

Definitions:

Cephalopod: A group of ocean animals that includes octopuses, squids, cuttlefish, and nautilus. They are known for having large brains, soft bodies, and arms or tentacles.

Mantle: A muscular sac that holds most of the octopus's organs, including the hearts, gills, and stomach. It also helps the octopus breathe, move, and change color.

Branchial Heart: One of the two smaller hearts in an octopus. Each branchial heart pumps blood to a gill so it can pick up oxygen.

Systemic Heart: The main heart in an octopus. It receives oxygen-rich blood from the gills and pumps it to the rest of the body.

Hemoglobin: An iron-based protein found in human blood that carries oxygen. Each hemoglobin molecule can carry up to four oxygen molecules.

Hemocyanin: A copper-based protein found in octopus blood that carries oxygen. It is less efficient than hemoglobin and gives octopus blood its blue color when oxygenated.

Jet Propulsion: A fast movement method where the octopus sucks water into its mantle and then forcefully pushes it out to shoot itself backward like a rocket.

Siphon: A tube-shaped structure that the octopus uses to push water out of its body. It helps with breathing, jet propulsion, and even squirting ink.