

## ***Facts about sea animals (Star fish)***

### ***1. Do starfish have a brain and blood or not?***

**Star fish** are also called sea stars. Their body consists of organs like the stomach, a water vascular system, and digestive glands.

i) **The stomach** –consists of two parts a) **Cardiac Stomach** – It is a pouch-like, glandular stomach that can be everted (pushed out) from the body to engulf and begin digesting food externally.

b) **Pyloric Stomach**- It is a smaller stomach that stays inside the body, connected to the cardiac stomach and also connected to the pyloric caeca in each arm.

ii) **Pyloric Caeca** -It is a digestive gland located in each arm that secretes enzymes and absorbs nutrients.

### ***The water vascular system consists of***

a) **Madreporite**: It is a sieve-like structure on the upper surface that regulates water intake into the system.

b) **Stone Canal**: It is a tube connecting the madreporite to the ring canal.

c) **Ring Canal**: It is a circular canal surrounding the mouth, connecting to the stone canal, and the radial canals in each arm.

d) **Radial Canals**: Radial canals are canals extending into each arm from the ring canal.

e) **Ampullae**: It is a bulb-like structure connected to the tube feet that control their movement.

f) **Tube Feet**: Tube feet are small, flexible, and muscular extensions used for locomotion, feeding, and sometimes gas exchange.

The brain is absent in star fish. Blood is also absent in it. They pump seawater through their bodies. Starfish use it to move nutrients. Starfish live up to 35 years.

## **References**

<https://biologywise.com/starfish-anatomy>

<https://allen.in/neet/biology/diagram-of-starfish>

[Sea Stars \(Starfish\): Anatomically Speaking](#)