

Chordates practical

Chapter 1

Requirements: name and classification



Ciona sp.

Molgula sp.

FIGURE 2: Three acidacean species.

Ciona sp.:

Scientific Name: Ciona (genus)

Classification:

Kingdom: Animalia

Phylum: Chordata

Subphylum: Urochordata or Tunicata

Class: Ascidiacea

Order: Enterogona

Family: Cionidae

Genus: Ciona

Molgula sp.:

Scientific Name: Molgula (genus)

Classification:

Kingdom: Animalia

Phylum: Chordata

Subphylum: Urochordata or Tunicata

Class: Ascidiacea

Order: Stolidobranchia

Family: Molgulidae

Genus: Molgula



Adult larvacean species.

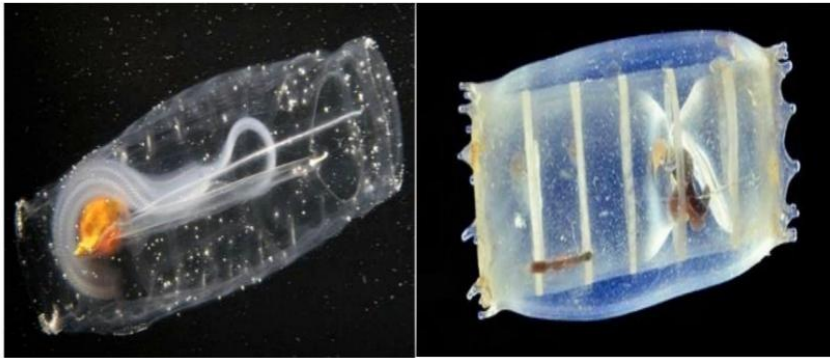
Larvacea or Appendicularia

Kingdom: Animalia

Phylum: Chordata

Subphylum: Urochordata or Tunicata

Class: Larvacea or Appendicularia



Salpa sp.

Doliolum Sp.

Salpa sp.:

Common name: salps

Scientific Name: Salpa (genus)

Classification:

Kingdom: Animalia

Phylum: Chordata

Subphylum: Urochordata or Tunicata

Class: Thaliacea

~~Order: Salpida~~

~~Family: Salpidae~~

Genus: Salpa

Doliolum sp.:

Common name: salps

Scientific Name: Doliolum (genus)

Classification:

Kingdom: Animalia

Phylum: Chordata

Subphylum: Urochordata or Tunicata

Class: Thaliacea

~~Order: Doliolida~~

~~Family: Doliolidae~~

Genus: Doliolum

Requirements:

- Name and classification
- Draw and label
- Morphology characteristics

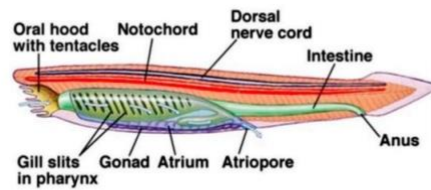


FIGURE 5: *Amphioxus* (= *Branchiostoma*) *sp.*, closely resembling the idealized chordate.

Scientific Name: *Amphioxus* (formerly known as *Branchiostoma*)

Classification:

Kingdom: Animalia

Phylum: Chordata

Subphylum: Cephalochordata

Class: Leptocardii

Order: ~~Amphioxiformes~~

Family: ~~Branchiostomatidae~~

Genus: *Amphioxus*

Chapter 2

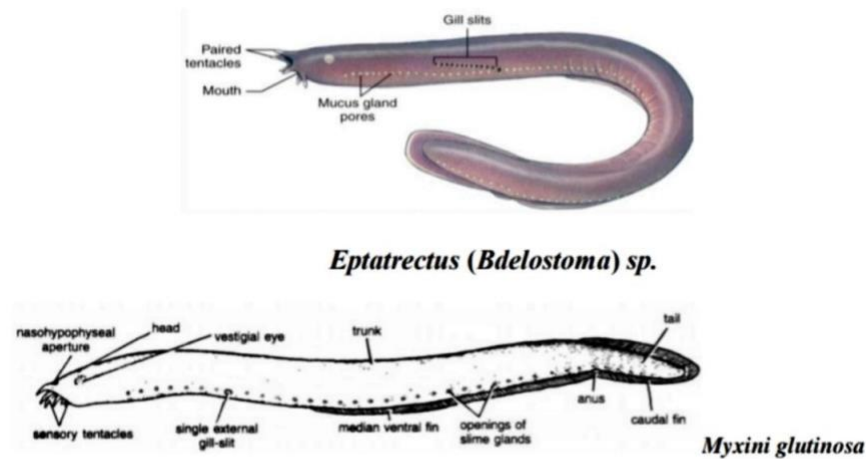


FIGURE 2: Two species of class myxini.

Eptatrectus (Bdelostoma) sp.:

class are named hagfishes.

Scientific Name: Eptatrectus (formerly known as Bdelostoma)

Classification:

Kingdom: Animalia

Phylum: Chordata

Class: Myxini

Subphylum: Vertebrata

Order: Myxiniformes

Superclass: Agnatha

Myxine glutinosa:

Scientific Name: Myxine glutinosa

class are named hagfishes.

Classification:

Kingdom: Animalia

Phylum: Chordata

Subphylum: Vertebrata

Class: Agnatha (Jawless fish)

Order: Myxiniformes

Family: Myxinidae

Genus: Myxine

Species: Myxine glutinosa

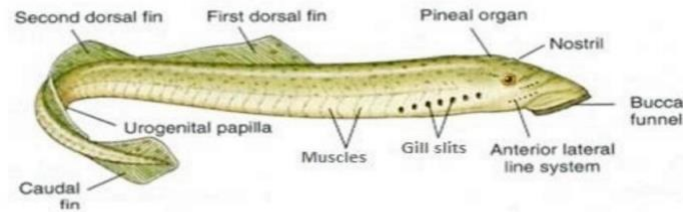


FIGURE 3: General form of the lamprey's species.

Scientific Name: Lampetra (for lampreys in the genus Lampetra)
common name for members of this class. Lampreys

Classification:

Kingdom: Animalia

Phylum: Chordata

Class: Cephalaspidomorphi

Subphylum: Vertebrata

Order: Petromyzoniforms

Superclass: Agnatha

TABLE 2: Differences between lampreys and hagfishes

Lampreys	Hagfishes
1. Marine as well as fresh water.	1. Exclusively marine.
2. Species reach up to 1 meter.	2. Remain under one meter.
3. Dorsal fin well-developed divided, and with fin rays.	3. Dorsal fin poorly developed, single or absent.
4. Skin less slimy.	4. Skin exceeding slimy.
5. Eyes large and functional.	5. Eyes degenerate, covered by thick skin.
6. Mouth ventral.	6. Mouth terminal.
7. Buccal funnel present.	7. Buccal funnel absent.
8. Oral tentacles absent.	8. Oral tentacles 3 to 4 pairs.
9. Tongue less developed with larger teeth.	9. Tongue well developed with smaller teeth.
10. Pharynx end blindly as a respiratory tube.	10. Pharynx continued into esophagus.
11. Gill slits 7 pairs.	11. Gill slits or pouches more in number.
12. Sexes separate.	12. Sexes united. Gonads hermaphroditic.
13. Development indirect with a larval stage (ammocoete) and metamorphosis.	13. Development direct without larval stage and metamorphosis.

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