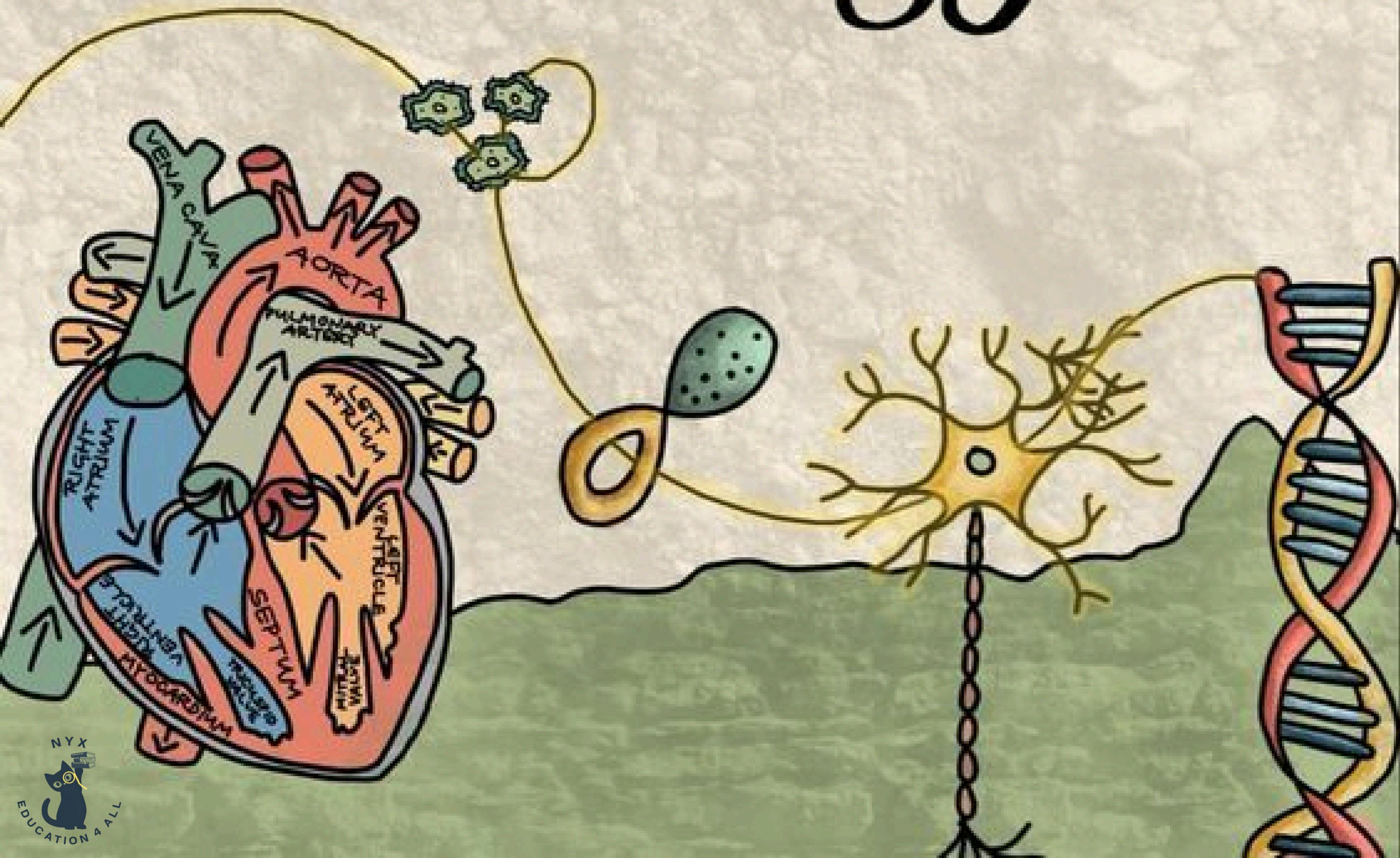


# BIOLOGIE

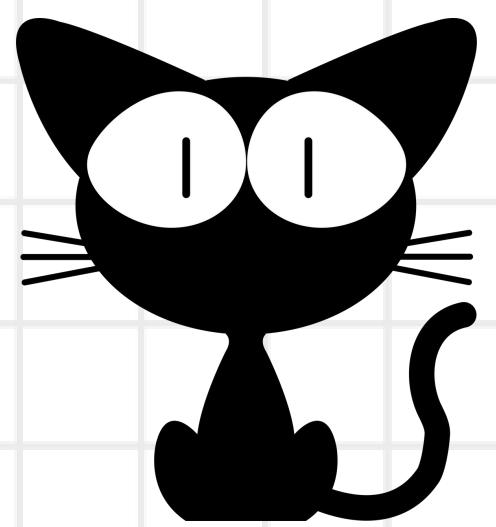
## Pathology



# CHAPTER 1 Characteristics and classification of living organisms

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- ★ Characteristics of Living Organisms
- ★ Concept & Uses of Classification Systems
- ★ Features of Organisms
- ★ Features of Organisms Continued



# CHAPTER 1: Characteristics of living organisms

амьд зүйлсийн чанар!!

**Movement:** an action by an organism or part of an organism causing a change of position or place

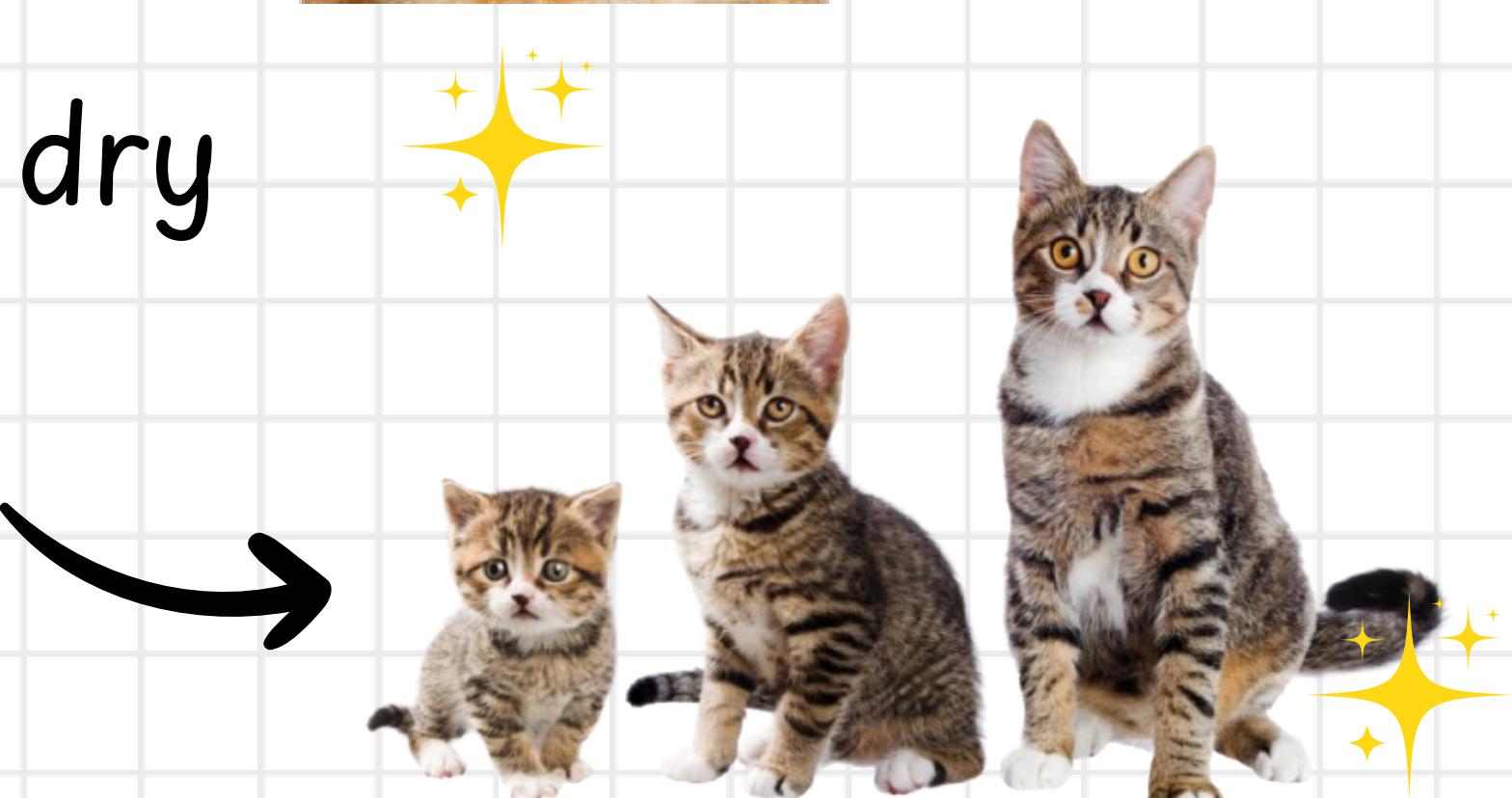


**Respiration:** the chemical reactions that break down nutrient molecules in living cells to release energy for metabolism

\*ИЛЭХ\*



**Sensitivity:** the ability to detect or sense stimuli in the internal or external environment and to make appropriate responses



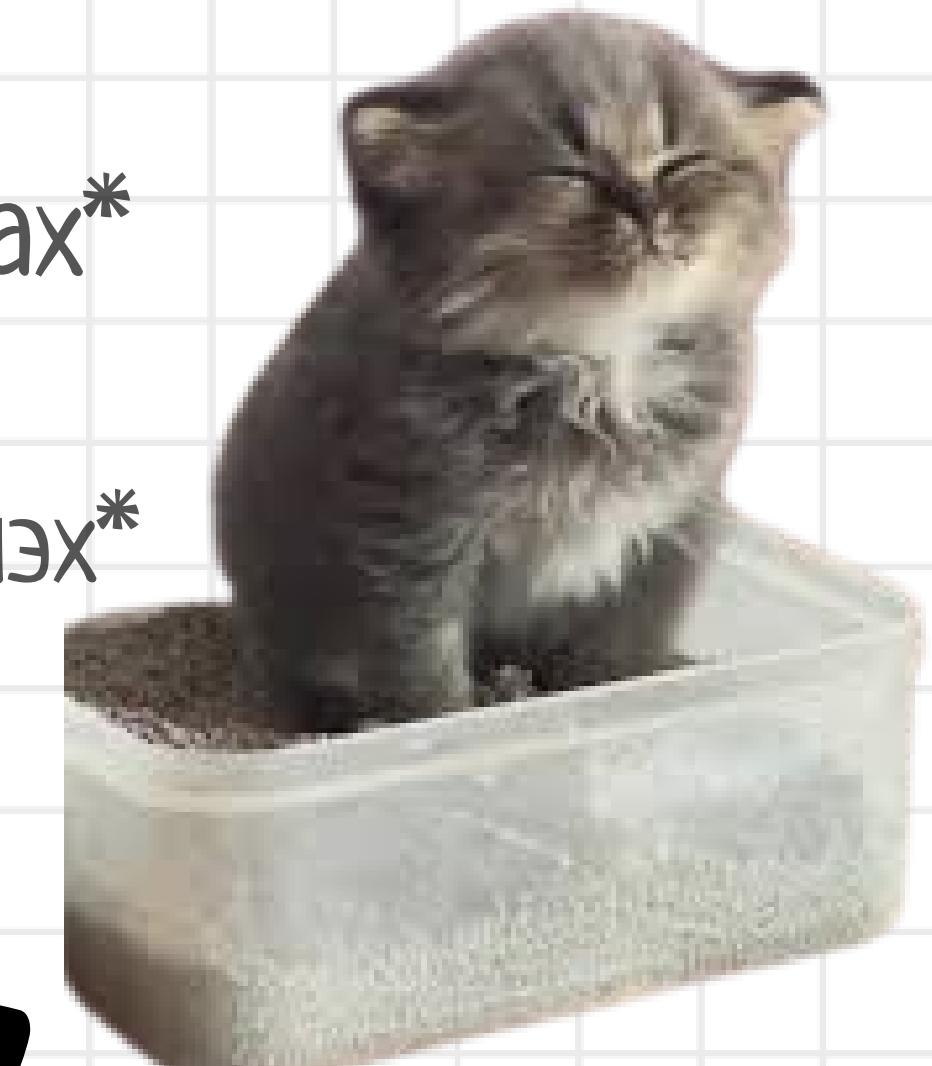
**Growth:** a permanent increase in size and dry mass by an increase in cell number or cell size or both



**Reproduction:** the processes that make more of the same kind of organism



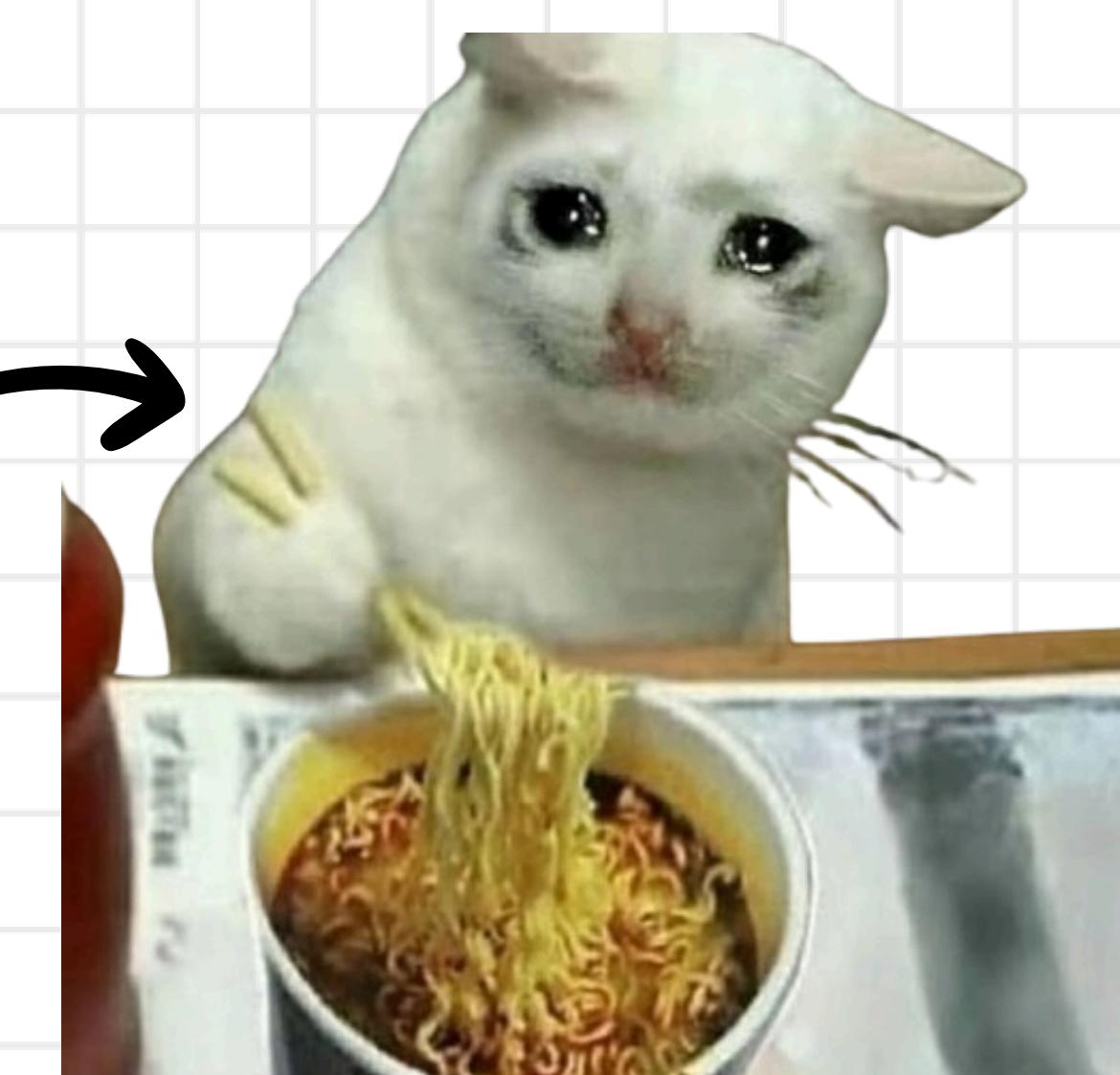
\*баах\*



**Excretion:** the removal from organisms of toxic materials, the waste products of metabolism (chemical reactions in cells including respiration) and substances in excess of requirements

\*дүлэх\*

**Nutrition:** the taking in of materials for energy, growth, and development; plants require light, carbon dioxide, water, and ions; animals need organic compounds, ions, and usually need water



# BINOMIAL SYSTEM (by Linnaeus)



Kingdom: Animal  
Phylum: Chordata  
Class: Mammalia  
Order: Carnivora  
Family: Felidae  
Genus: Felis  
Species: catus

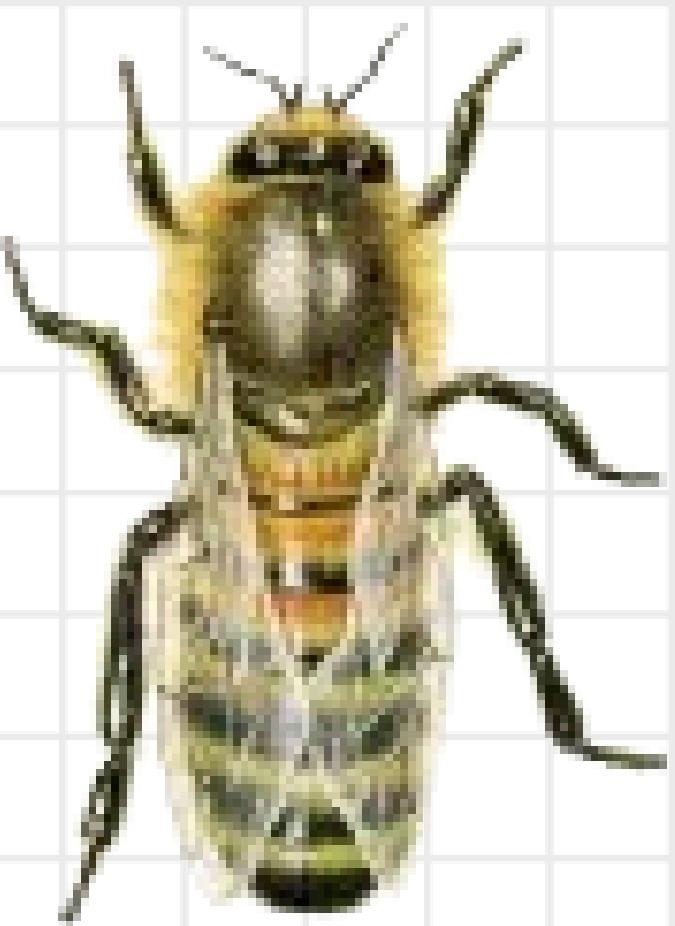
**binomial system** where the scientific name of an organism is made up of **two parts** starting with the **genus** (always given a capital letter) and followed by the **species** (starting with a lower case letter)

Жишээ нь энэ нөхөр бол */Felis catus/*

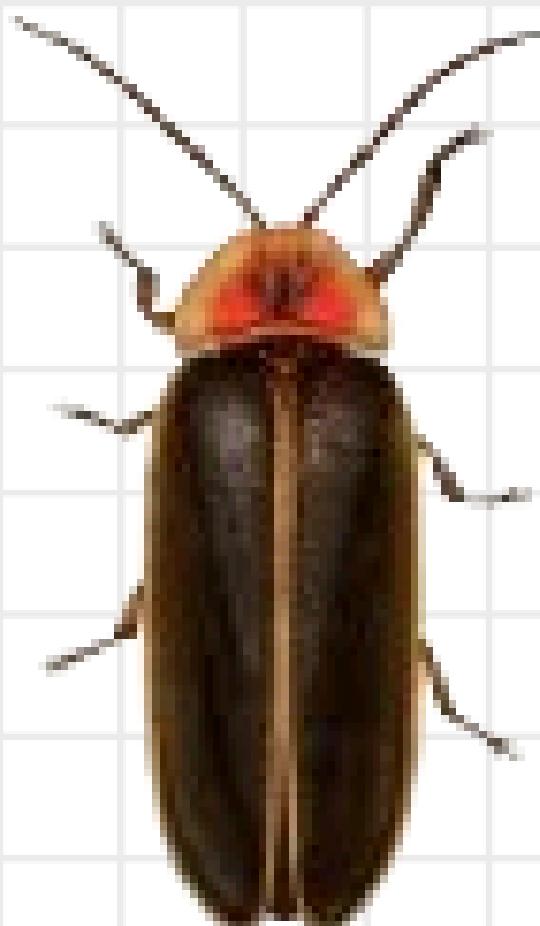
Заавал italic фонтоор бичдэг шүү!

## DICHOTOMOUS KEYS

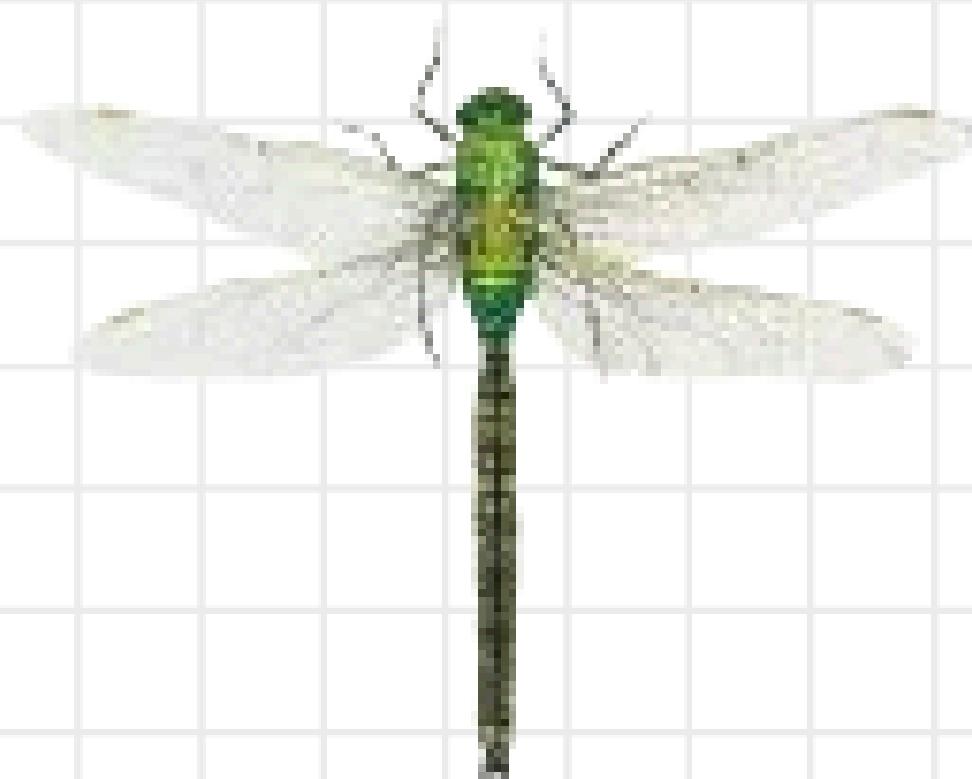
Дихотомийн түлхүүр нь ихэвчлэн олон сонголттой шалгалтад гардаг тул заавал ашиглаж сурах хэрэгтэй! Тиймээс, хэрэв та түлхүүрийг ашиглах чадвар эзэмшихгүй бол олон оноо алдаж магадгүй.



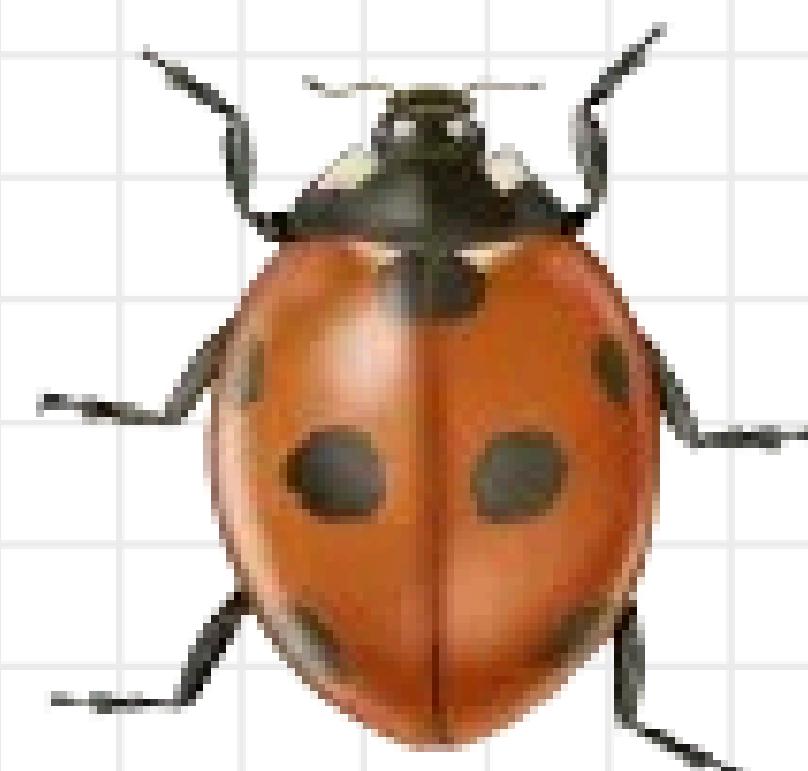
(A)



(B)

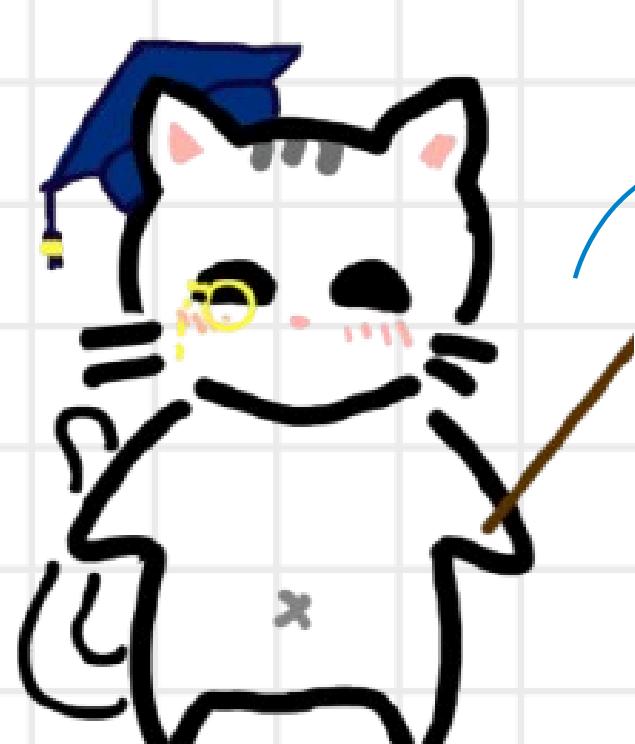


(C)



(D)

- 1a. Wings are covered by an exoskeleton – go to step 2.
- 1b. Wings are not covered by an exoskeleton – go to step 3.
  
- 2a. Body has a round shape – ladybug.
- 2b. Body has an elongated shape – firefly.
  
- 3a. Wings point outward from the body – dragonfly.
- 3b. Wings point toward the rear of the body – bee.



Таныг эхнээс нь эхлэхийг хүснэ.

Тушаалуудыг дагаж, сонголтоо хий. Энэ сонголт бур таныг дараагийн асуулт руу аваачих болно.  
Эцэст нь та амжилттайгаар организмын нэрийг олно.