



# Phylum- **Cnidaria**

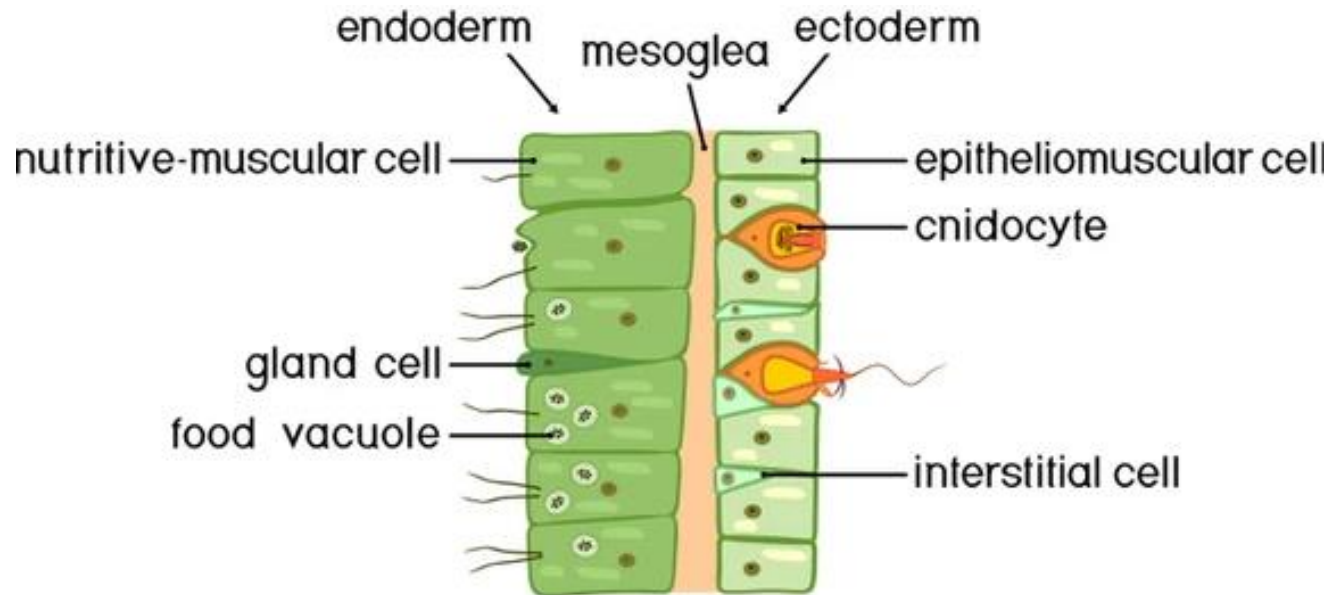
## **General Characteristics and Classification**



1. All ***Aquatic***, mostly ***Marine***, some ***Freshwater***.
2. ***Solitary*** or ***Colonial.***, ***Sedentary*** or ***Free swimming.***
3. Body organization is ***cell-tissue grade.***

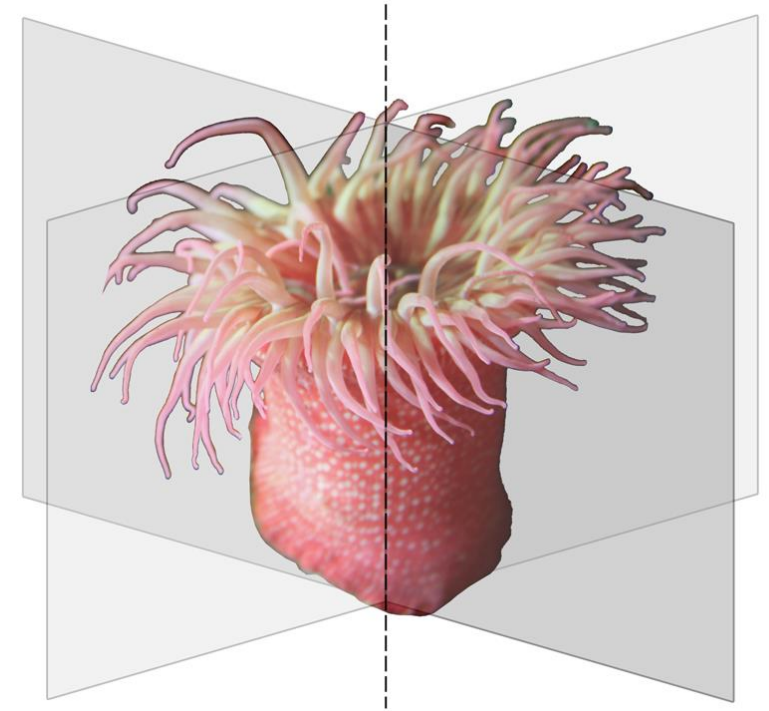


- 3. **Radial** or **Biradial** symmetry.
- 4. Body wall diploblastic.
- 5. **Chitinous** or **Calcareous** Exoskeleton



<https://depositphotos.com/vector/hydra>

Radial  
symmetry

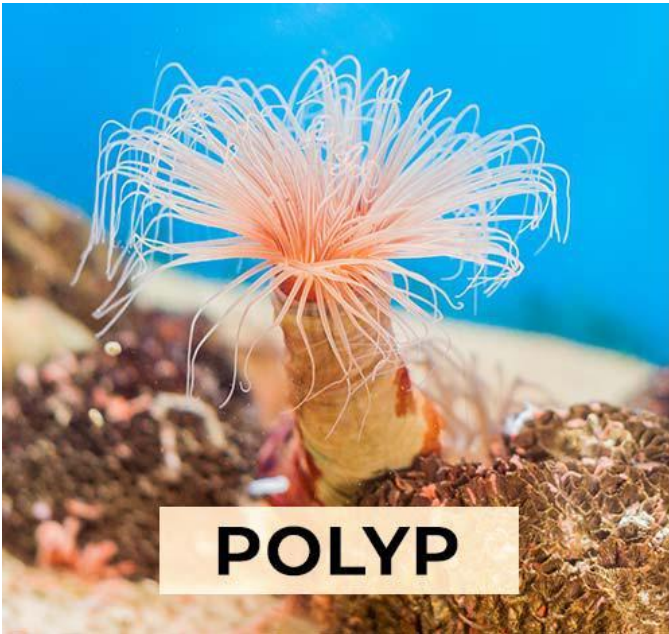


<https://www.digitalatlasofancientlife.org/learn/cnidaria/>



6. Two types of individuals occurs: **Sedentary:- Polyp** and **Free-swimming:- Medusa**, some exhibit **Polymorphism**.

7. Both polyp and medusa possess **Tentacles**.

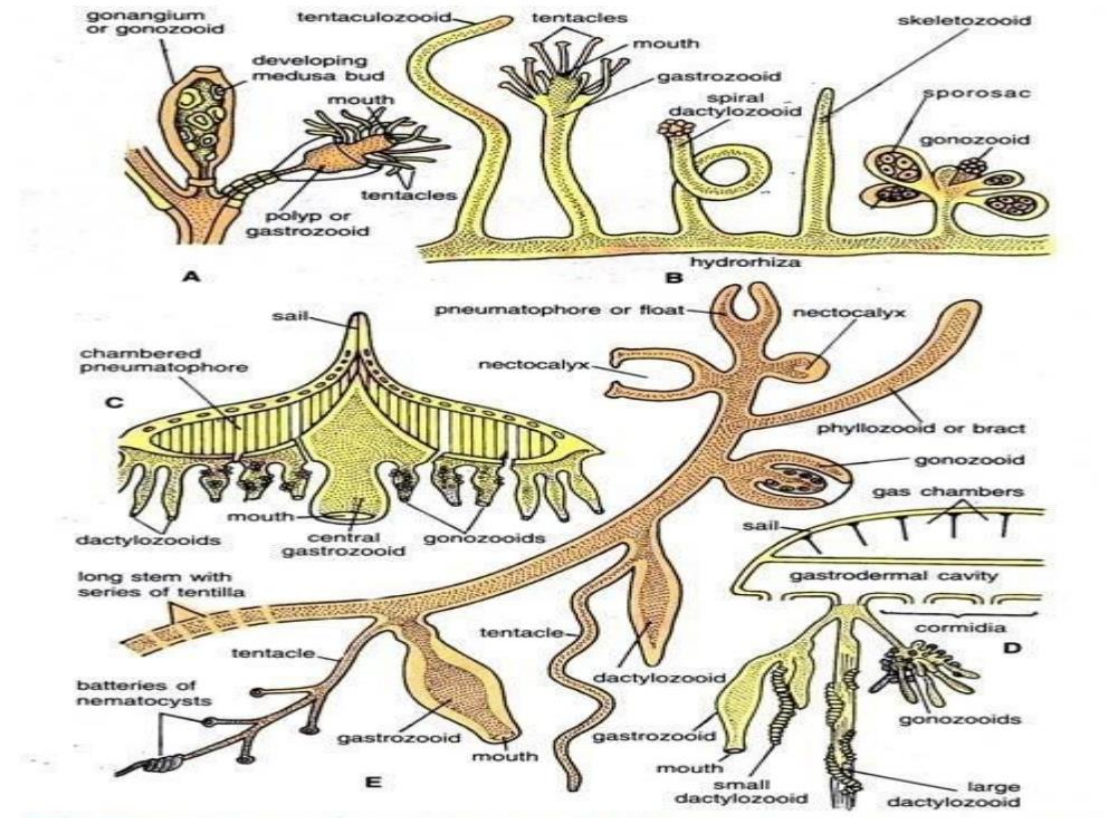


**POLYP**

<https://www.geeksforgeeks.org/polyp-and-medusa/>



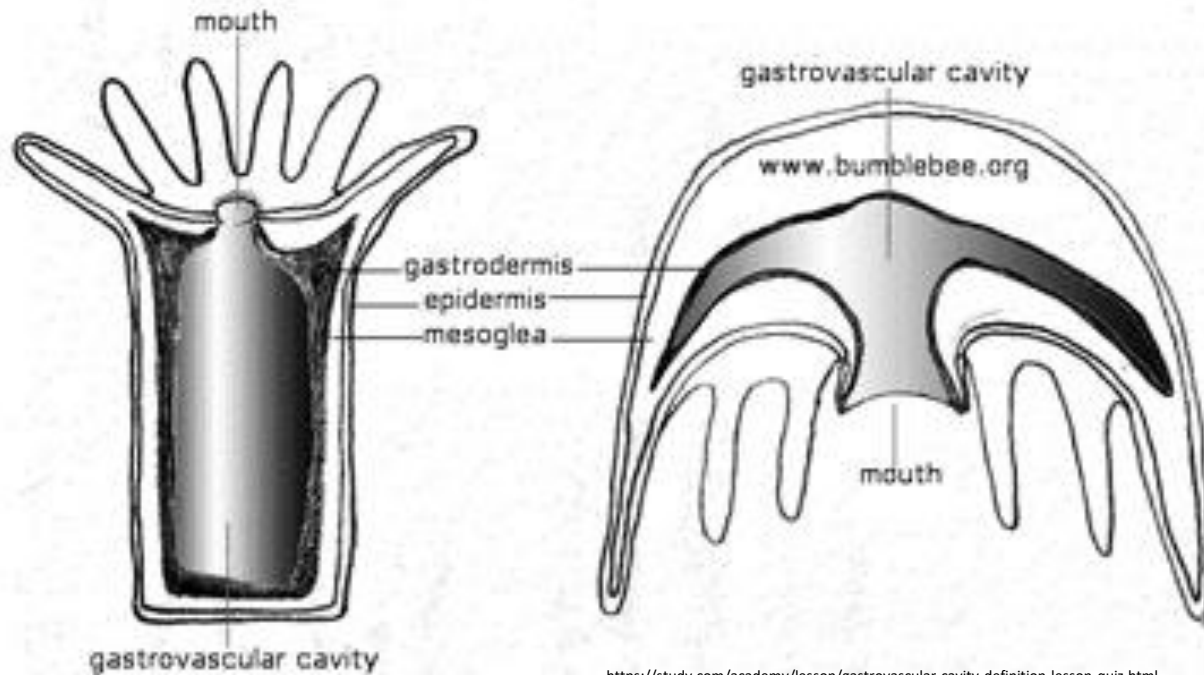
**MEDUSA**



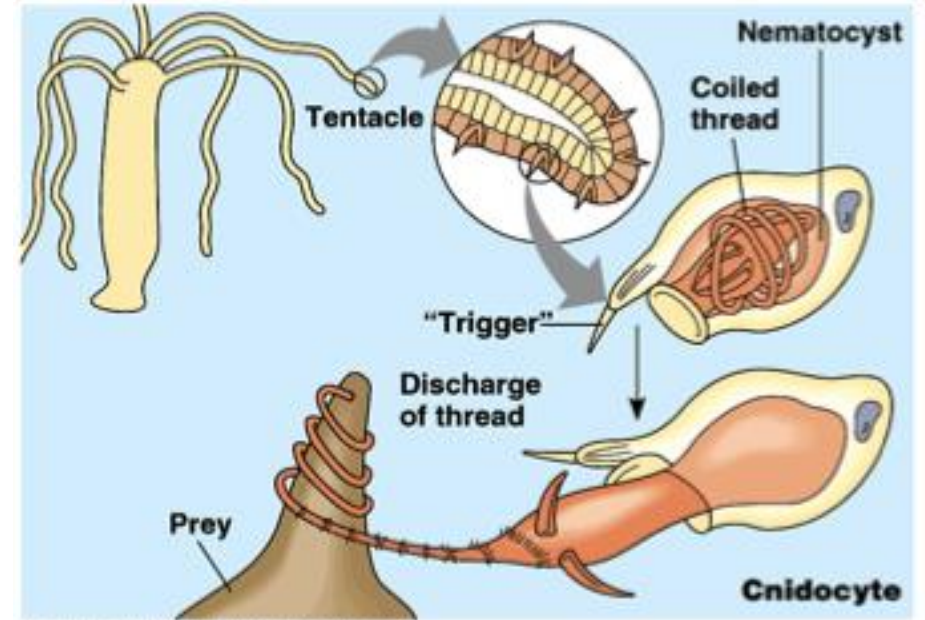
<https://www.coursehero.com/file/114134779/POLYMORPHISIMIN-HYDROZOApdf/>

**Polymorphism**

8. Single internal cavity:- **Gastrovascular cavity** or **Coelenteron**.
9. Digestion is **intracellular** or **extracellular**.
10. Respiratory, Circulatory and Excretory system wanting.
10. **Nematocysts** or **Cnidocytes** (stinging cells) are present – for adhesion, food capture and defence.



<https://study.com/academy/lesson/gastrovascular-cavity-definition-lesson-quiz.html>

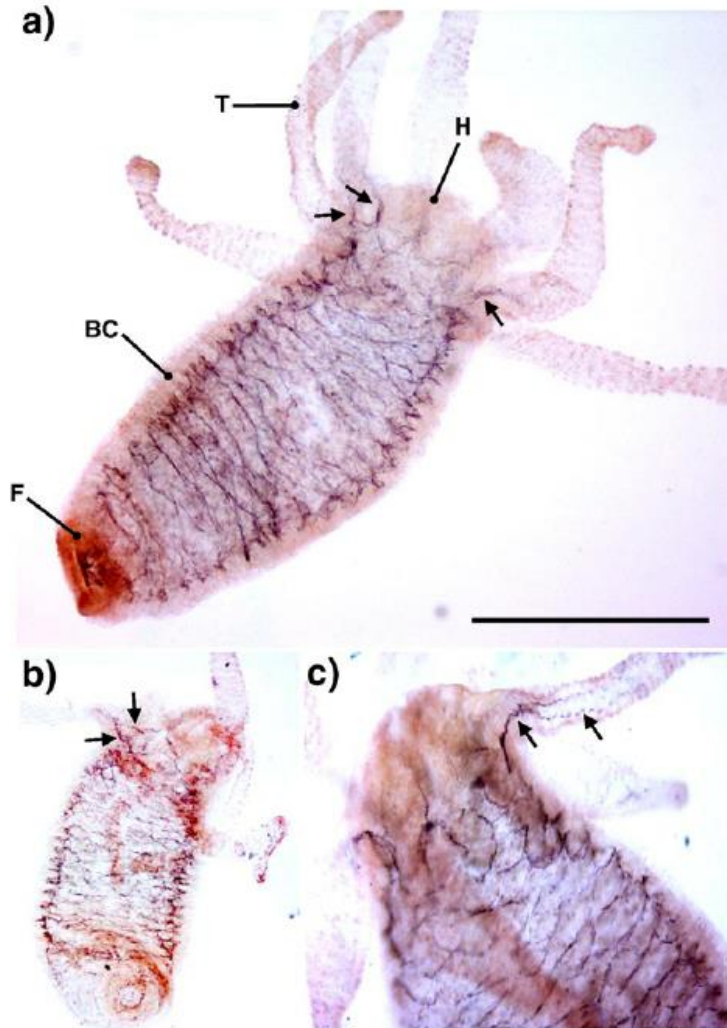


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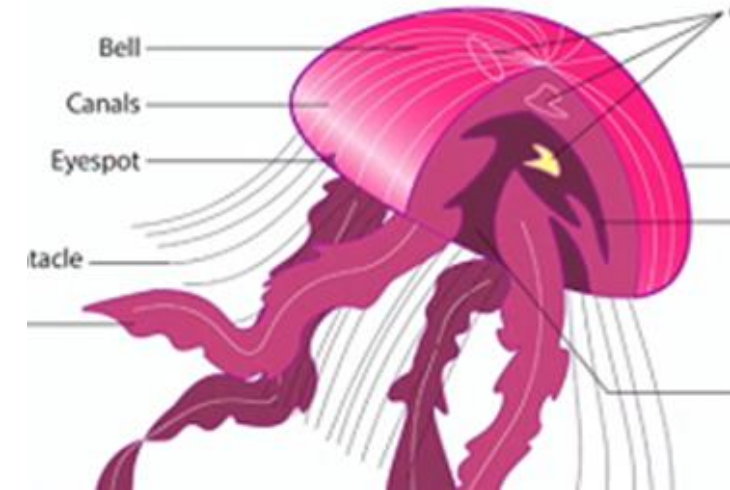
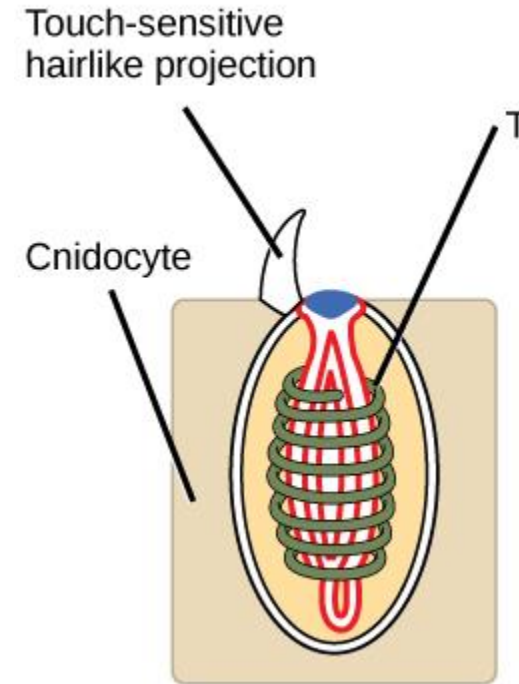
<https://blogs.ubc.ca/mrpletsch/2019/01/23/phylum-cnidaria/>



11. Nervous system is primitive consisting of **Nerve net**. Central nervous system is absent.



12. Sensory organ forms **ocelli** (eye spot) and **statocysts** (balance).



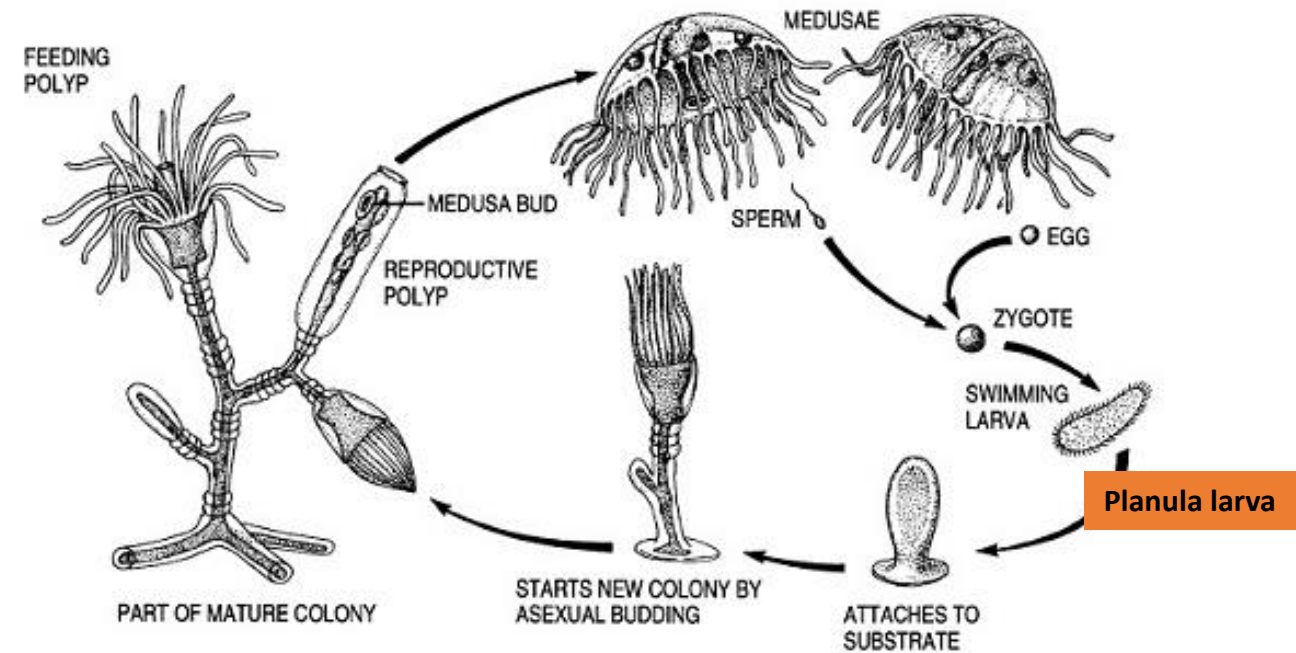
<https://courses.lumenlearning.com/suny-wmopen-biology2/chapter/phylum-cnidaria/>

13. Reproduction: Both **Asexual** and **Sexual**.

14. Development includes **Planula larva**.

- Asexual reproduction by **Budding or Fission**

- Sexual reproduction by **ova** and **sperms**.



<https://www.geol.umd.edu/>

*Thank You*