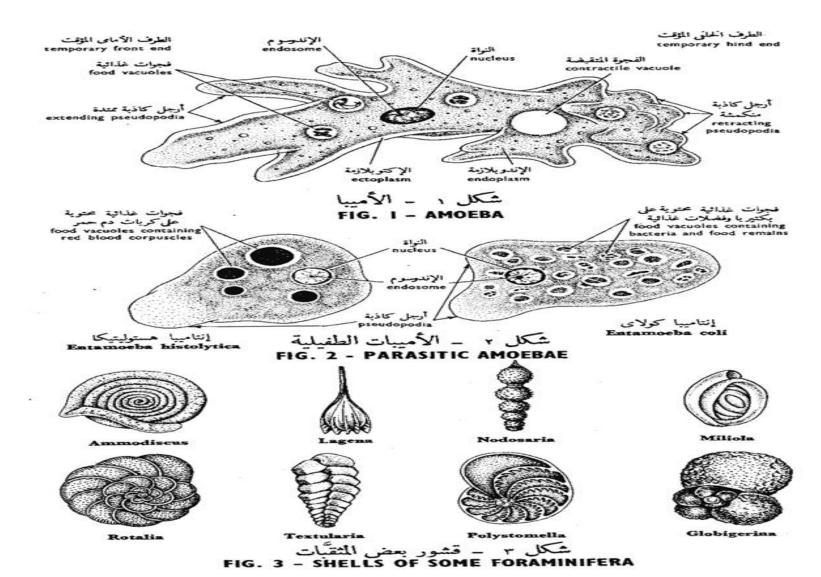
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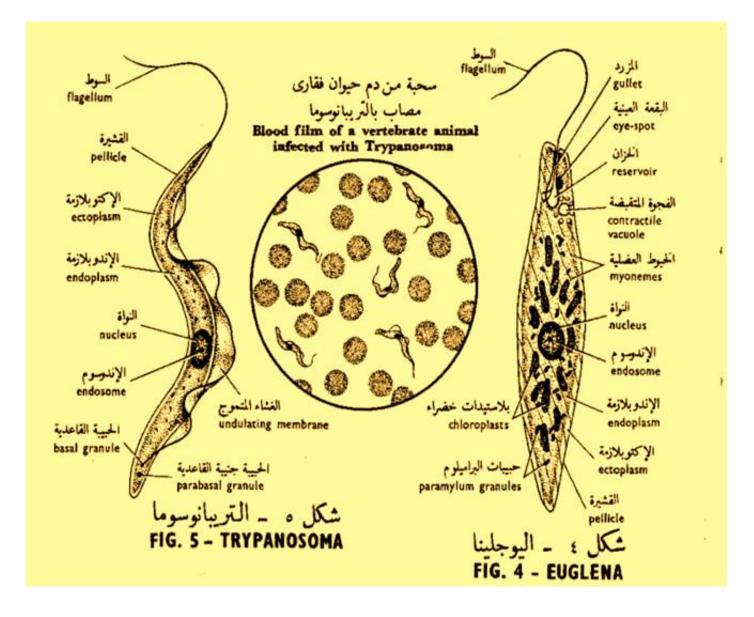
Invertebrates•

Of the million or more animal species in the world, more than 90% are invertebrates. Invertebrates don't have an internal skeleton made of bone. Many invertebrates have a fluid-filed hydrostatic skeleton, like the Jelly fish or worms. Others have a hard outer shell like insects and crustaceans. There are many type of invertebrates. The most common invertebrates include the

protozoa, annelids, echinoderms, mollusks and arthropods.

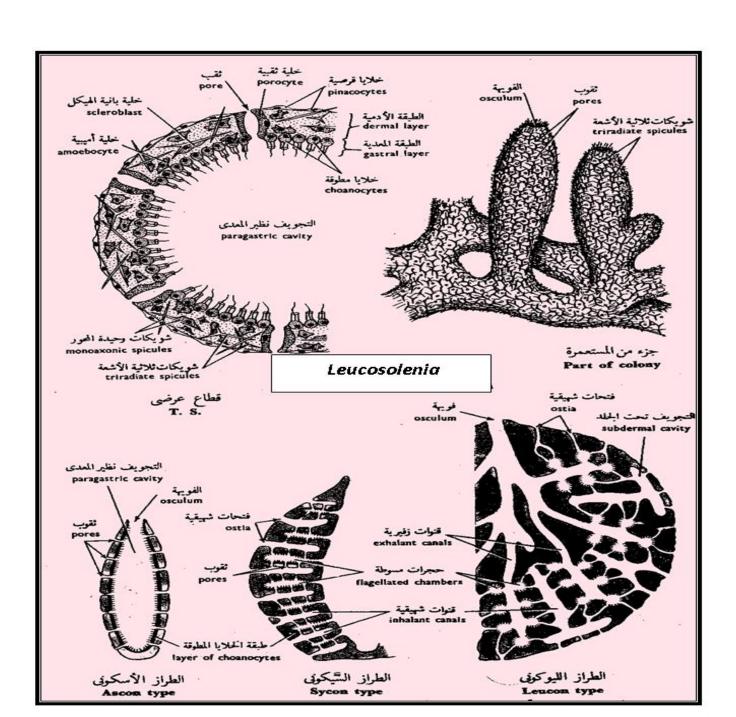
The protozoa Life within a single plasma membrane





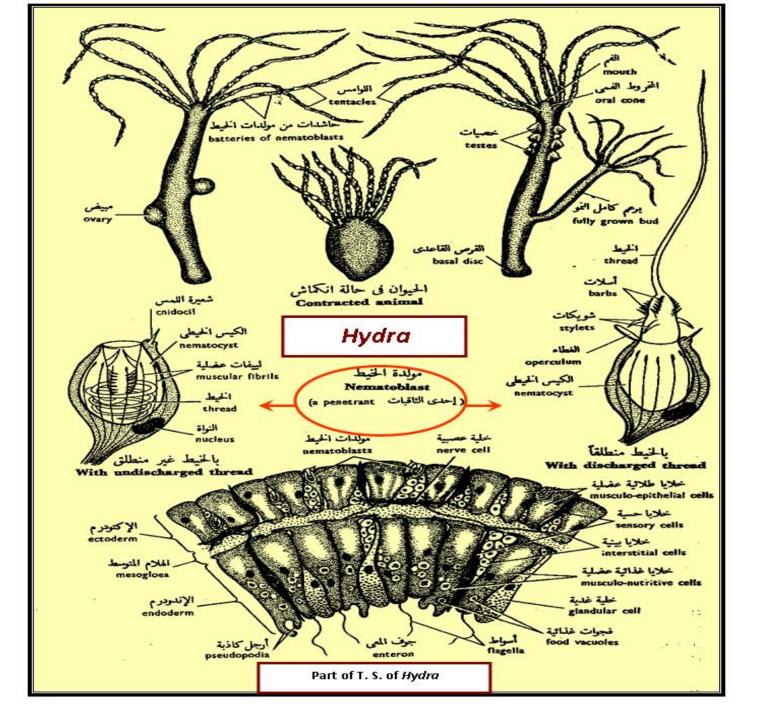
Phylum PORIFERA

• The exact position of sponges has till recently been unknown. They were once included as plants, largely because they are sedentary and do not possess a nervous system.



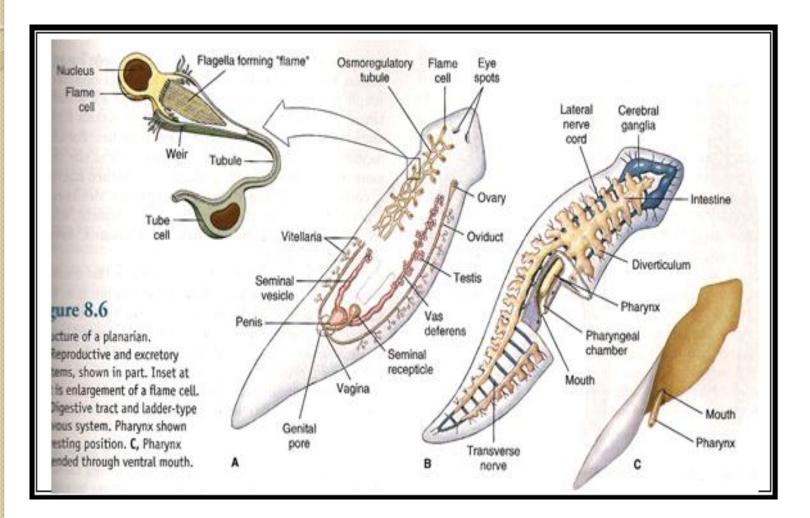
• Phylum: Cnidaria (COELENTERATA)

This phylum and all the following phyla belong to the • subkingdom Metazoa. The Coelenterata show a distinct advance in structure over the Porifera. Their cells are much more specialized, with a higher coordination than in sponges, maintained by a simple nervous system in the form of a network. Similar cells, therefore, work together to perform a common function, thus beginning to form "tissues". In other words, the Coelenterata have reached the "tissue" grade of organization.



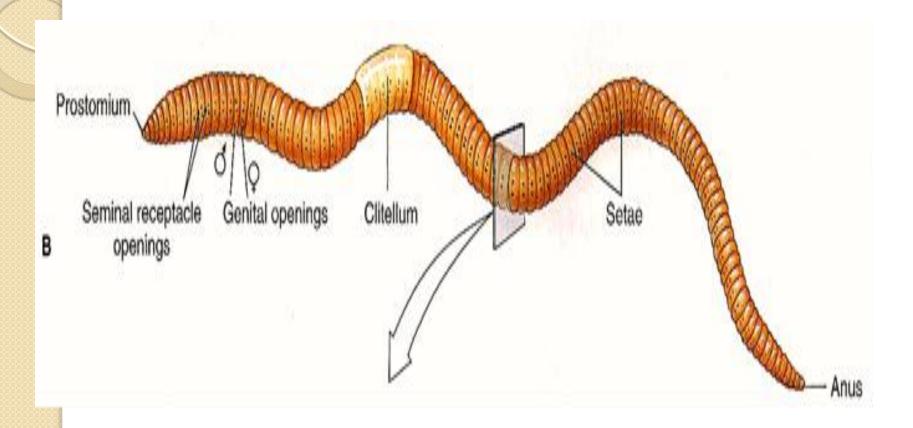
• Phylum PLATYHELMINTHES

 Platyhelminthes or flat-worms, together with all the following phyla, are triploblastic Metazoa, that is with three germ layers



• PHYLUM ANNELIDA

The Annelida or ringworms are metamerically segmented, triploblastic coelomate animals. Their body is covered with a thin non-chitinous cuticle, and the body wall is muscular with outer circular and inner longitudinal muscle layers. They possess chaetae but no continuous exoskeleton.



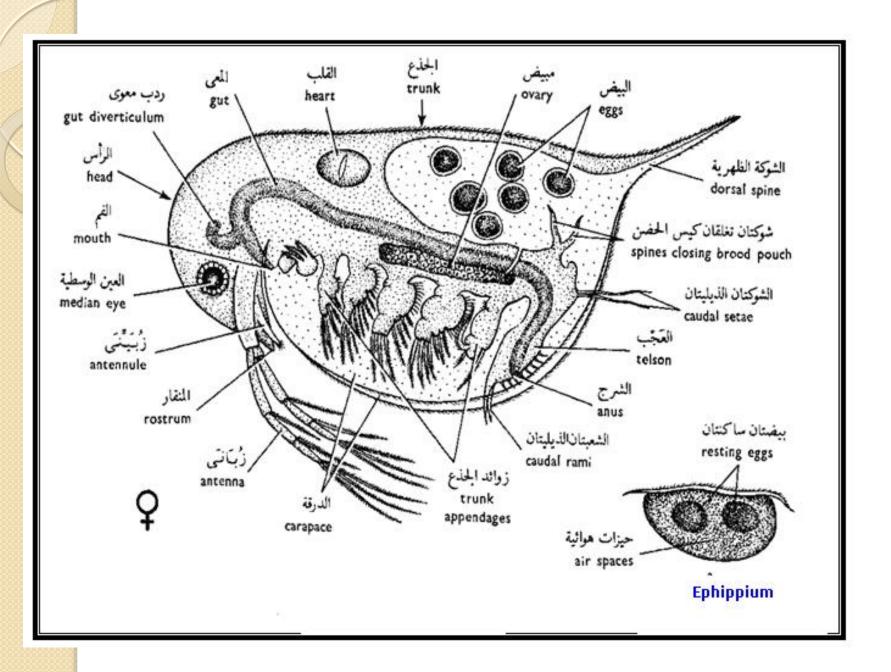
• phylum Onychophora

• Some authorities prefer to consider them to form a separate phylum standing half-way between the Annelida and the Arthropoda. The Onychophora are the most primitive Arthropoda, and apart from their haemocoelic body cavity and tracheal respiratory system their structure is mainly annelidan.



Phylum Arthropoda

• The phylum Arthropoda is the largest of the animal phyla, and also the most successful, that they have conquered every ecological niche. The Arthropoda are, like the Annelida:



• Phylum MOLLUSCA

• Molluscs range in size and body form from the giant squid, measuring 18 m in length, to the smallest garden slug, less than 1 cm long

