tissue - group of similar cells that performs a particular function.

- four main types: muscle, epithelial, nervous and connective
- 1) *muscle tissue* enables the body to move.
- 2) epithelial tissue cover interior and exterior body surfaces. (5/1)
- 3) *nervous* transmits nerve impulses throughout the body.
- 4) connective provides support for the body and connects its parts.

organ - a group of different types of tissues that work together to perform a single function.

> ex: The eye is made up of epithelial tissue, nervous tissue, muscle tissue and connective tissue.

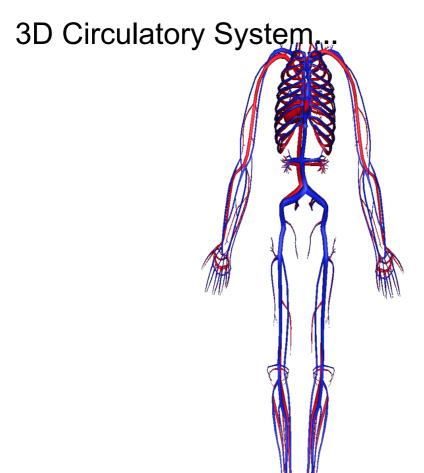
organ system - a group of organs that perform closely related functions.

- the human body has <u>eleven</u> organ systems...

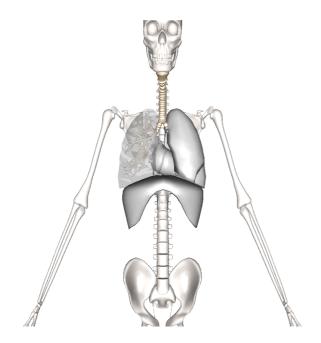
nervous system integumentary system respiratory system digestive system excretory system skeletal system muscular system circulatory system endocrine system reproductive system lymphatic/immune system

KNOW the NAME and it's FUNCTION...

Organ System	Function	Organ System	Function
Esophagus Stomach Liver, pancreas, gallbladder Small and large intestine	Ingests and breaks down food so that it can be absorbed by the body Chapter 7	Cardiovascular Blood vessels Heart	Enables the transport of nutrients, gases, hormones, and wastes to and from cells of the body Chapter 9
Urinary		Endocrine	
Kidney Ureter Bladder Urethra	Eliminates liquid wastes; regulates water balance Chapter 11	Pituitary gland Thyroid, parathyroid Thymus Gonads, others	Secretes hormones into bloodstream for regulation of body activities Chapter 16
Respiratory	Enables gas ex- change, supplying blood with oxygen	Nervous	Senses environment; communicates with and activates other parts of
Trachea Bronchi Lung	and removing carbon dioxide Chapter 10	Brain Spinal cord Nerves	the body Chapters 14 and 15
Skeletal		Lymphatic and Immune	
Cartilage Bone	Provides mechanical support for the body; stores minerals; pro- duces red blood cells Chapter 6	Thymus Lymph nodes Lymphatic versels Spleen	Protects against infections Chapter 12
Muscular	F	Reproductive—Female	
- Skeletal muscles	Enables movement, posture, and balance via contraction and extension of muscles Chapter 6	Ovary Uterus Cervix Vagina	Produces eggs and supports the develop- ment of offspring Chapter 18
ntegumentary		Reproductive—Male	
Hair Nails Skin	Protects body from environment, injury, and infection; stores fat Chapter 6	Prostate Testicle Penis	Produces and deliv- ers sperm and associated fluids Chapter 18



3D Respiratory System...



NOTES - Ecological Organization.pdf Levels of Ecological Organization

The levels of organization studied by ecologists are organisms, species, populations, communities, ecosystems, biomes and finally the biosphere.

- **Organism** an individual living thing.
- Species group of individuals that are closely related and can mate to produce fertile offspring.

(don't have to be in the same place)

- **Population** all the members of the same species that live in the same place at the same time.
- **Community** a group of various species that live in the same place and interact with each other.
- **Ecosystem** a collection of all the organisms that live in a particular place together with their nonliving, or physical environment

• **biome** - a group of terrestrial communities that covers a large area and is characterized by certian soil and climate conditions and particular assemblages of plants and animals











Five Major Types of Biomes

Aquatic Deserts Forests Grasslands Tundra

• <u>biosphere</u> - contains the combined portions of the planet in which all life exists, including land, water, and air, or atmosphere.

- extends from about 8 km above Earth's surface to as far as 11 km below the surface of the ocean

Biosphere 2 ???



Key Points... 'Biosphere 2'

- 4 months to make a pizza
- variety of climates
- oxygen decreased (concrete absorbed)
- biosphere at International Space station for 14 months
- sealed with steel and glass
- 8 people (4 male/4 female)
- 1991 was constructed
- plants to space...extension
- oasis in backyard...let nature take its course
- people stink & noticed what food she was eating

POEM...If the Earth Were Only a Few Feet in Diameter



Joe Miller, "If the Earth Were Only a Few Feet in Diameter..."



"If the Earth were only a few feet in diameter, floating a few feet above a field somewhere, people would come from everywhere to marvel at it. People would walk around it marveling at its big pools of water, its little pools, and the water flowing between the pools. People would marvel at the bumps on it, and the holes in it, and they would marvel at the very thin layer of gas surrounding it and the water suspended in the gas. The people would marvel at all the creatures walking around the surface of the ball and at the creatures in the water. The people would declare it sacred because it was the only one, and they would protect it so that it would not be hurt. The ball would be the greatest wonder known, and people would come to pray to it, to be healed, to gain knowledge, to know beauty, and to wonder how it could be. People would love it and defend it with their lives because they would somehow know that their lives, their own roundness, could be nothing without it. If the Earth were only a few feet in diameter..."

- Joe Miller

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