

Cell

A membrane-covered structure that contains all of the materials necessary for life

Sexual Reproduction

Two parents produce offspring that will share characteristics/genes of both parents.

Asexual Reproduction

A single parent produces offspring that are genetically identical to the parent.

What are the six characteristics of all living things?

1. Living things are made up of one or more cells
2. Living things sense and respond to change
3. Living things reproduce
4. Living things have DNA
5. Living things use energy
6. Living things grow and develop

Producer

(Autotroph) An organism that can make its own food by using energy from its surroundings

Consumer

(Heterotroph) An organism that eats other organisms or organic matter.

Decomposer

An organism that gets energy by breaking down remains of dead organisms or animal wastes and consuming or absorbing the nutrients.

What are the four **NEEDS** of all living things?

1. Water
2. Air
3. A place to live
4. Food

Cell membrane

A protective layer that covers the cell's surface and acts as a barrier.

Organelle

Structures that perform specific functions within the cell.

Nucleus

In a eukaryotic cell, a membrane bound organelle that contains the cell's genetic material. Controls the cell's activities.

Prokaryotes

Single-celled organisms that do not have a nucleus or membrane-bound organelles.

Eukaryotes

Organisms that are made up of cells containing a nucleus,

Classification

The division of organisms into groups based on specific characteristics.

Taxonomy

The science of describing, naming, and classifying organisms.

What are the six kingdoms?

Animalia, Plantae, Fungi, Protista, Archaeobacteria, Eubacteria

What are the seven levels of classification (in order)?

Kingdom,
Phylum, Class,
Order, Family
Genus Species

**Carolus
Linnaeus**

Developed the modern,
two-name
naming system.

**Binomial
Nomenclature**

Two name naming system. Identifies the Genus (capitalized) and species (lowercase) of an organism. Both written in italics.

**Dichotomous
Key**

A tool that is used to identify organisms. Uses pairs of descriptive statements.

Kingdom Protista

Single or Multi-cellular organisms. Heterotrophs and autotrophs. Prokaryotic and Eukaryotic. Ex: algae, slime molds, amoebas.

Kingdom Fungi

Multicellular, eukaryotic organisms that do not perform photosynthesis. Decomposers (heterotrophs). Yeast is only single-cell fungi. Ex: mushrooms and molds

Kingdom Plantae

Multicellular, eukaryotic organisms. Producers (autotrophic). Contain cell walls. Not able to move around. Photosynthesis.

Kingdom Animalia

Multicellular, eukaryotic organisms. Lack cell walls. Consumers (heterotrophic). Are able to move.

Bacteria

Unicellular,
prokaryotic
organisms. Autotrophic
and/or heterotrophic.
Contain a cell wall.

Eubacteria

"Modern-day
bacteria"

Archaeobacteria

Live in
extreme
environments.

