

THE LIVING WORLD

Notes for KITE Victers Zoology Class (Class :3) 3/12/2020

For viewing the class click the link below

<https://www.youtube.com/watch?v=MqWHtMGu06M&t=1342s>

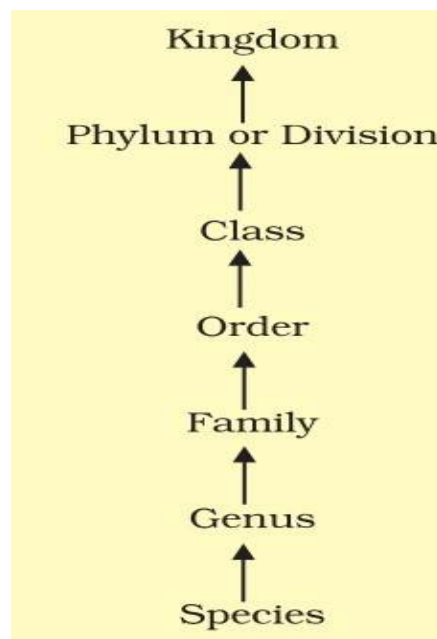


Taxonomic Hierarchy

Arrangement of organisms into different categories or 'taxa' (from lower taxon 'species' to higher taxon 'Kingdom') based on their relationships is called taxonomic hierarchy.

TAXONOMIC CATEGORIES

- The hierarchy of steps in the taxonomic arrangement is called **taxonomic Categories**.
- All taxonomic categories together called **taxonomic hierarchy**



Taxonomic Categories showing Hierarchical arrangement in ascending order

Species
It is the Basic taxon in Taxonomic Hierarchy. It includes group of organisms with fundamental similarities.
Eg. *Musca domestica*
Here, 'domestica' indicates the specific epithet

Genus
A group of related species, which resemble one another .
Example: Lion, Tiger and Leopard are three different species but all belong to the same genus *Panthera*.
Lion - *Panthera leo*
Tiger - *Panthera tigris*
Leopard - *Panthera pardus*

Family
Related genera are grouped under family. Genus *Panthera*, (including lion, tiger, leopard) and Genus *Felis* (including domestic cats, mountain cats, wild cats etc.) are coming under family **Felidae
Dog coming under family **Canidae**
Man coming under family **Hominidae****

Order
It is a group of families resembling in a few characters
Order **Carnivora, includes families **Felidae, Canidae and Ursidae** etc (includes bears)**
Man comes under Order **Primata**
(Includes Apes, Monkeys, Lemur, Loris)

Class
It is a group of related orders having some common characters.
Class **Mammalia comprises 19 orders including Order **Primata** and **Carnivora**.**
****Pisces, Amphibia, Reptilia, Aves** etc. are some other classes.**

Phylum
It is group of related classes having some common features.
Eg. **Phylum Chordata, Phylum Non-Chordata**
In plants, term **Division is used instead of phylum**

Kingdom
All animals belonging to Kingdom **Animalia.**
All Plants belonging to Kingdom **Plantae.**

Systematics
Branch of biology deals with the study of relationships and diversities among different kinds of organisms and evolutionary relationship between them.

Common Name	Biological Name	Genus	Family	Order	Class	Phylum/ Division
Man	<i>Homo sapiens</i>	<i>Homo</i>	Hominidae	Primata	Mammalia	Chordata
Housefly	<i>Musca domestica</i>	<i>Musca</i>	Muscidae	Diptera	Insecta	Arthropoda
Mango	<i>Mangifera indica</i>	<i>Mangifera</i>	Anacardiaceae	Sapindales	Dicotyledonae	Angiospermae
Wheat	<i>Triticum aestivum</i>	<i>Triticum</i>	Poaceae	Poales	Monocotyledonae	Angiospermae

Systematics

Branch of biology deals with the study of relationships and diversities among different kinds of organisms and evolutionary relationship between them.

Word 'Systematics' was derived from Latin word '**SYSTEMA**' means Systematic arrangement of organisms.

'**Systema Naturae**' is the title of publication by Linnaeus

Assignment

Prepare the hierarchical arrangement of taxonomic categories of the following organisms in ascending order

Cat

Dog

Lion

Housefly

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