

Cnidaria and Ctenophora

Cnidaria is pronounced nye-DARE-e-yah
Cnidaria all have stinging cells. Cnidos in Greek means stinging nettle. All cnidaria have stinging cells called nematocysts – like harpoons with poison.

Anthozoa

True corals, anemones, sea pens

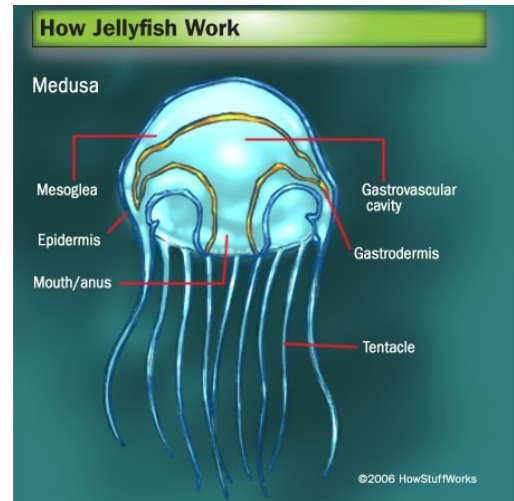
Medusozoa (Jellyfish)

Cubozoa - Box jellies (cool and complex)

Hydrozoa - Hydroids, fire corals, medusae,

Scyphozoa - True Jellyfish

Staurozoa – stalked Jellyfish



Formerly, cnidaria and ctenophora were in the phylum coelenterata.

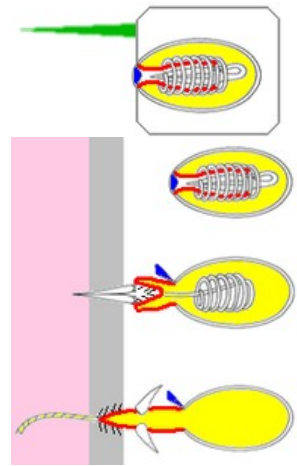
BODY PLAN

Have a coel – body cavity composed of two to three layers

They also have nematocysts (stinging cells)

DRAW a nematocyst

A nematocyst has a trigger made from a cilia (spike outside of the cell at right) The cell has a harpoon-like spike inside that is injected into the prey. It has barbs to prevent the stinger from falling out of the skin. Corals, anemones, jellyfish, hydras, and all of the cnidarians all have these stinging cells.



There are two main body plans

1. Polyp (tentacles up)

Polyps are rooted to the substrate (rocks and junk) below them.

Think P = Polyp, P = Planted. Most cnidarians are in the polyp form. Examples include the sea anemones, hydra (although they move freely), corals, etc.

2. Medusa (tentacles down).

Medusas (medusae) can move freely through the water. By propelling water out of their body cavity, they can move forward. Think M = Medusa, M = Move

All cnidarians have radial symmetry (like a pizza, no matter how you slice, the halves are similar). Cnidarians have no brain, but they have nerve nets, and cells for light detection (ocelli)

Reproduction

Jellyfish reproduce both sexually and asexually

Sexual – adult jellies combine gametes

Asexual – Polyps bud

Ctenophora (pronounced TEN-oh-four-ah, separate phylum)

Comb Jellies

Similar, but have no stinging cells

Found in darker, deep waters

Produces colors and lights

