

A collage of various living organisms, including a lion, a fish, a dog, a cat, a pig, a bear, a frog, and a squirrel, serving as a background for the text.

Variety of living organisms

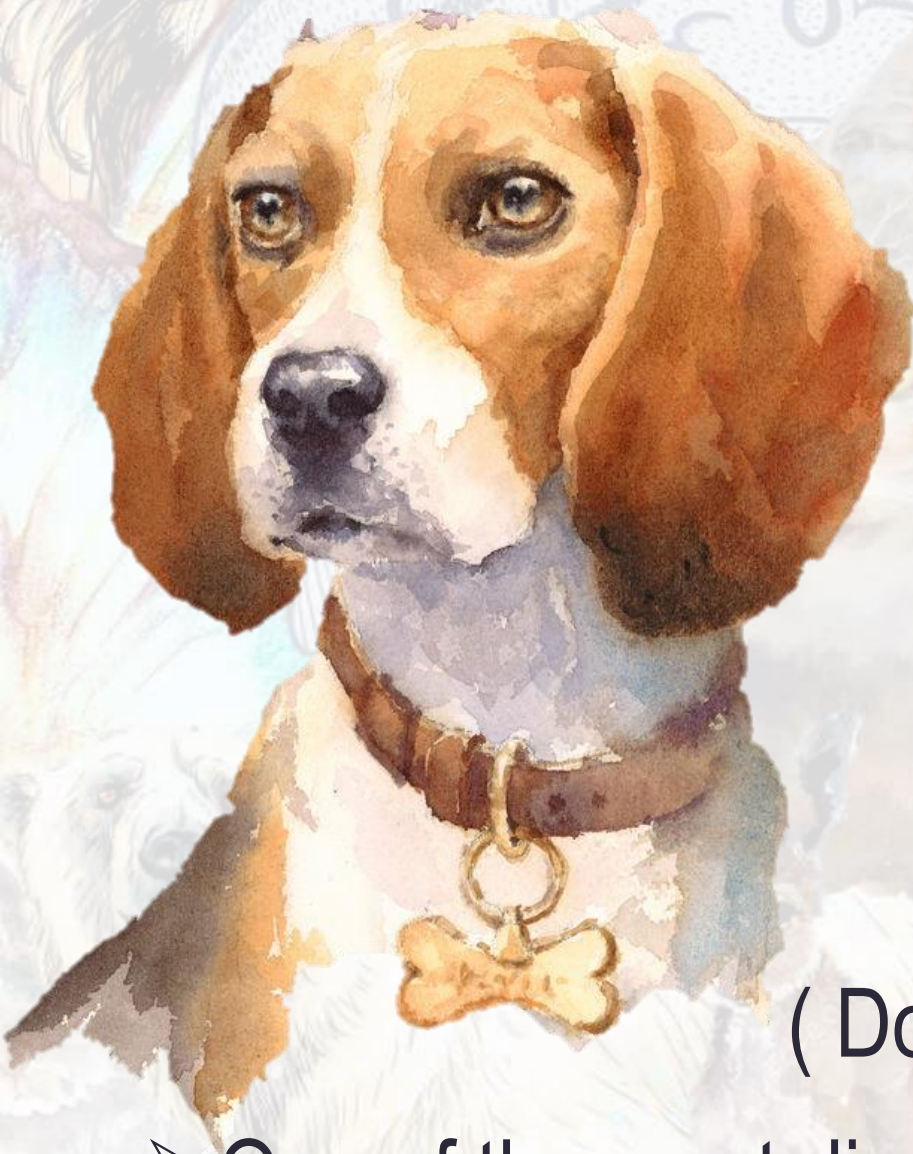
BIOLOGICAL CLASSIFICATION

- usually called taxonomy
- a discipline concerning the principles and methods of
- Identification classification naming (nomenclature) of biological individuals

7 LEVELS

- The classification of living things includes 7 levels:
kingdom phylum classes order families genus
species

ANIMAL KINGDOM



(Dog)

- Divided into two large groups :
vertebrates
invertebrates
- Distinguish them from other cells

➤ One of the most diverse and comprises :
mammals fish birds reptiles
amphibians insects molluscs and
annelids among others

PLANT KINGDOM

- Contain:
Chlorophyll
cellulose
- Can perform
photosynthesis
to release
oxygen
- Can produce
organic matter
on their own



(Flower)

- Most live in a certain environment
and cannot move freely
- Reproduce sexually or asexually

FUNGI KINGDOM



(Mushroom)

- Have a nucleus
- A large amount of non-coding DNA in the genome
- introns in the genes have many membrane organelles
- Including:
 - mitochondria
 - endoplasmic reticulum
 - high bas body etc.
- The membrane contains :
 - sterols
- Reproduction through spores

BACTERIA KINGDOM

➤ Organisms usually formed from a single prokaryotic cell

➤ Phase prokaryotic cells generally have no inner membrane

no nuclear membrane-encapsulated forming nucleus

➤ No chromosomes in the cell (germ)

➤ DNA strands are not coiled

➤ Exist in the cytoplasm in a free form

➤ no membrane-bound organelles in the cytoplasm



PROTISTA KINGDOM



(*Hyperia macrocephala*)

- The most primitive of the eukaryotes and all the others are descendants of it
- Simple eukaryotic organisms
- Mostly unicellular organisms
- Some are multicellular
- Do not have tissue differentiation
- This realm is the lowest among eukaryotes

➤ The way of making nutrients:
absorbing nutrients from the outside world
carrying out photosynthesis or predation

➤ All protists live in water

VERTEBRATES

- Generally symmetrical
- Body is divided into three parts :
Head Trunk Tail
- A hard bone tube runs through the body length
- Relatively complete :
Sensory organs Motor organs
A highly differentiated nervous system
- Vertebrates include five groups :



Birds



Amphibians (Frog)



Reptiles (Crocodile)



Fish



Mammals (Pig)

INVERTEBRATES

➤ animals that neither possess a spine nor develop vertebrae



Arthropods (Butterfly)



Mollusks (Snails)



Macroinvertebrates (Jellyfish)

MAMMALS

- collective name for vertebrate mammals
- Common features of mammals :

Mammals have hair
all over their bodies

Have three auditory ossicles ,
and mammary glands

Mammary gland produced and
secreted breast milk to feed the
baby

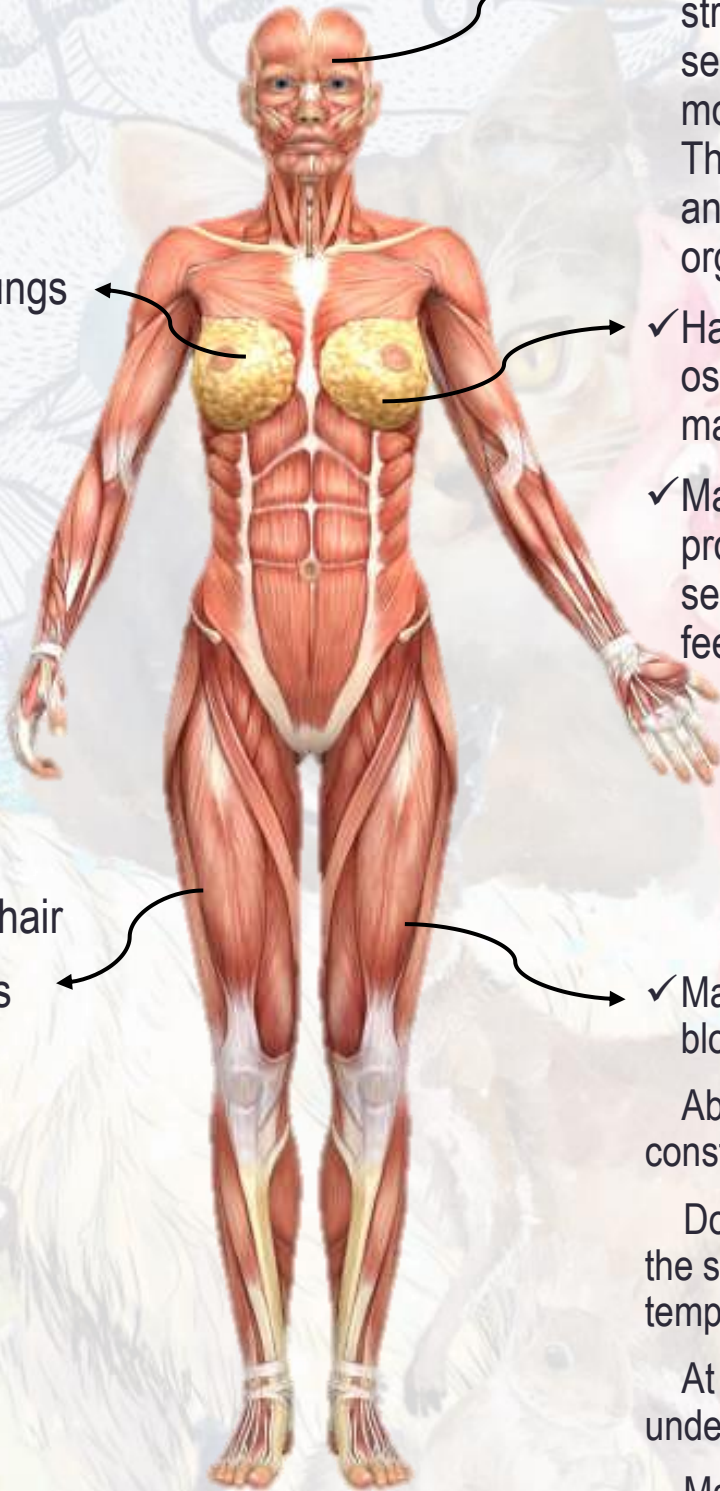


Breathing with lungs

Mammals are warm-blooded
Able to maintain constant temperature
Does not change with the surrounding air temperature
At lower temperatures under such conditions
Mammals can still have their usual activities

The inner limbs are strong and
sensitive with rapid mobility
The nervous system and sensory
organs are developed

HUMAN (MAMMALS)



✓ The inner limbs are strong and sensitive with rapid mobility
The nervous system and sensory organs are developed

✓ Have three auditory ossicles, and mammary glands

✓ Mammary gland produced and secreted breast milk to feed the baby

✓ Mammals are warm-blooded

Able to maintain constant temperature

Does not change with the surrounding air temperature

At lower temperatures under such conditions

Mammals can still have their usual activities

✓ Breathing with lungs

✓ Mammals have hair all over their bodies



MCQ

Which of the following is the correct order of 7 levels ?

- A) kingdom phylum classes order families genus species
- B) order phylum kingdom classes genus species families
- C) kingdom classes order families phylum genus species

What are the common features of mammals ?

- 1) breathing with lungs
 - 2) warm-blooded
 - 3) have hair all over their bodies
- A) 1+2+3 B) none of above C) 1+2

Which of the following is not the 5 kingdom ?

- A) animal B) plant C) human

LINK

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F3A Kelly 10
F3A Amy 28