

2- Chondrichthyes class:

The general characteristics of cartilaginous fish are;

- a) Cartilage makes up the skeleton
- b) Body is covered with triangular placoid scales
- c) Possess ventral sub terminal mouth
- d) Fins are stiff and non-flexible
- e) Absence of swim bladder
- f) Found in marine, brackish and fresh water

A) Sharks;

Common name is Great white shark Also known as White pointer, White shark, White death and scientific name is *Carcharodon carcharias*

Kingdom: Animalia

Phylum: Chordata

Subphylum: Vertebrata

Super class: Gnathostomata

Class: Chondrichthyes

Order: Lamniformes

Family: Lamnidae

Genus: *Carcharodon*

Species: *carcharias*



B) Rays;

Common name is Common stingray and scientific name is *Dasyatis pastinaca*.

Kingdom: Animalia

Phylum: Chordata

Subphylum: Vertebrata

Super class: Gnathostomata

Class: Chondrichthyes

Order: Myliobatiformes

Family: Dasyatidae

Genus: *Dasyatis*

Species: *pastinaca*



C) Skates;

The New Zealand smooth skate is common name and scientific name is *Dipturus innominatus*.

Kingdom: Animalia

Phylum: Chordata

Subphylum: Vertebrata

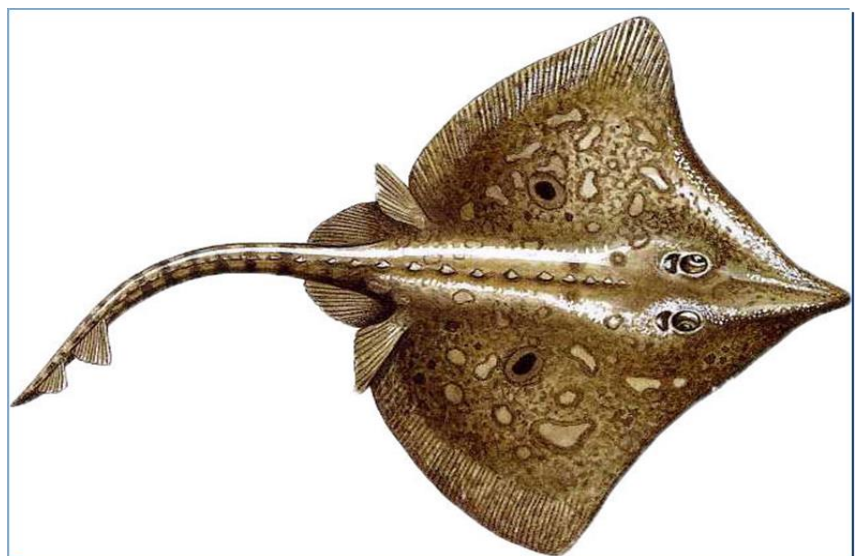
Super class: Gnathostomata

Class: Chondrichthyes

Order: Rajiformes

Family: Rajidae

Genus: *Dipturus* Species: *innominatus*



D) Chimaeras;

The Spotted ratfish is common name and scientific name is *Hydrolagus colliei*

Kingdom: Animalia

Phylum: Chordata

Sub Phylum: Vertebrata

Super class: Gnathostomata

Class: Chondrichthyes

Order: Chimaeriformes

Family: Chimaeridae

Genus: *Hydrolagus*

Species: *colliei*



3-Osteichthyes Class;

The general characteristics of bony fish are;

- Bones make up the skeleton
- The gills are covered with operculum
- Swim bladder is present
- Fins are made up of rays and spines
- This species possesses different types of scales

Bony fish has two groups which are; lobe finned group and ray finned group;

A-Lobe finned group

There are two sub classes;

1-Coelacanth

Common name is West indian ocean coelacanth and scientific name is *Latimeria chalumnae*.

Kingdom: Animalia

Phylum: Chordata

Sub Phylum: Vertebrata

Super class: Gnathostomata

Class: Osteichthyes

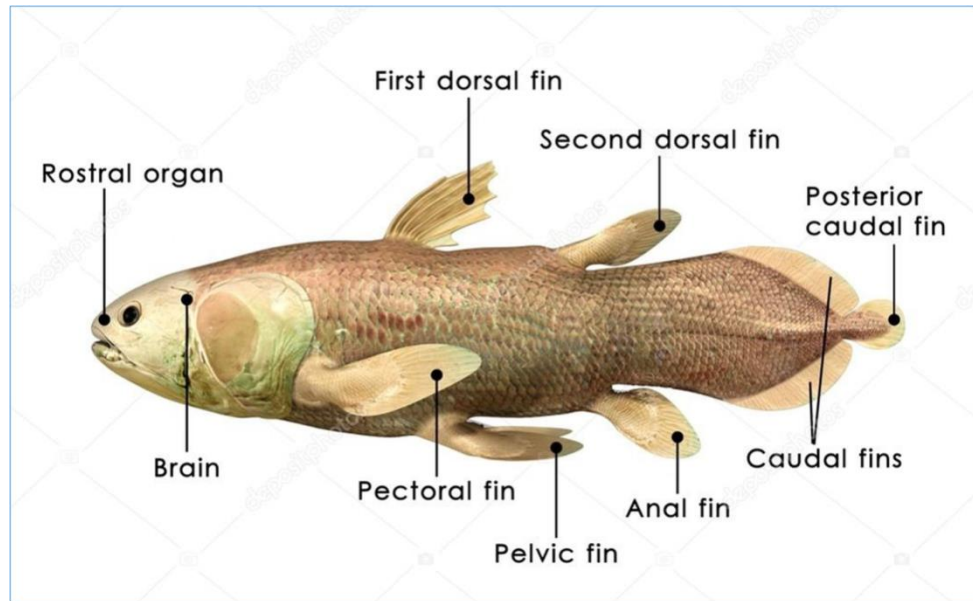
Sub Class: Sarcopterygii

Order: Coelacanthiformes

Family: Latimeriidae

Genus: *Latimeria*

Species: *chalumnae*

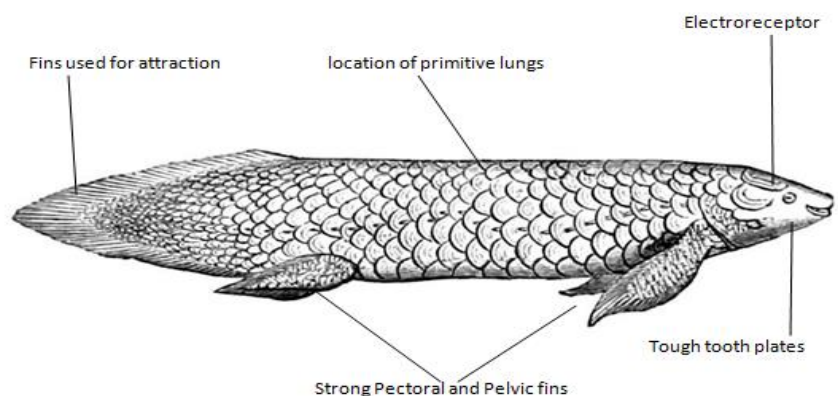


2-Lungfish;

Common name is Queensland lungfish, Australian lungfish, Burnett salmon and Barramundi and scientific name is *Neoceratodus forsteri*

Kingdom: Animalia

Phylum: Chordata



Sub Phylum: Vertebrata

Super class: Gnathostomata

Class: Osteichthyes

Sub Class: Sarcopterygii

Order: Ceratodontiformes

Family: Ceratodontidae

Genus: *Neoceratodus*

Species: *forsteri*

B-Ray finned group

There are three sub classes;

1-Chondrosteans

-Common name is Atlantic sturgeon and scientific name is *Acipenser oxyrinchus*.

Kingdom: Animalia

Phylum: Chordata

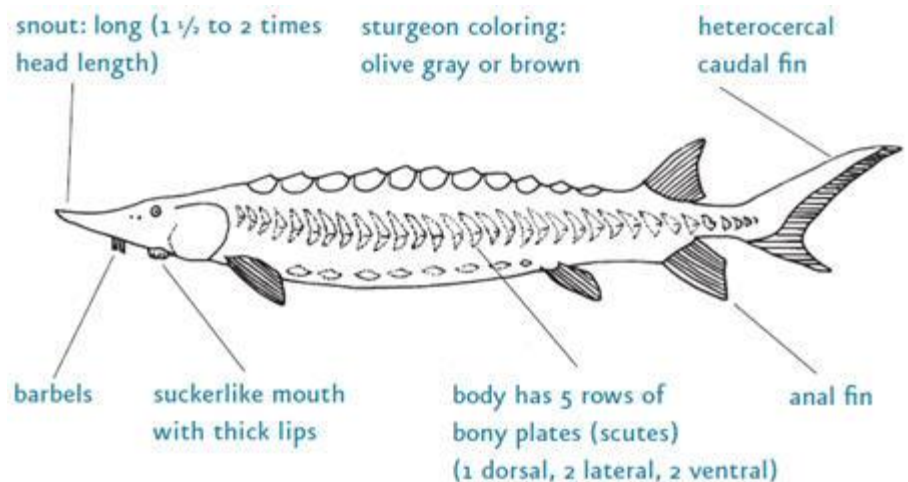
Sub Phylum: Vertebrata

Super class: Gnathostomata

Class: Osteichthyes

Sub Class: Actinopterygii

Order: Acipenseriformes



Family: Acipenseridae

Genus: *Acipenser* Species: *oxyrinchus*

2-Holostteans

- Taxonomy (Classification) of Bowfin fish

The Common name is Bowfin fish and scientific name is *Amia calva*

Kingdom: Animalia

Phylum: Chordata

Sub Phylum: Vertebrata

Super class: Gnathostomata

Class: Osteichthyes

Sub Class: Actinopterygii

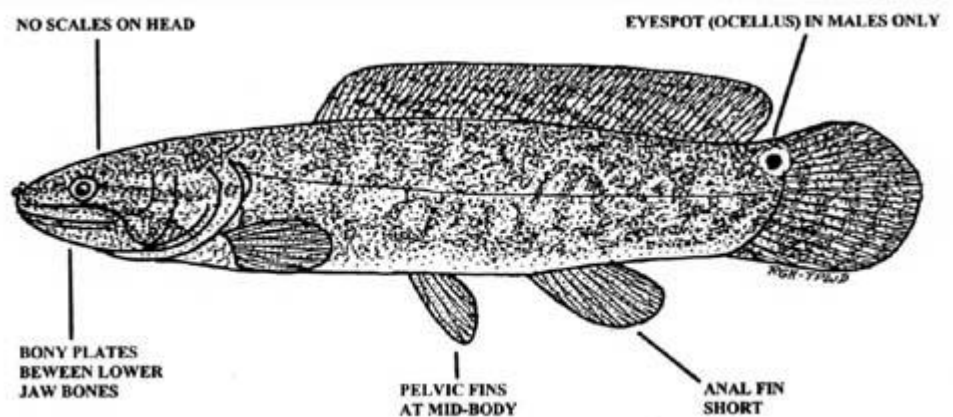
Order: Amiiformes

Family: Amiidae

Subfamily: Amiinae

Genus: *Amia*

Species: *calva*



3-Teleosts

Common name is Atlantic salmon and scientific name is *Salmo salar*

Common name is Dwarf gourami and scientific name is *Trichogaster lalius*

Taxonomy (Classification) of common carp

The common name is Common carp and scientific name is *Cyprinus carpio*

Kingdom: Animalia

Phylum: Chordata

Sub Phylum: Vertebrata

Super class: Gnathostomata

Class: Osteichthyes

Sub Class: Actinopterygii

Order: Cypriniformes

Family: Cyprinidae

Genus: *Cyprinus*

Species: *carpio*



Salmo salar



Principle of Ichthyology
2nd stage
L3

Dr.Ayub Younis Anwar

Trichogaster lalius