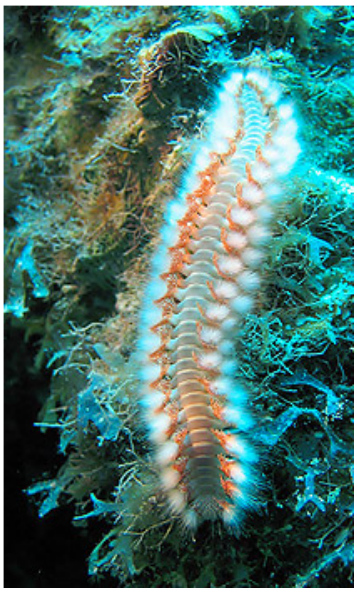
Phylum Annelida

The first Segmented animals

Size range of 1mm to 3m

Examples: earthworm and fireworm

http://www.kidcyber.com.au/IMAGES/earthworms.jpg



Hermodice carunculata, Bearded Fireworm at MarineBio.org

Each segment contains digestive, excretory, circulatory, and locomotor organs

Some segments are modified for specific function

Oct 30 - 1:05 PM

Cerebral ganglion- primitive brain

The brain is connected to a nerve cord that runs the entire length of the body

Septa- internal body wall that separate the segments

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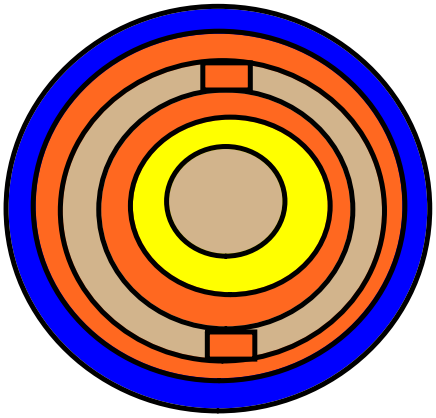
Characteristics of Annelids

1. Coelom- fluid-filled coelom located entirely in the mesoderm



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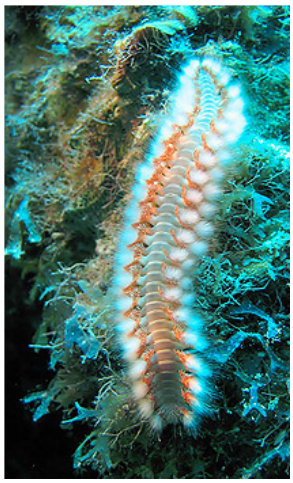
2. Organ systems- closed circulatory system and a highly modified gut

3. Bristles- external bristles (setae)

a. They are paired on each segments and increase traction

b. Parapodia- some annelids also have fleshy appendages



Hermodice carunculata, Bearded Fireworm at MarineBio.org

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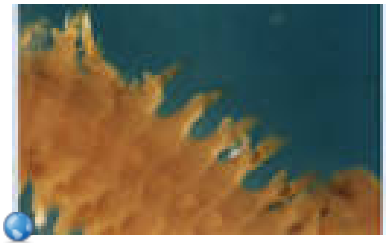
Parapodia and the number of setae on each segment are used to classify the organism



http://dbsdb.nus.edu.sg/epic/biramous2.jpg

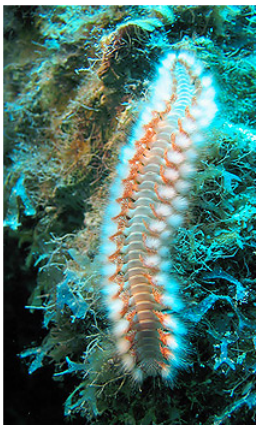
Class Polychaeta

Marine Worms

The largest group of annelids

Unusual forms and iridescent color

They have parapodia that are fleshy and paddle-like



Hermodice carunculata, Bearded Fireworm at MarineBio.org

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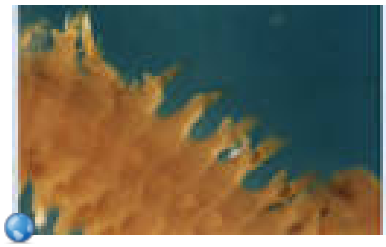
They are used to swim, burrow, or crawl

They greatly increase the animals surface area for gas exchange



http://dbsdb.nus.edu.sg/epic/biramous2.jpg

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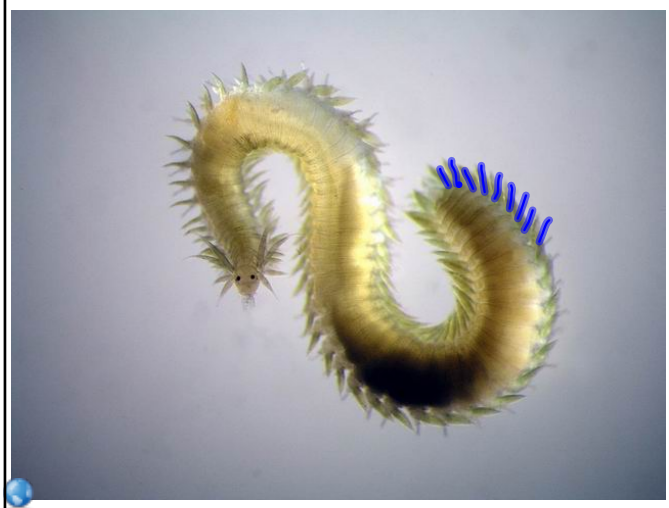
Tubeworms

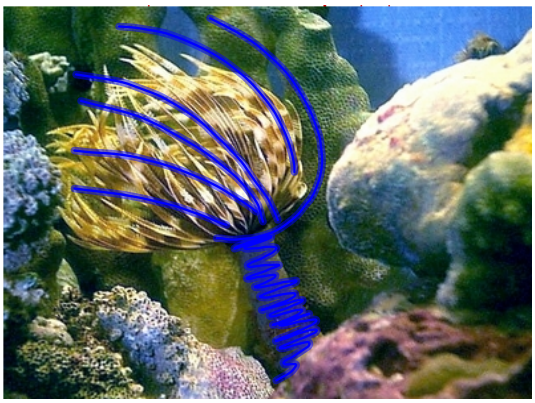
Live in protective tube formed by hard secretions of glands

Sometimes only their head is stuck out of the tube

Examples: nereis and feather dusters



http://miljolare.no/virtue/img/nydisk2004/images/008%20Nereis%2006.jpg



http://saltaquarium.about.com/blclipartfduster2.htm

Class Oligochaeta

Earthworms and some Fresh water worms

Lack a distinctive head region and have no eyes

Have light sensitive organs located on each end of their body

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Earthworm's Digestion

Eat their way through soil

They consume their own body weight in soil each day

Food moves from the esophagus, crop (storage chamber), gizzard (grinds the food), intestine (food absorbed)

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Respiration
oxygen and carbon dioxide diffuse through the skin

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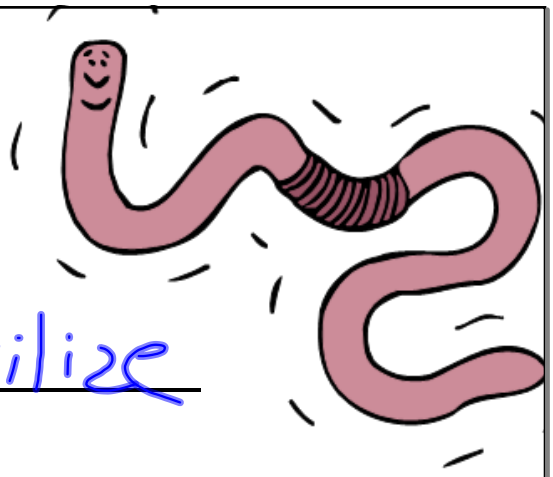
Reproduction

Hermaphrodites

They do not self-fertilize

Clitellum release a cocoon that surrounds that eggs



Brain

Coordinates the muscular activity

Process the info from the light sensitive organs

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Class Hirudinea

Leeches

Had blood suckers at both ends of its body

Most are predators or scavengers

Some are parasite on vertebrates or crustaceans

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Lack both setae and parapodia
Has a flattened body
The segments are not separated internally

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