

Phylum Cnidaria - Section 26-3

Jellyfish, Hydra, Coral, Anemones

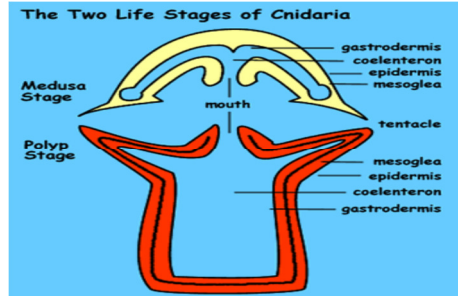
What is a Cnidarian?

- Soft bodied, _____ animal that has _____ symmetry, _____ tissues, and stinging _____ cells on their tentacles, which are arranged in _____ around their mouths

Life Stages

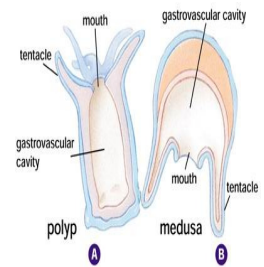
_____ life stages (or body plans)

-
-



Body Plan of Cnidarians

- Both polyps and medusa have:
 - a _____ made up of _____ called:
 - _____ - inside layer
 - _____ - outside layer
 - A body wall that surrounds the _____ (GVC)
 - Food is _____ and nutrients are circulated in the GVC
- A _____ which functions as the _____ and _____



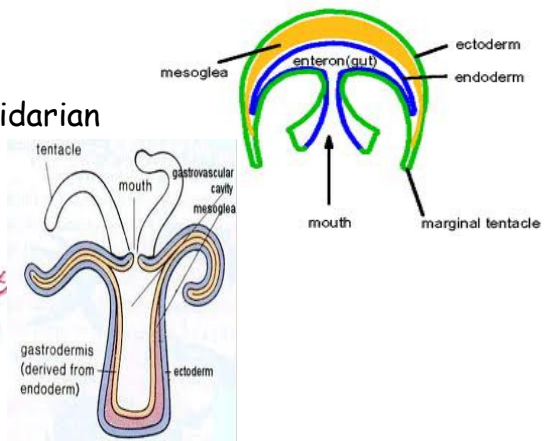
Medusa-the _____ motile form of a cnidarian

- _____-shaped floating body
- Mouth is on the underside
- Tentacles that point _____
- **ex:** jellyfishes



Polyp - the _____ form of a cnidarian

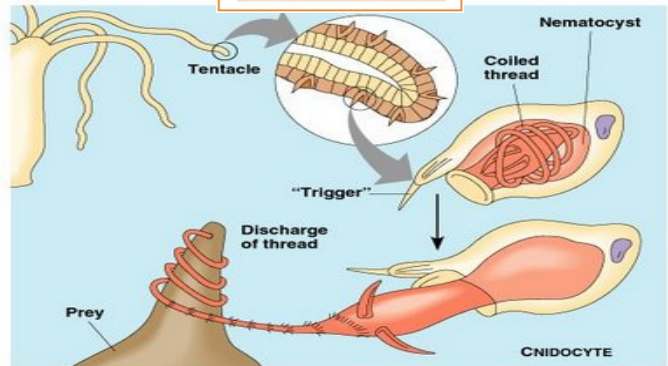
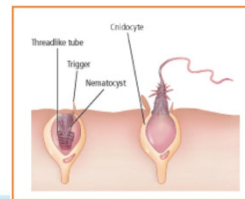
- _____-shaped
- Mouth on top
- Tentacles that point _____
- Solitary or _____
- **Ex.** Sea anemone, hydra



Feeding

- Cnidarians _____ food using stinging structures called _____ = poison-filled, tightly coiled darts
- The nematocysts are _____ from _____ which are found on the _____

- Tentacles _____ to bring prey to the mouth
- Cells lining the GVC _____ for _____ digestion
 - Food then transported to the rest of the body by _____



Organization of Tissue

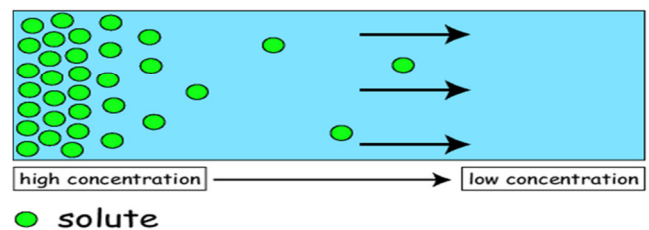
- No _____ system
- No _____ system
- No _____ system
- _____ (Nervous System)

Respiration & Circulation

- O_2 is taken up and transported by all cells by _____ because the cnidarian body is _____ (only _____ tissue layers)

- After digestion, nutrients are _____ throughout the body by _____

Diffusion



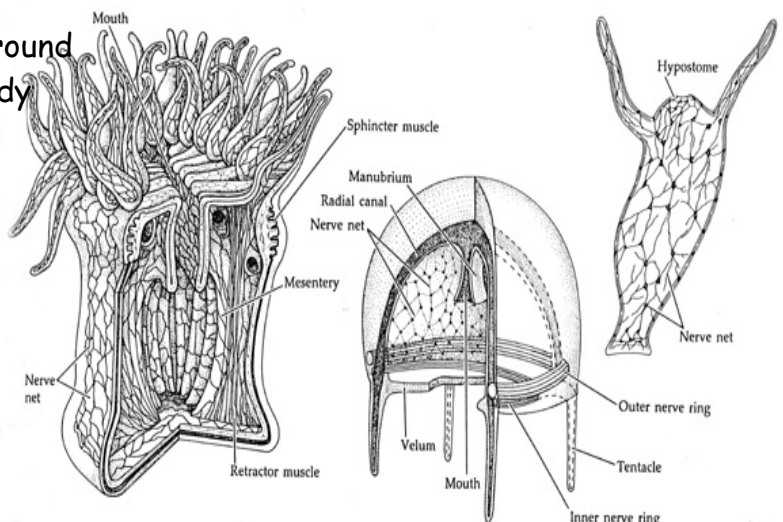
Excretion

- CO_2 and other wastes diffuse _____ of cells into surrounding _____
- The mouth is the *only opening* that cnidarians have, so all solid wastes leave through the _____

Nervous System

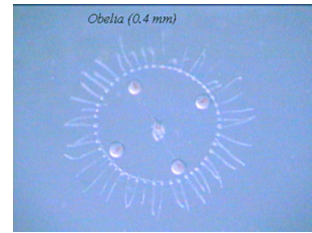
- No brain, but do have a loosely organized _____ called a _____

- The nerve net is _____ around the mouth but does spread around the body
- Nerve net controls _____ and _____



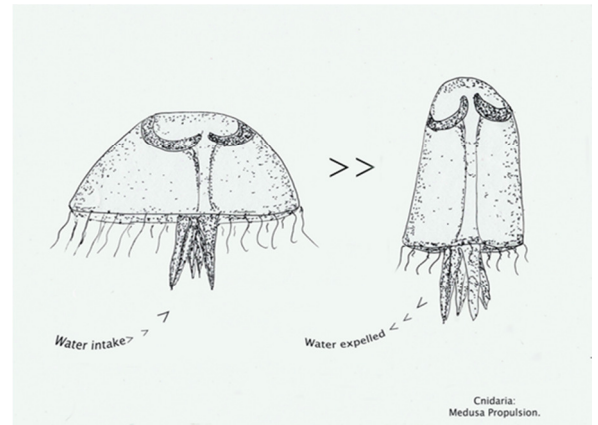
Response (Nervous System)

- Movement - No typical muscles, but they have _____ that _____ & serve a similar function
- Have _____ to determine the _____ of gravity
- Have _____ (_____) to help detect light/dark



Movement

- **Polyyps** = have a _____
 - (circular & longitudinal "muscles") that along with H₂O allow it to make itself taller/shorter
- **Medusae** = move by _____
 - _____ cell _____ cause the body to close like an umbrella & push H₂O out of the bell, pushing the medusa forward

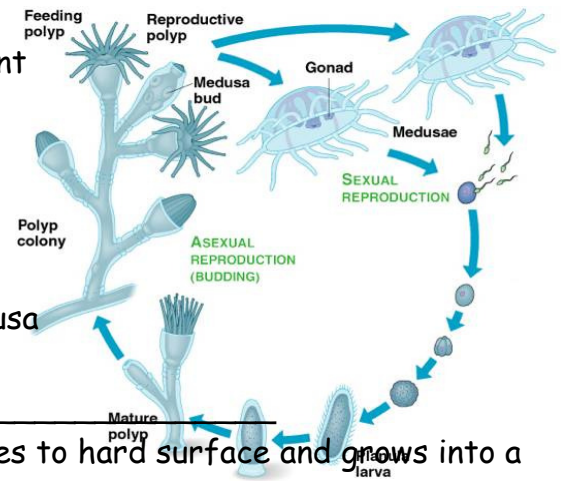


Asexual Reproduction

- Budding can occur in the _____ stage
- The new animal is _____ to the parent

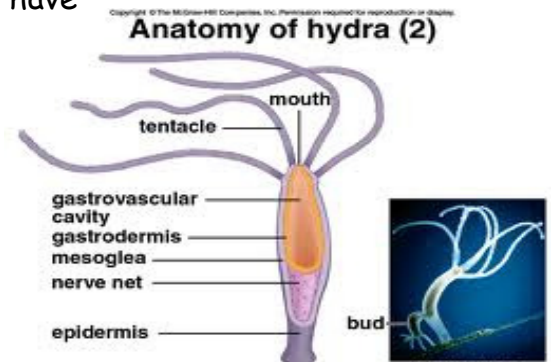
Sexual Reproduction

- Occurs in the _____ stage
- Gametes are _____ into _____
 - Fertilization can occur in open water or in the Medusa
 - Zygote grows into a _____ that swims around then settles down, attaches to hard surface and grows into a polyp



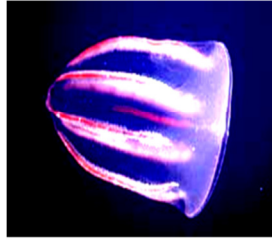
Class Hydrozoa

- Spend most of their lives as _____, but have a short _____ stage
- May grow in branching colonies
- Ex: Hydras



Class Scyphozoa

- Go through a similar life cycle to that of class Hydrozoa, except that the _____ stage is _____
 - Ex: Jellyfishes



Class Anthozoa

- " _____ "
- _____ have the _____ in their life cycle
- Eggs and sperm are _____ (not the medusa) during sexual reproduction
- Asexual reproduction occurs by _____, as in the other classes
- Ex. Sea anemone and Coral

