Cnidarians (Phylum Cnidaria) Day 1

* **Basic characteristics:**
	+ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- symmetry
	+ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
		- *\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_* covers body surface
		- *\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_* lines internal body cavity; specialized for digestion
	+ *\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_* (stinging cells) within specialized cells (*cnidocytes*) on tentacles. Used for protection and feeding
	+ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (sac-like with mouth only)
	+ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ throughout body coordinates movements
	+ Have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ but no eyes

**Two Body Forms:

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** – free-swimming form that is transported by water currents, mouth with surrounding tentacles positioned downwards

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** – attached form with mouth and tentacles positioned upwards

* All cnidarians go through both phases in their life cycle.



**Nematocysts and Cnidocytes**

* Weapons that are used for protection, stunning prey, defense.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- organelle constructed as an explosive harpoon tipped with neurotoxin.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- Cells containing nematocyst. Located on the tentacles.

Classes of Cnidarians

Hydrozoans

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* *Portuguese man-of-war* (*Physalia) –* siphonophore carried by a gas-filled float; some of the polyps with long tentacles armed with stinging nematocysts

Scyphozoans

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* Move by rhythmic muscular contractions of the *bell*, but carried by water currents

Cubozoans

* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**-Small medusae with tentacles armed with very powerful nematocysts that may cause death in humans
* Called the Box jellyfish or sea wasp

Anthozoans

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* Most reef-building corals are colonial: interconnected polyps that develop asexually from a single polyp

Assignment: Cnidarian Stings Webquest