

Class-VII

Subject - Biology

Chapter-3

The Classification of Animals.

Teacher - Ms. Nidhi Rana

Good Morning Children! Today we are going to start with a new chapter - 'The classification of Animals'. I am sure you will be engrossed in the topic and going to imagine a beautiful world of animals around you.

We have learnt that Whittaker classified organisms into five kingdoms. Out of these five kingdoms, Kingdom Animalia comprises organisms that are multicellular and show heterotrophic mode of nutrition.

Based on the presence or absence of a backbone, scientists have divided Kingdom Animalia into two groups.

Invertebrates

- do not have a backbone.
- divided into 8 major phyla - Porifera, Cnidaria, Platyhelminthes, Nematoda, Annelida, Arthropoda, Mollusca, Echinodermata

Vertebrates

- Animals that have a backbone.
- divided into 5 groups - Fishes, Amphibians, Reptiles, Birds, Mammals.

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1. Porifera - comprises of aquatic animals that are mostly marine.

- found attached to the ocean floor and cannot move.
- have a simple body with pores through which water and food enter the body cavity.
- There is a single large pore present at the top of the body for the exit of water.
- For example - sponges, scypha, Euspongia, spongilla
(fresh water sponge)



Sea sponge.

2. Cnidaria or Coelenterata - mostly marine; some live in fresh water as well.

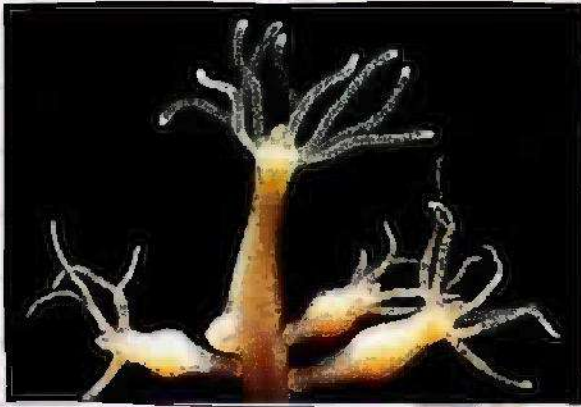
- There is a mouth at one end leading to a single hollow cavity.
- The mouth is surrounded by a number of finger-like structures called tentacles which are used to catch food.

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- They either float on water or stick to the rocks under water.
- Their bodies are radially symmetrically (they can be divided vertically into two identical halves along any plane passing through the central point).
- Examples - Hydra, jelly fish, sea anemone.



Hydra



Jelly fish.

3. Platyhelminthes (Flatworms)

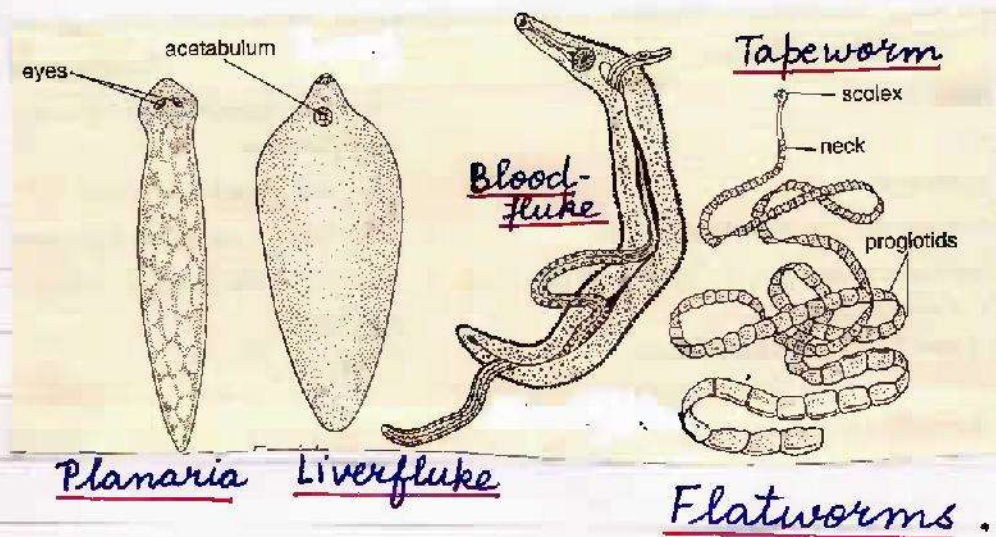
- comprises of worms that have soft, flattened and leaf-like or ribbon-like bodies. They have hooks and suckers on their head around the mouth which help them to grip the body of the host.
- Flatworms mostly live as parasites inside the body of animals and human beings. Some live freely in freshwater bodies and in the sea.

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- They have only one opening through which they take in food and get rid of wastes.
- Their body is bilaterally symmetrical (it can be divided into two identical halves through one plane only).
- Examples - tapeworm, liver fluke.



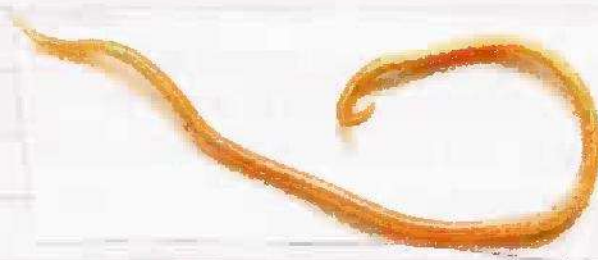
4. Nematoda (Roundworms)

- found as parasites in plants and animals.
- have a soft, cylindrical, unsegmented body. Body is bilaterally symmetrical.
- have a mouth at one end and anus is present at the other end of the body.
- Examples - Ascaris (roundworm in humans)
It lives in small intestine, commonly in children who eat with unwashed hands or eat unwashed fruits and vegetables.

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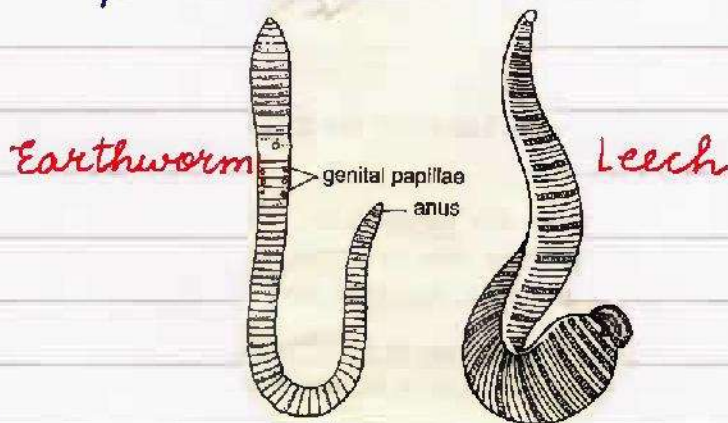
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Ascaris
(roundworm)

5. Annelida (segmented worms)

- have a soft, cylindrical and bilaterally symmetrical body.
- body surface is marked out into segments which help in movement.
- have a mouth and an anus with a well-developed digestive system.
- have special organs of excretion called nephridia.
- found both in fresh and sea water.
- Examples - earthworms, leeches.



Dear Parents,

Kindly assist your child into reading the chapter alongwith the notes for complete understanding of the chapter.