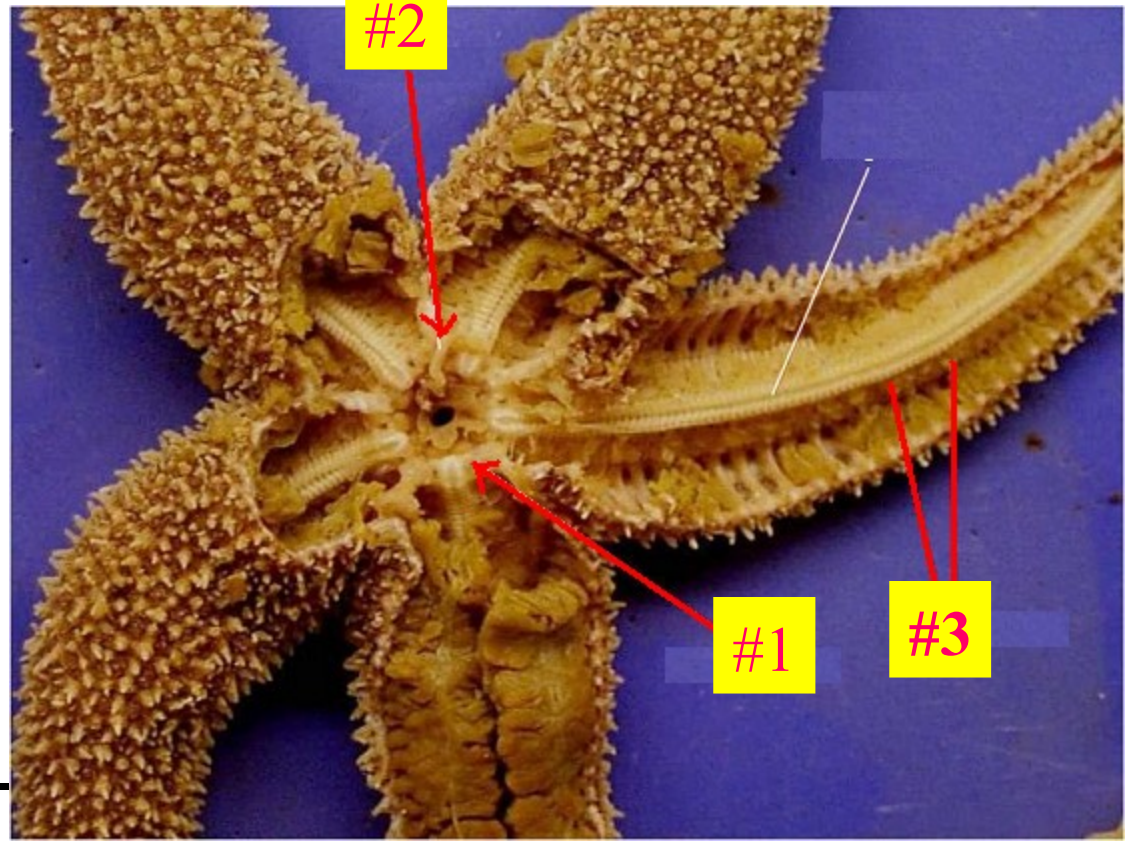
Its function is to

Squeeze to control water entering/leaving tube feet



This organ is the stomach

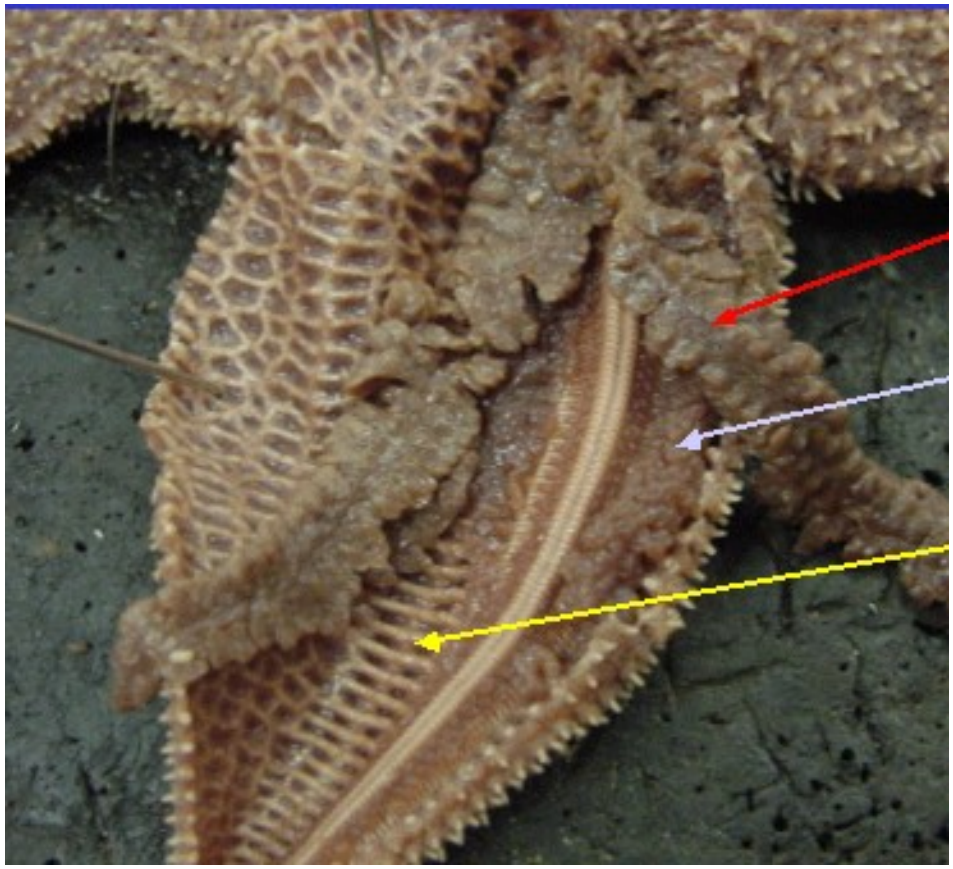
LABEL THE PARTS of the Water Vascular system



#1 = ring canal

#2 = Stone canal

#3 = ampullae

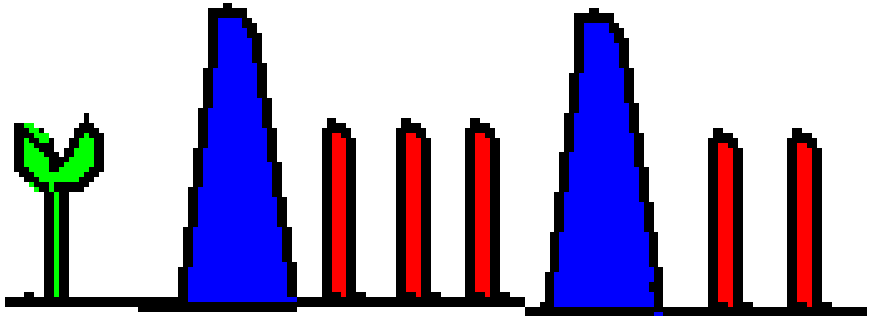


A Digestive glands

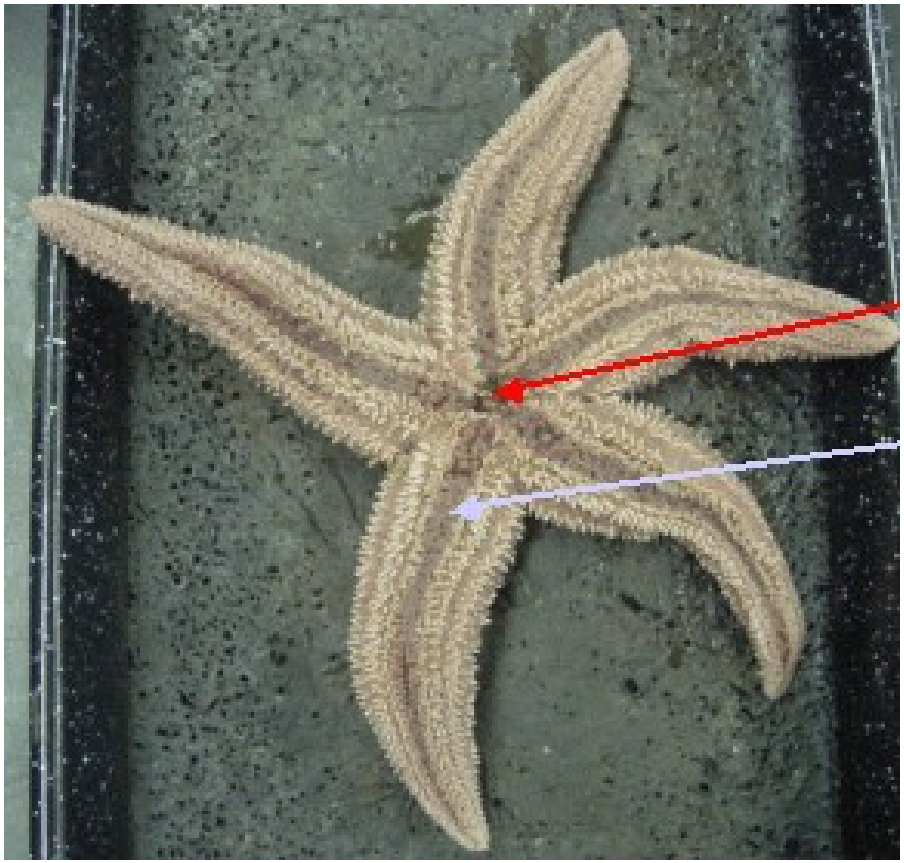
B gonads

C ossicles

This diagram represents the 3 structures you learned about on the surface of a starfish.



The blue structures are spines
for protection.
The red structures are Skin gills
for Exchanging gases/removing nitrogen waste
The green structure is a pedicellaria
for keeping the surface free of organisms



A mouth

B Ambulacral groove with tube feet

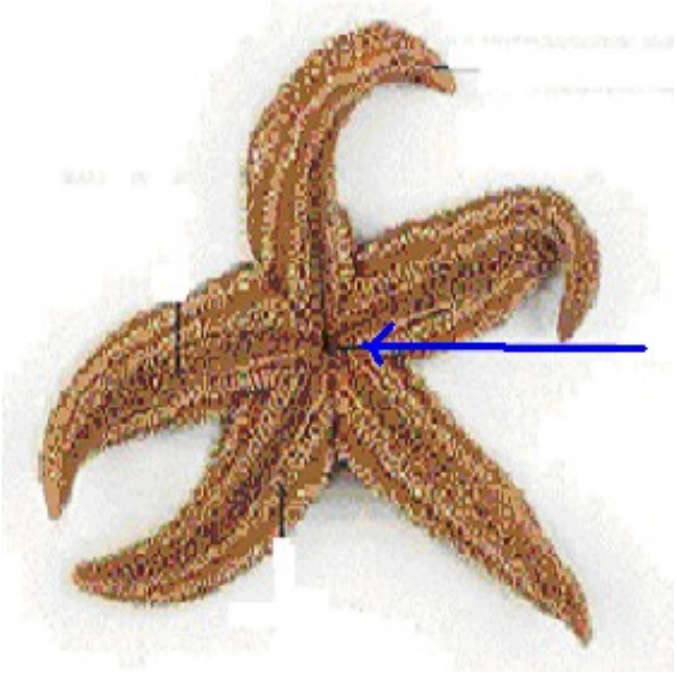
These are located in the ambulacral groove

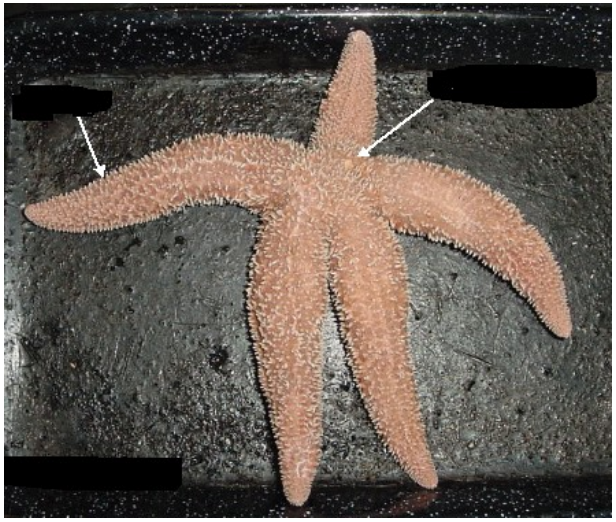
Tube feet

Their function is ?

Locomotion, suction cups can grab food, pry open clam shells, surface can exchange gases and nitrogen waste

This opening on the oral surface is the mouth

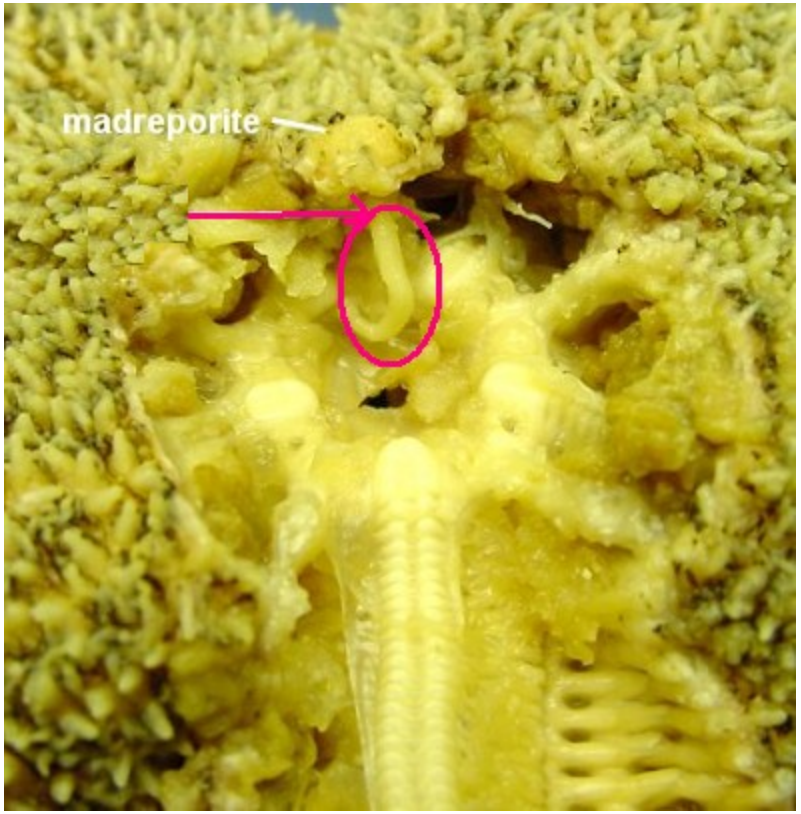




This seastar is showing you its aboral surface.

This tube is the

Stone canal



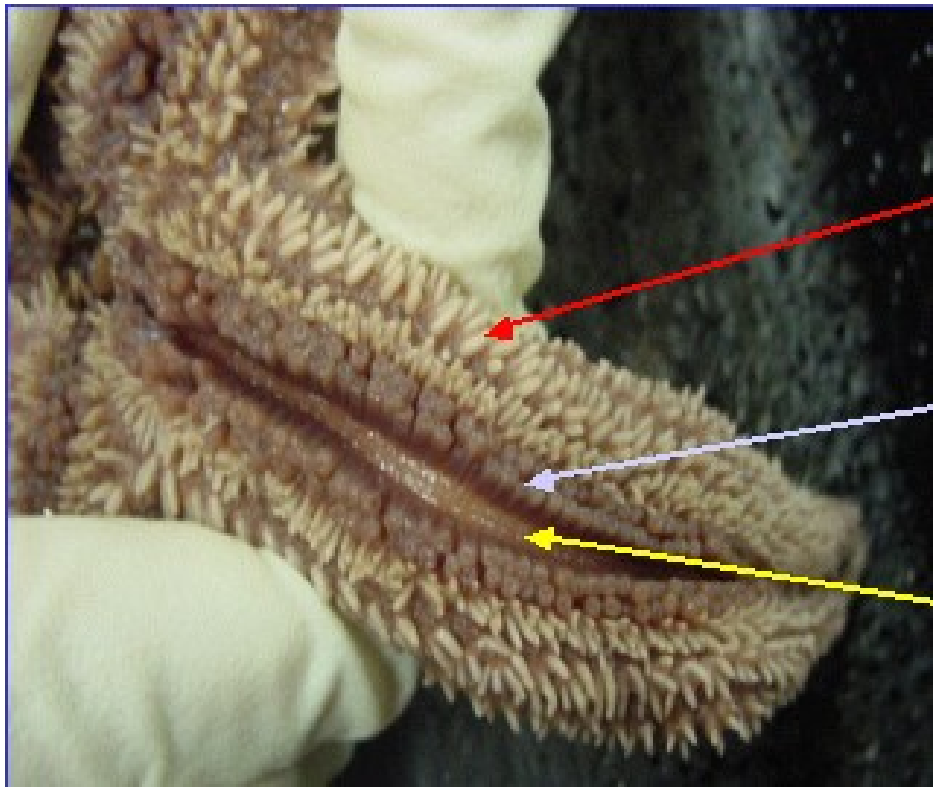
It has

Calcium carbonate

in it to make it hard.

It connects the madreporite

to the ring canal

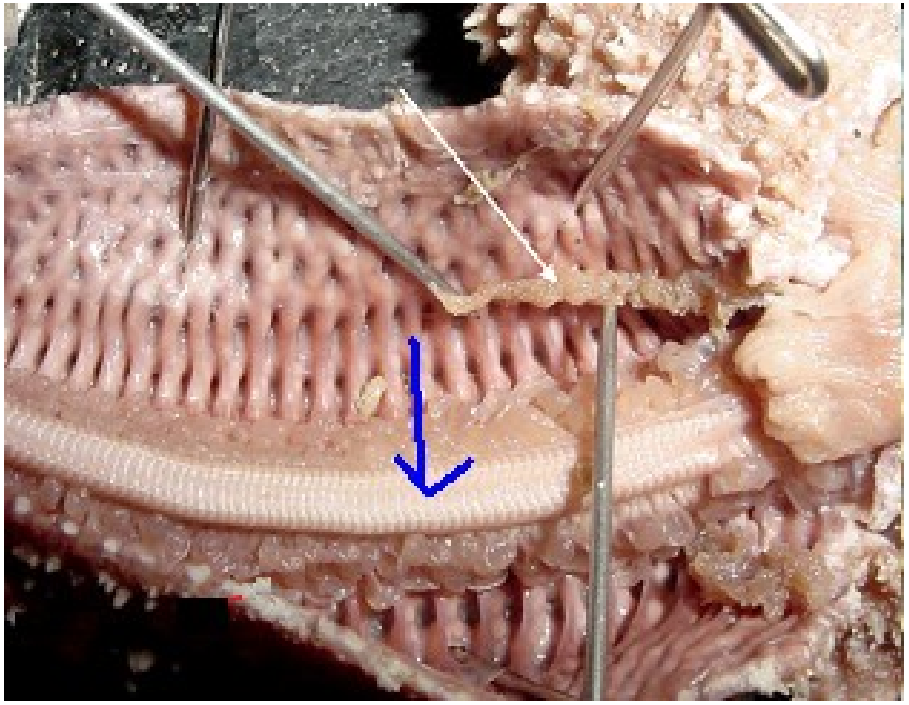


A spines

B Tube feet

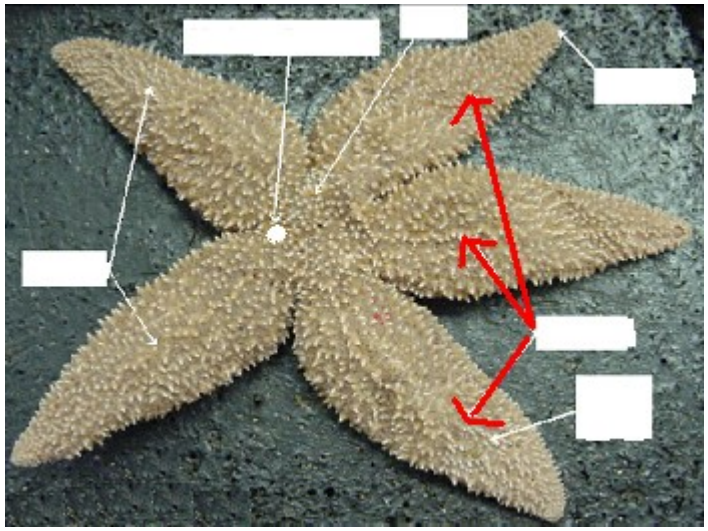
C ambulacral groove

The arrow is pointing at the Ambulacral ridge



The part of the water vascular system that is found inside this ridge is the Radial canal

The part of the nervous system that is found inside is the Radial nerve



These 3 arms farthest from the madreporite are called the

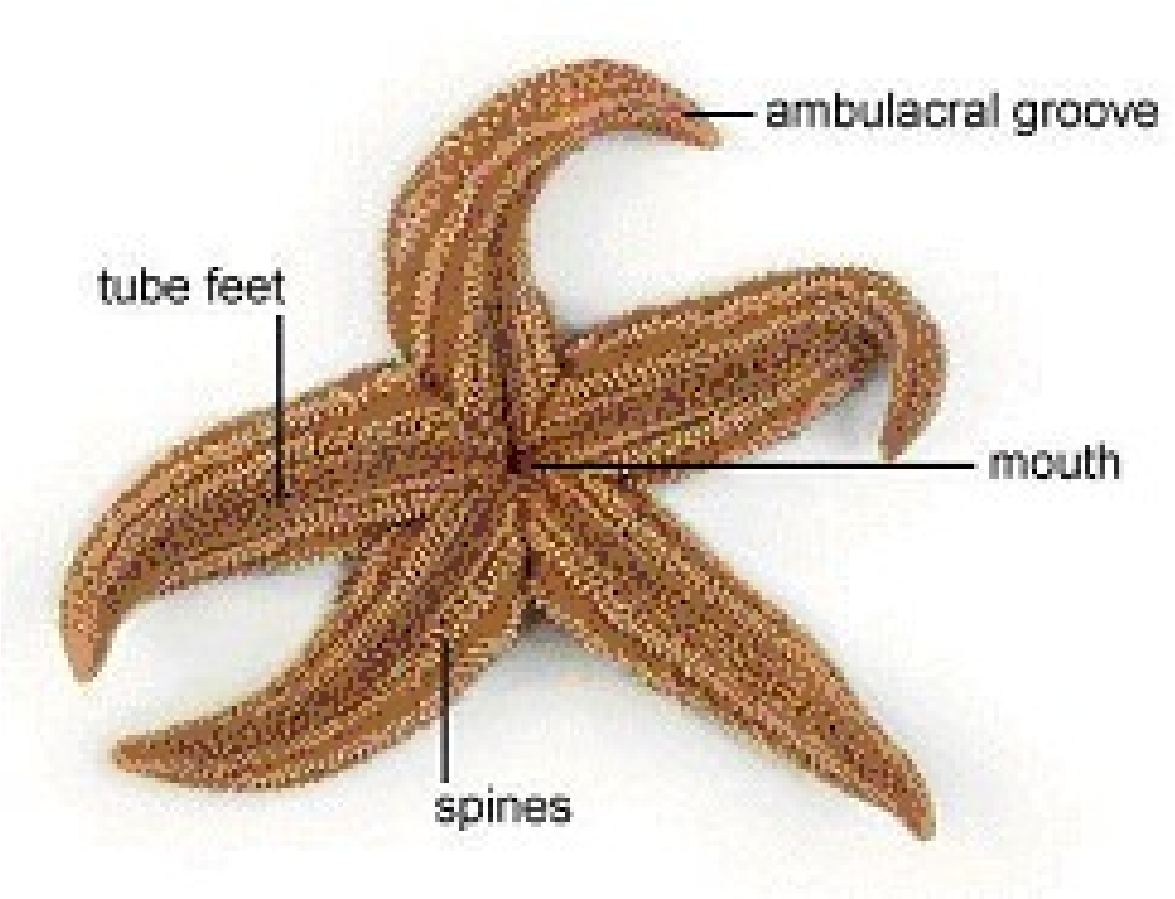
trivium

This starfish

is showing you its

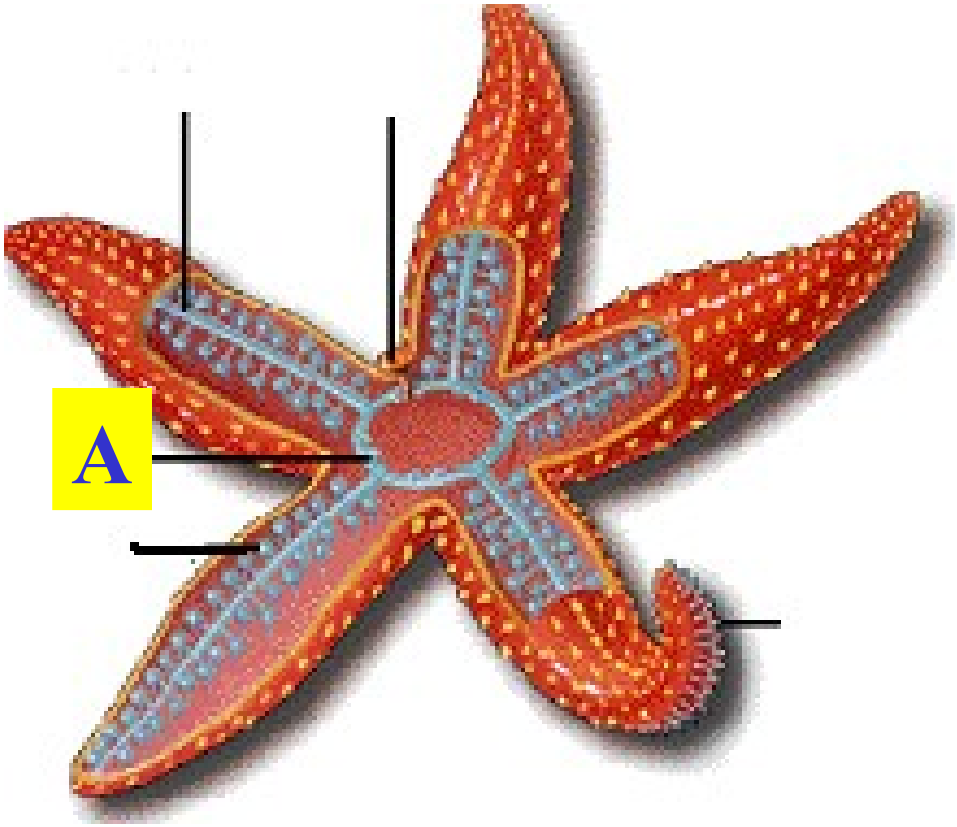
oral

surface.



Identify A

Ring canal



Tell the function of each part:

Opening for water vascular system ___madreporite___

Absorb nutrients ___Digestive glands___

Connect madreporite to ring canal ___Stone canal___

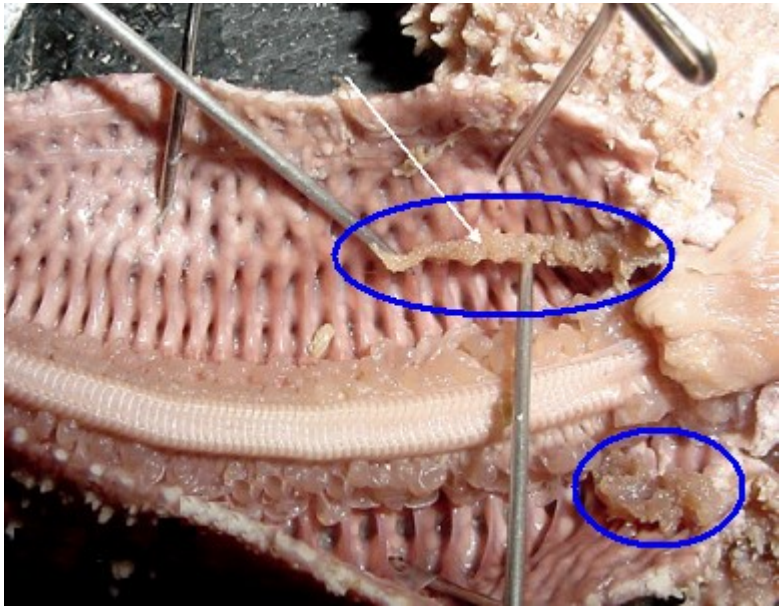
Plates that fuse to form skeleton ___ossicles___

Make sperm or eggs ___gonads___

Exchange gases and get rid of nitrogen waste ___Skin gills___

These structures that lie under the digestive glands are the

gonads



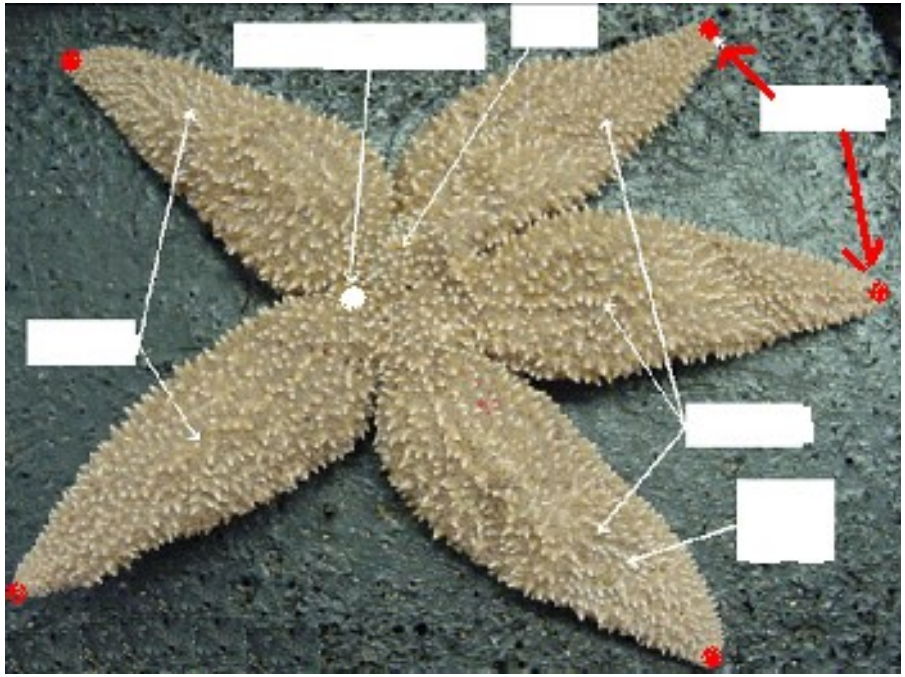
Their function is to

Make eggs or sperm

Their body system is reproductive

These are
located at the
tip of each arm

eyespots



Their function is

To sense light and dark

Tell the function of each part:

Keep skin free of organisms pedicellariae

Extruded out through mouth during feeding Cardiac stomach

Stomach that connects to digestive glands Pyloric stomach

Squeeze to move water up and down in tube feet ampullae

Spikes on surface for protection spines

This white disc on the aboral surface is the

madreporite

It belongs to the

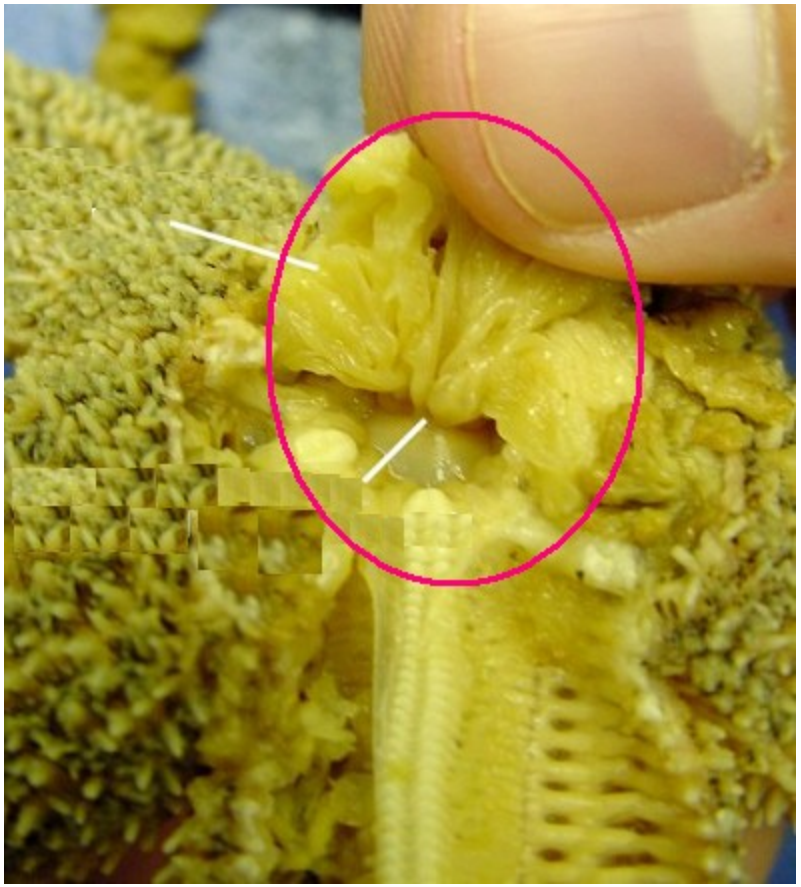
Water vascular **system**

Its function

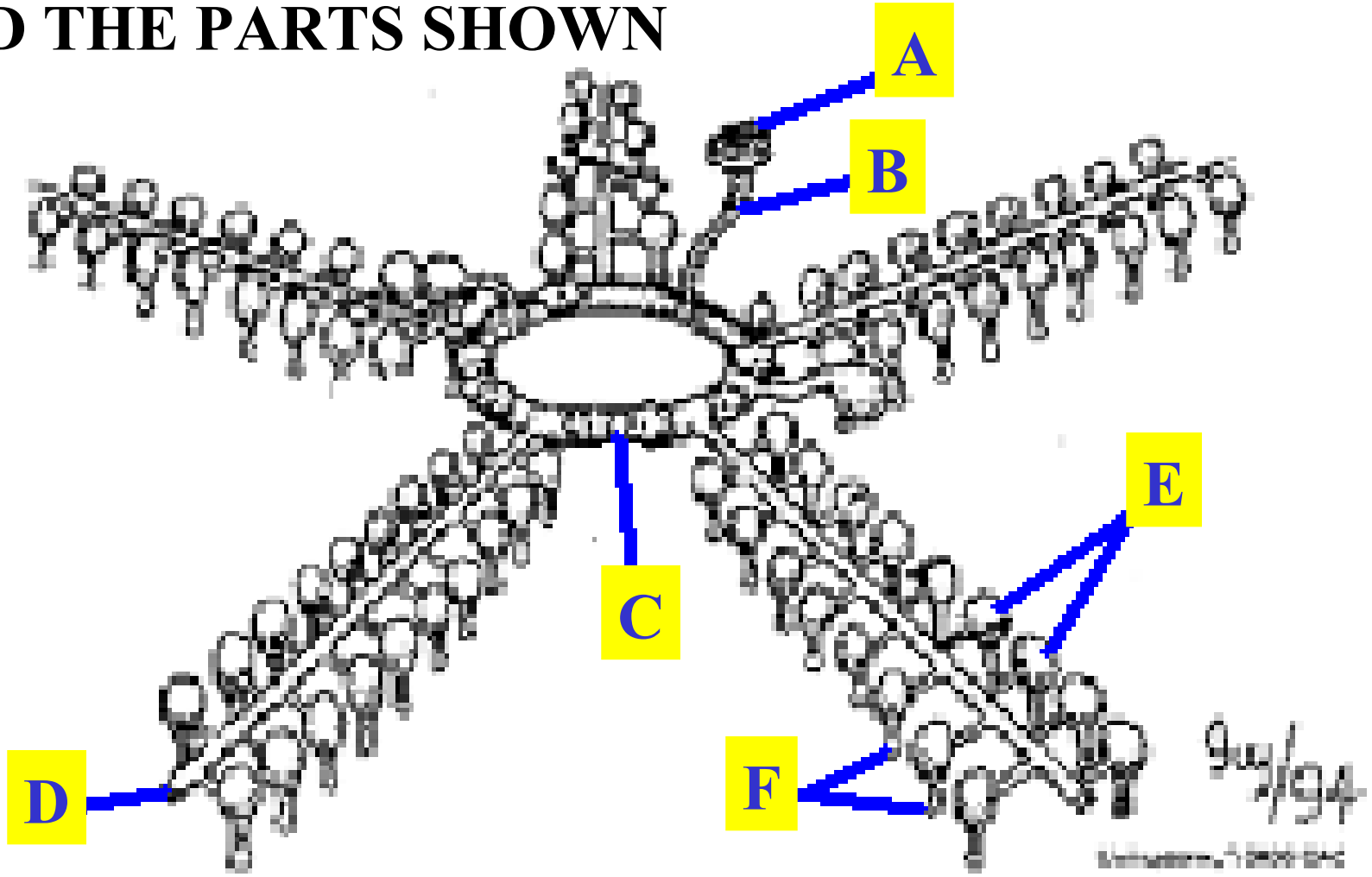
Opening for water entering the WVS

This part of the stomach connects to the mouth

cardiac



ID THE PARTS SHOWN



A = MADREPORITE

B = STONE CANAL

C = RING CANAL

D = RADIAL CANAL

E = AMPULLAE

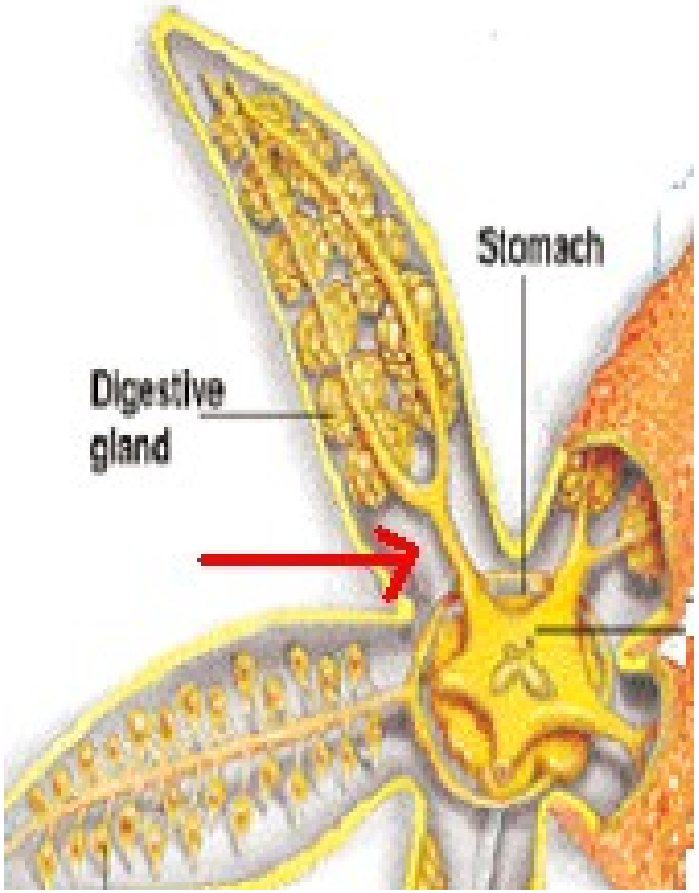
F = TUBE FEET

The digestive glands connect to the ___pyloric_____ stomach.

The ___cardiac_____ stomach is extruded out of the mouth during feeding

This space around the organs is the

coelom



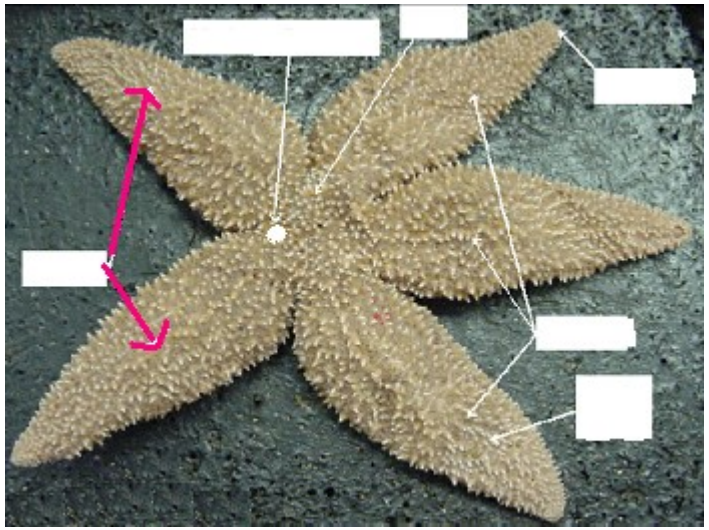
Type of body cavity found in echinoderms

Acoelom **Pseudocoelom** **Eucoelom**

EUCOELOM

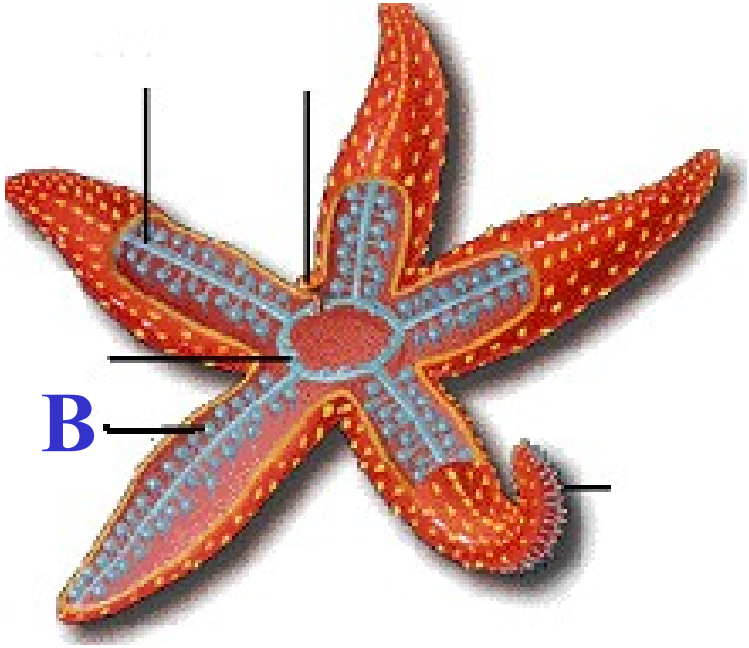
These 2 arms closest to the madreporite are called the

bivium

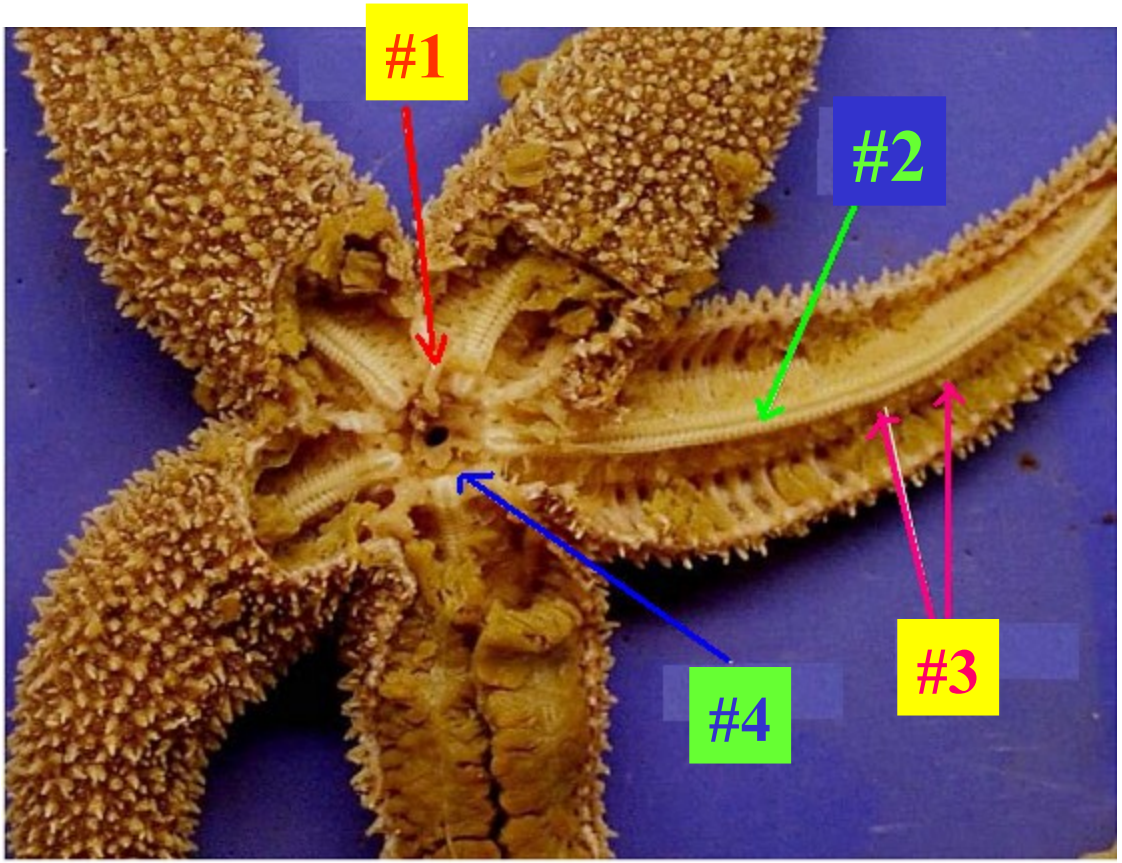


Identify B
(seen as bubbles along ambulacral ridge)

ampulla



Its function is **Squeeze to move water up and down in tube feet**

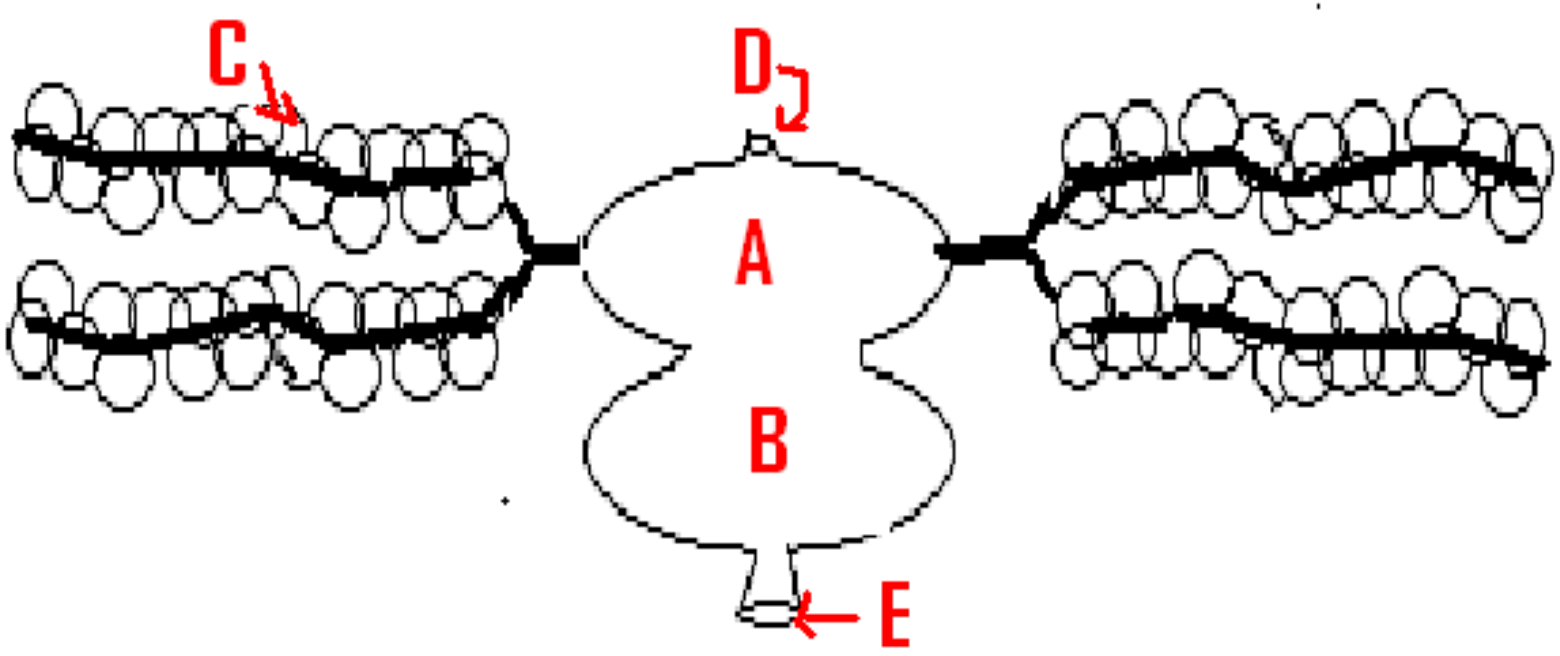


#1 = Stone canal

#2 = Ambulacral ridge

#3 = ampullae

#4 = Ring canal



A= Pyloric stomach

B= Cardiac stomach

C= Digestive glands

D= anus

E= mouth

These greenish brown structures are the

Digestive glands

Tell their functions

Make bile

Finish digestion

Absorb nutrients

These white structures on the surface are

spines

They connect down below to the skeleton underneath.

Their function is

protection

Echinoderm larva with wings

bipinnaria

Type of symmetry seen in the larval form

bilateral

Type of symmetry seen in adult echinoderms

radial