

PHYLUM PORIFERA

Definition → Porifera may be defined as an asymmetrical or radially symmetrical multicellular, cellular grade, without any definite tissue and organs.

Exclusively aquatic mostly marine only few fresh water species; ~~sedentary~~

Solitary or colonial

Perforated body by pores canals and chambers through which water flows, with one or more internal cavities lined with choanocytes and with a characteristic skeleton made up of calcareous spicules, silicious spicules or horny fibres made up of spongin

They consist of outer ectoderm and inner endoderm, with internal mesenchyme hence diploblastic

- Sponge body
- ① The internal space of is called Spongocoel
 - ② Mouth absent, digestion intracellular
 - ③ Excretory and respiratory organs absent
 - ④ Contractile vacuole present in some freshwater forms.
 - ⑤ Nervous and sensory cells are not well differentiated.
 - ⑥ Monoecious.
 - ⑦ Reproduction both by sexual and asexual methods.
 - ⑧ Asexual reproduction by buds and gemmules
 - ⑨ Sexual by ova and sperm.
 - ⑩ fertilization internal.
 - ⑪ cleavage holoblastic
 - ⑫ Development indirect by free living ciliated larva called amphiblastula or parenchymula
 - ⑬ The organization of sponges are of 3 types Ascon type, Sycon type and Leuconoid type

② Canal system present

Examples - Sycon, grania Euplactella
Thema, cliona, Spongilla, Euspondia
etc.

Classification of phylum porifera.

5000, species, and divided into 3
classes depending upon the type
of skeleton found in them

Porifera

