

Living Systems PowerPoint Notes

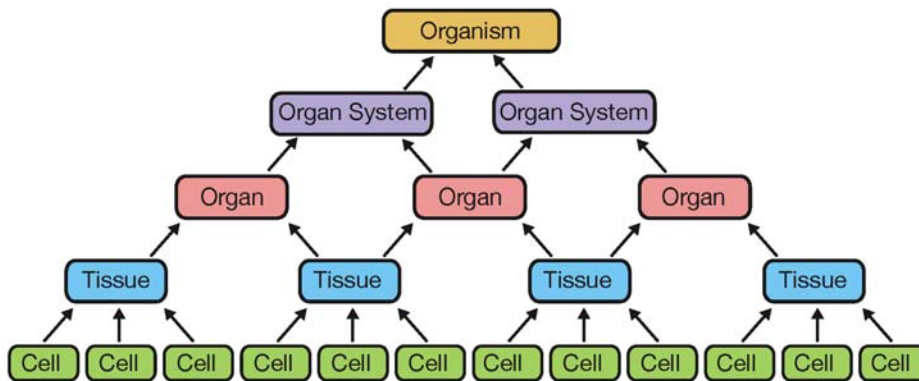
Plants and animals have levels of organization for structure and function, including cells, tissues, organs, organ systems, and the whole organism. Your body is a living system.

Molecules

A molecule is a basic unit of _____. Living systems are made of many different molecules. Each _____ of molecule has an important _____. Your body contains molecules that store _____, control _____, and even hold all of the _____ needed to make another you!

Levels of Organization

Living systems contain many levels of _____. A _____ is the basic unit of a living system. A group of specialized cells that performs a particular function is called a _____. An _____ is a group of tissues that works together to carry out a set of functions. A group of organs that works together to perform a set of functions is called an _____.



Cells

A cell is the basic unit of a _____. Each cell is made up of different types of _____ including proteins, carbohydrates, and others. Your body contains trillions of cells, each one a living system on its own. Cell _____ usually are visible only through a microscope.

Unicellular organisms

Some organisms are made up of only _____ cell. _____ organisms have just one cell. They can _____ on their own.

Multicellular Organisms

Organisms that are made of more than one cell are called _____ organisms. Multicellular organisms have _____ – (humans have many trillion cells). The cells must remain a part of the organism’s body to _____.

Your body is made up of many _____ of cells. You have skin cells, muscle cells, liver cells, nerve cells, and blood cells, to name just a few. Red blood cells, for example, carry oxygen to the cells and tissues of the body.

Tissues

A group of _____ that performs a particular function is called a _____. Muscle tissue, for example, is a tissue that is able to contract. Muscle tissue in your stomach contracts to mix food. Another type of tissue makes a chemical that breaks down the food.

Organs

Tissues combine to form _____. An organ is a _____ of _____ that works together to carry out a set of functions. Examples of organs include the stomach, intestines, heart, lung, and skin. The _____ is an organ. This child has chicken pox, a disease that affects the skin. _____ include stems, roots, and leaves.

Organ System

A group of organs that works together to perform a set of functions is called an _____. The network of organ systems works together to keep the organism _____. Your digestive system, for example, consists of many organs including the esophagus, stomach, small intestine, and large intestine. Each organ in the system performs a _____ that is part of the digestive process.

Organism

An organism is an _____ thing.

Levels of Organization in Living Things – Use the following graphic organizer to illustrate the levels of hierarchy from the cell to a human organism. (You don't need to illustrate atom, molecule, or organelle.)

