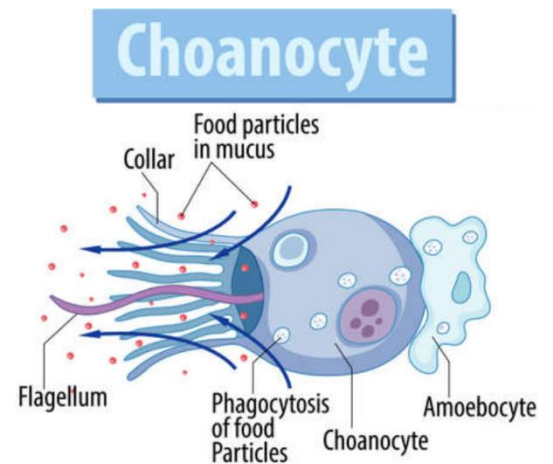
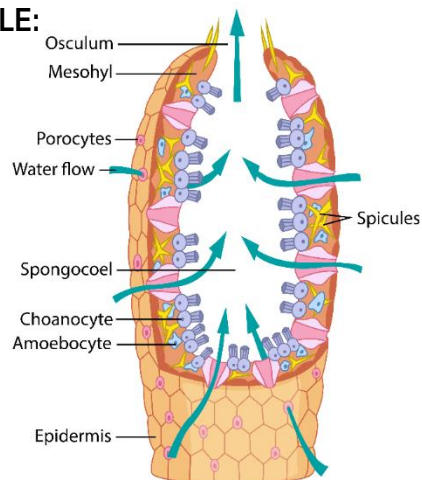


CONCEPT: PORIFERA AND CNIDERIA

- **Porifera** – sponges that are mostly hermaphroditic, and reproduce asexually and sexually
 - Filter feeders – feed on particles suspended in water by drawing it through their bodies
 - Spongocoel – central cavity through which water moves
 - Osculum – opening out of which water flows
- Choanocytes – flagellated cells that line the spongocoel, feed on suspended food and bacteria via phagocytosis
 - Intracellular digestion – digestion that takes place in the cytoplasm
- Mesohyl – gelatinous matrix that separates the regions of a sponge body
- Amoebocytes – cells that transport nutrient and create rigid structural fibers in the mesohyl

EXAMPLE:



- **Cnidarians** – animals like jellyfish, with a radial body plan that is basically a case for the gastrovascular cavity
 - **Polyp** – cylindrical sedentary organisms, like hydra, that adhere to a surface and catch prey in their tentacles
 - **Medusa** – free swimming jellyfish with their body opening on their underside surrounded by tentacles
 - Cnidocytes – specialized “stinging cell”
 - Nematocysts – penetrating barbed organelle fired from cnidocytes
 - Hydrostatic skeleton – fluid-filled cavity surrounded by muscle, supports body via fluid pressure
 - Anthozoa – cnidarians like coral and sea anemones, many of which have a hard CaCO_3 exoskeleton

EXAMPLE:

