

Characteristics of Life

Biology is defined as the study of life

❖ Biologist study:

- Interactions between living things
- Interactions between living things and their environment
- Finding solutions to scientific problems or question

One living things is known as an organism. For any organism, it must have five specific characteristics in ordered to be considered living.

❖ 7 Characteristics of living things:

➤ Organization

- Every living thing has to be made up of a cell or cells, which is but a unit of life cell, which is the basic unit of life.
 - Unicellular- one cell organism
 - ◆ For example: some bacteria
 - Multicellular- multiple cell organism
 - ◆ For example: plants, fungi, mushroom

- Every living thing has a code in DNA, which is genetic information. Or the basic building block for all living things.

➤ Reproduction

- means to further the species
- Species are a group of similar organisms that can interbreed and have fertile offspring.
- Essential for survival

➤ Growth & Development

- Growth- the organism increases in size
- Development-maturing/undergoing stages

➤ Homeostasis

- Maintaining an internal balance within the organism.
- If this doesn't happen then the organism will die
 - For example: when your are hot, you sweat.
 - For example: When you are hungry, your stomach growls.

➤ Adaption

- Any characteristic or trait that help an organism be able to survive in it's environment.
- Stimulus- any change that causes a reaction
 - For example: Fly in your face
- Response- one's reaction to a stimulus