

*The importance of Biology

→ Enable us to:

- Understand ourselves and our surrounding environment.
- Understand the interaction between living things and the environment.

→ In Biological research, benefits include:

- A better understanding of how human body functions
- Finding cure for diseases
- Saving endangered species which are on the verge of extinction
- A better management of problems related to environment

* BRANCHES
OF
BIOLOGY

Biology is simply the study of life.

*Biology is concerned with all living things.

- There are many branches of biology.
- Every one is study of a group of organism.

ZOOLOGY



- This science study the animals, including classification, physiology, development, and behavior
- **Who does make the observation about zoology is called Zoologist.**

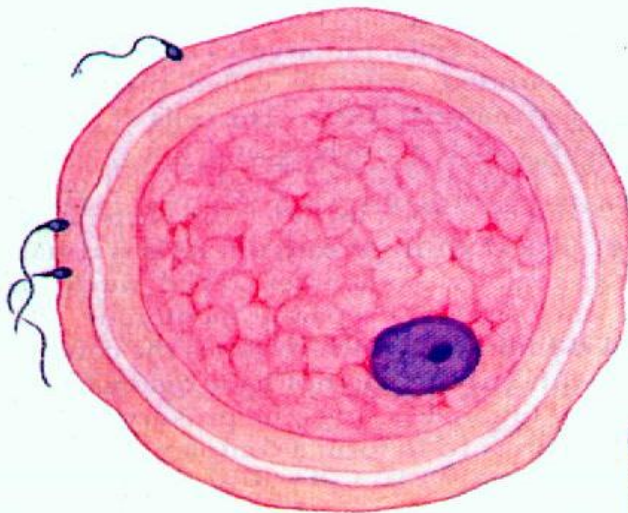
BOTANY



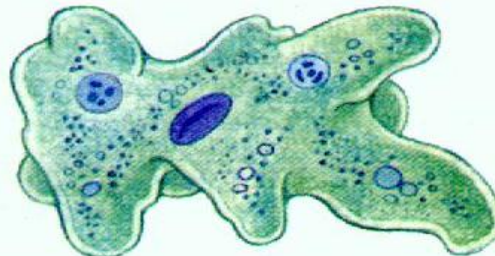
- Botany is concerned with plants
- Who does make the observation about the botany is called Botanist.

CYTOLOGY

- the study of the cell as a complete unit, and the molecular and chemical interactions that occur within a living cell



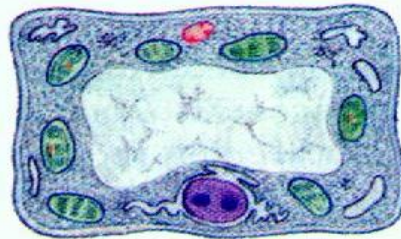
(a) Ovum (egg) and sperm cells



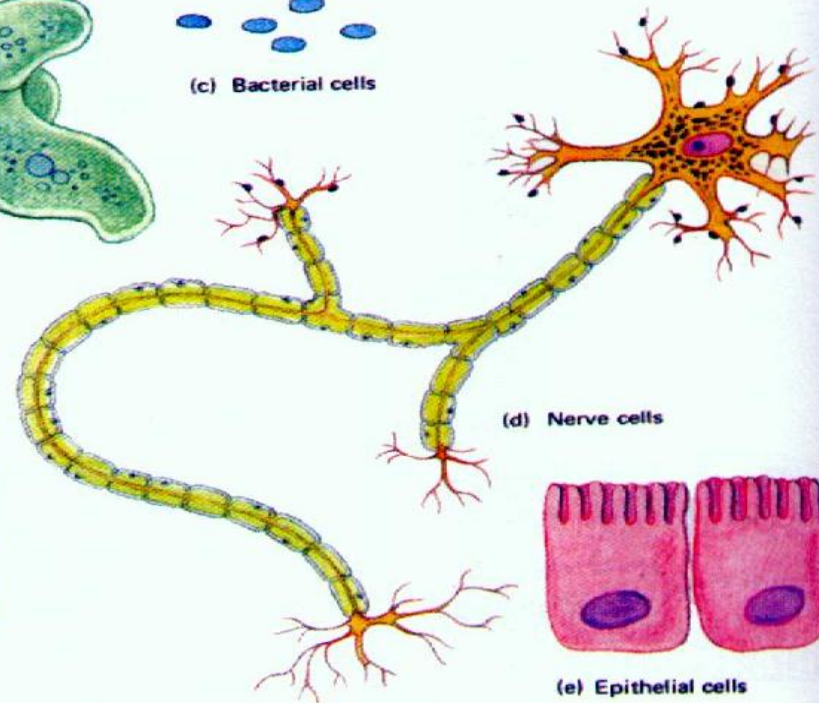
(b) Amoeba



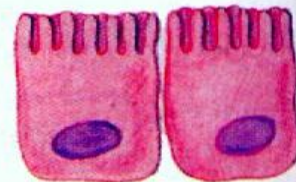
(c) Bacterial cells



(f) Plant cell (Parenchyma)

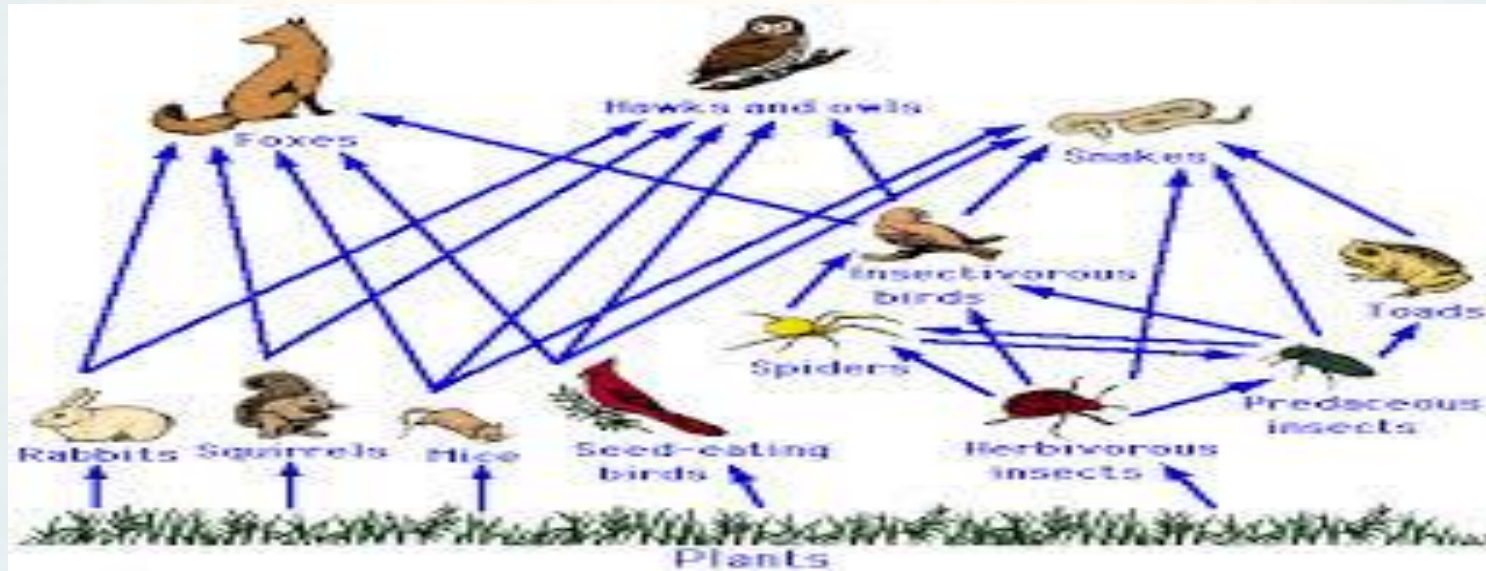


(d) Nerve cells



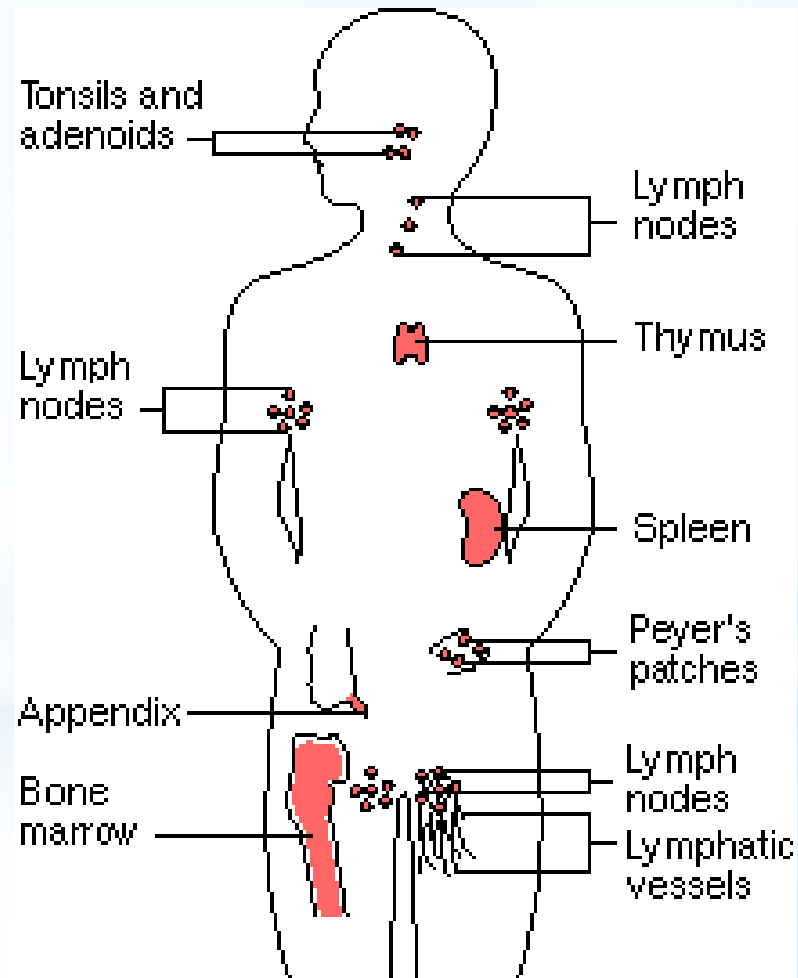
(e) Epithelial cells

* Ecology



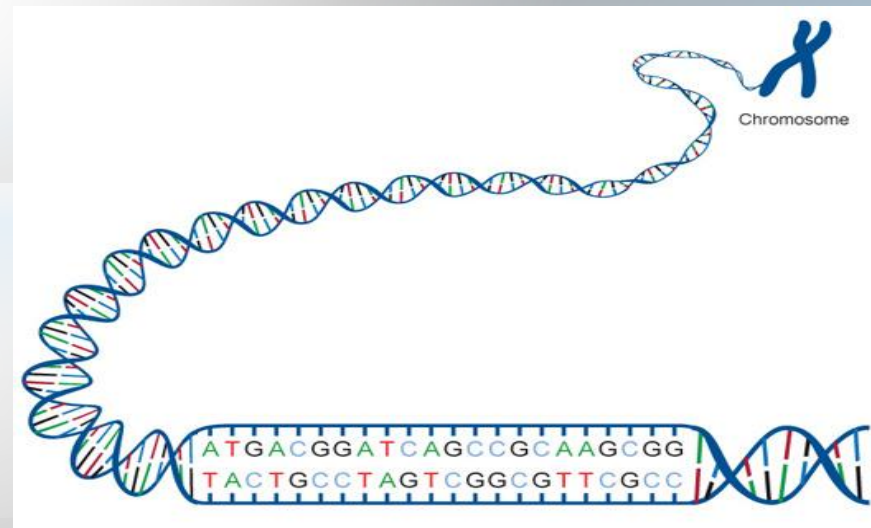
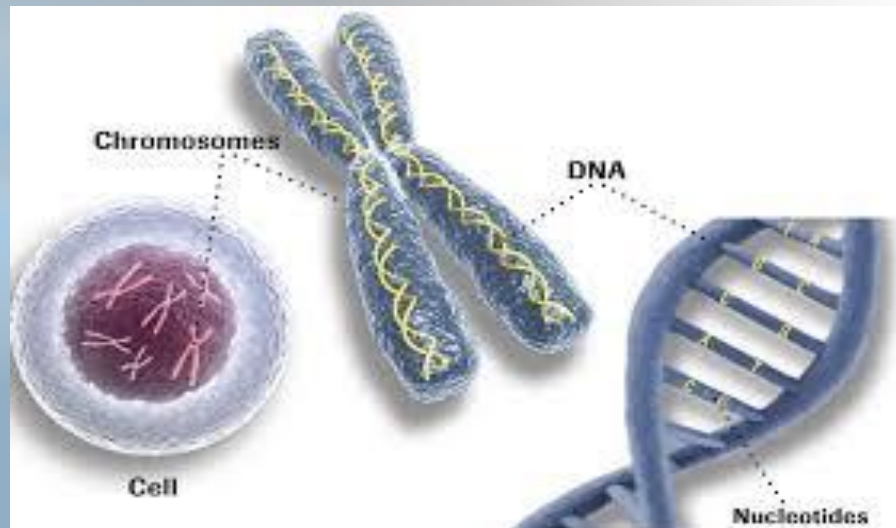
- Ecology is the science which studies the relationship of living things between each other and their environment.
- Also ecology is concerned with pollution. Such as air and water pollution

* Immunology - deals with the body's defenses against disease



GENETICS

- Genetics is the study of how features is passed to offspring from their parents.



Biotechnology

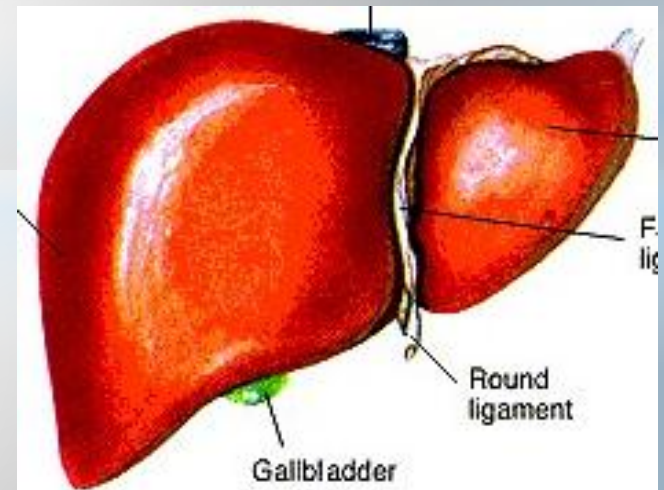
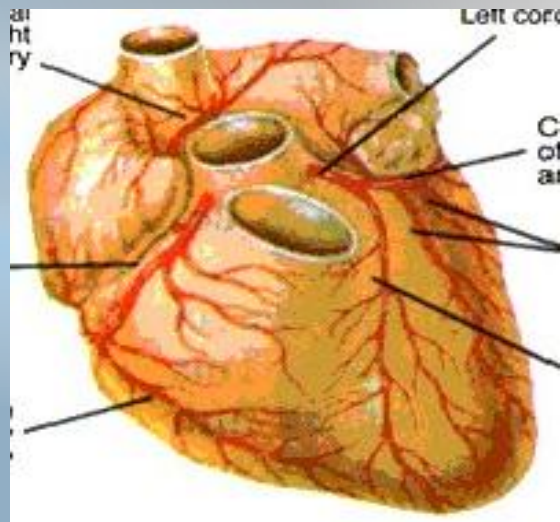


- Biotechnology - the branch of biology dealing with recombinant DNA research and applications



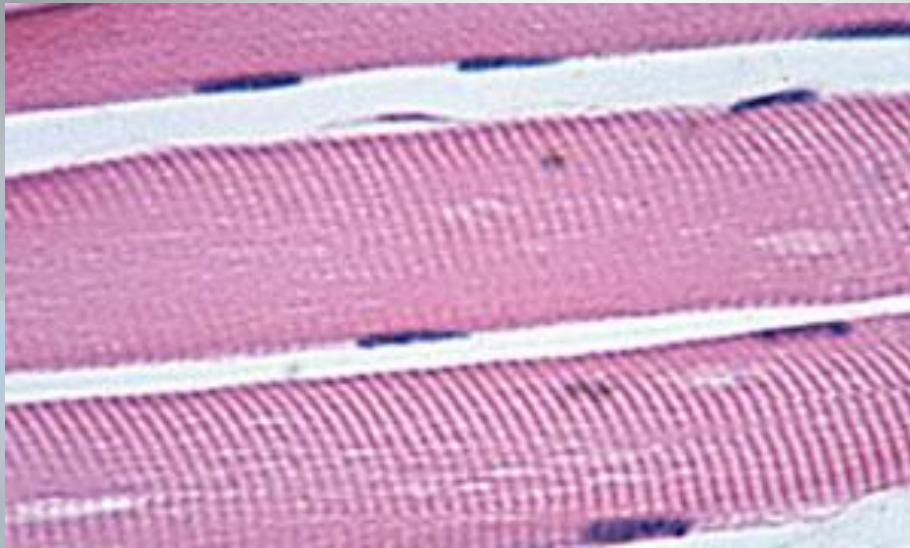
* ANATOMY

Anatomy is the study of the inner organs of the body (kidney, heart, liver etc.)



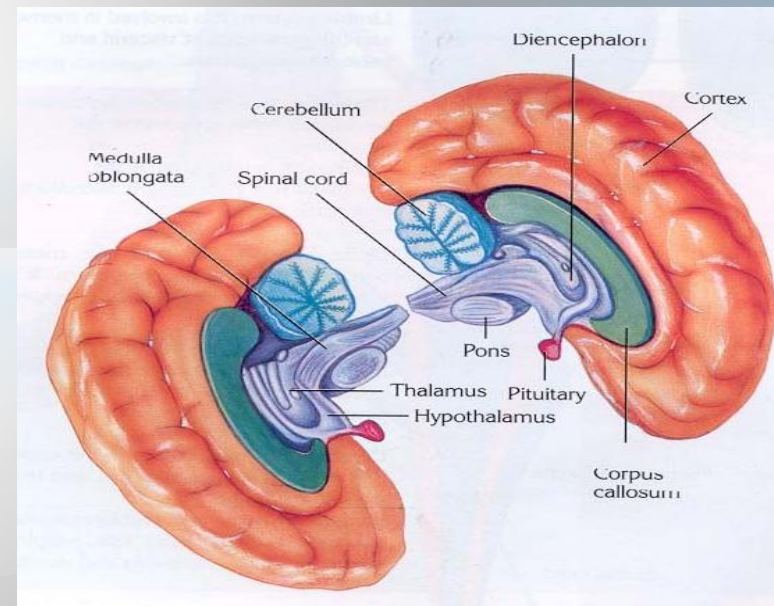
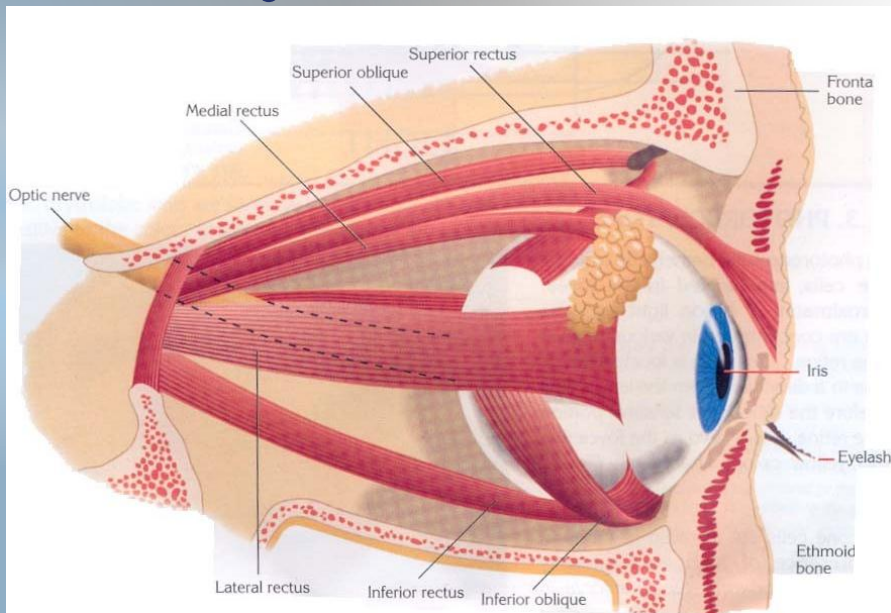
*Histology

Histology – the study of tissues



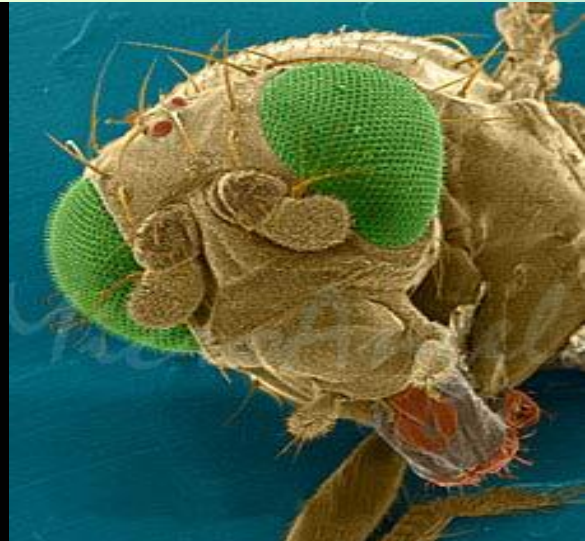
* Physiology

Physiology is concerned to study the function and activities of tissue, organs and systems.

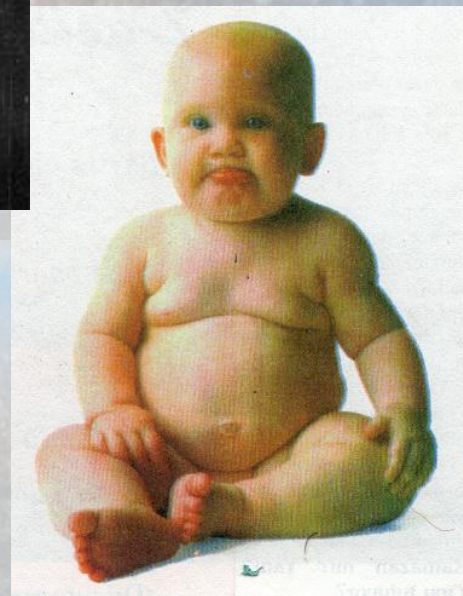
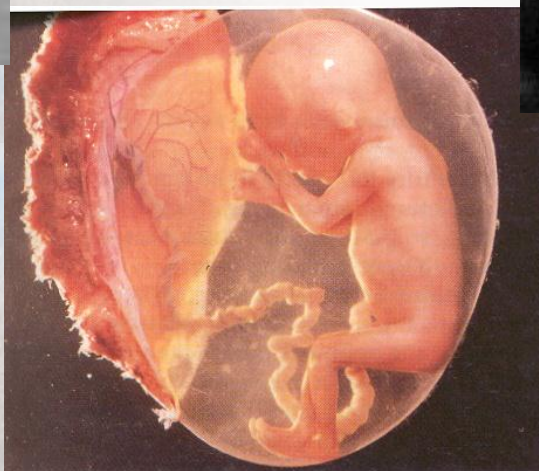


morphology

Morphology is concerned with phenotype (Appearance) of living things.



embryology



Embryology -

deals with the development of embryos of organisms and their features

Embryology studies the developmental patterns of organisms from zygote to birth.

taxonomy

- Taxonomy is the study of the classification of living organisms.
- Classification is made groups of organisms.
- Given the scientific name for the organism



ORNITHOLOGY

- Ornithology is the study of birds.



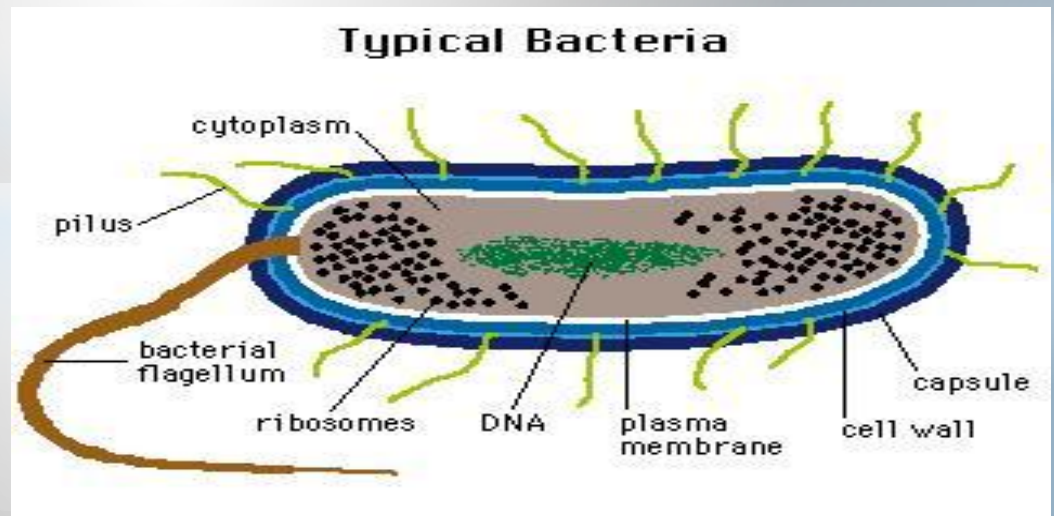
*ENTOMOLOGY

- Entomology is the study of insects.
- Such as mosquito and spider



*Microbiology

- Microbiology is the study of microscopic organisms (microorganisms) and their interactions with other living things



*PARASITHOLOG

- Parasitology is the study of parasites.
- Parasites are harmful organisms for living things.

protozoa



helminths

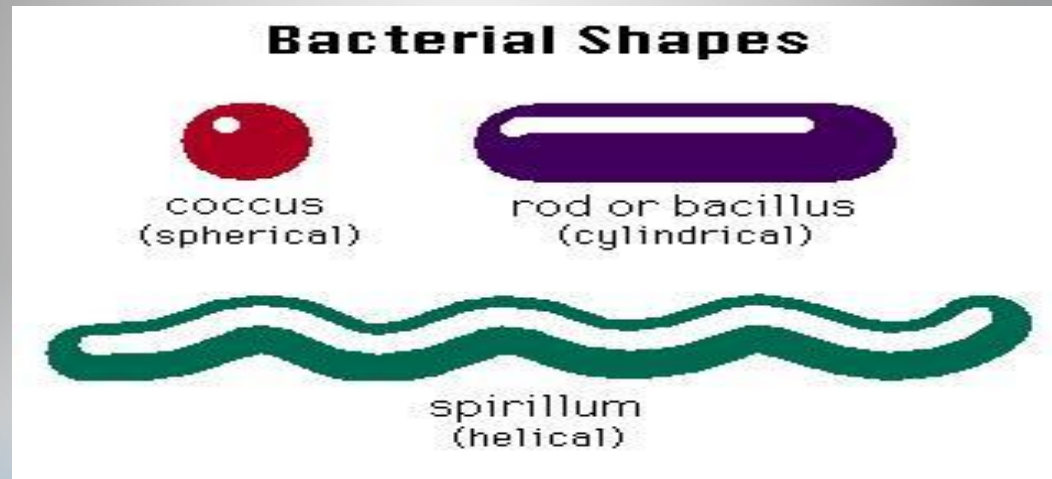


arthropods



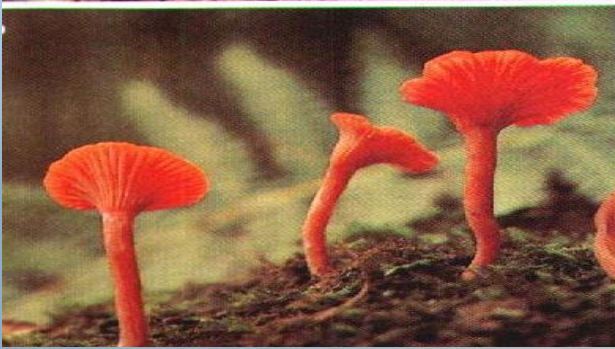
*Bacteriology

Bacteriology is the study of bacteria



*Mycology

- Mycology is the study of fungi.



*Virology

- **Virology is the study of viruses.**

