

Human Body Systems Test Review

7th Grade Science
Unit 4

Levels of Organization - From simplest to most complex

Cell - Basic unit or building block of life

Tissue - A group of cells that perform a similar function

Organ - Groups of tissue that perform a similar function



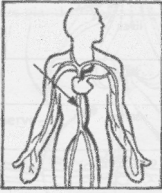

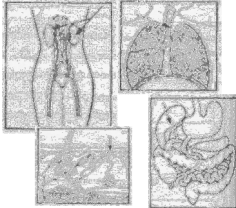
Body System - A group of organs that perform a similar function

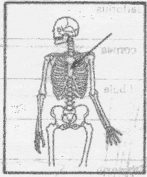
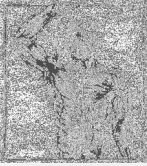
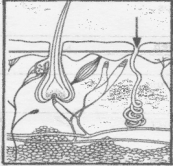
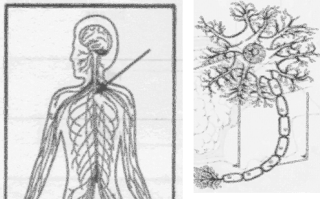
Organisms - An individual form of life; a body made up of organs, organelles, or other parts that work together to carry on the various processes of life

Examples

Cell	Tissue	Organ	Body System
Cardiac Cell	Muscle Tissue	Heart	Circulatory
Bone Cell	Cartilage	Bone	Skeletal
Neuron (Nerve Cell)	Nerve Tissue	Brain	Nervous

Human Body Systems

BODY SYSTEM	FUNCTION(s)	MAJOR ORGANS	ILLUSTRATION
Endocrine	Secretes hormones & regulates body growth	Glands: adrenal, thyroid, pancreas	
Respiratory	Supply body with oxygen by breathing	Nasal cavity, trachea, bronchi, lungs, alveoli, diaphragm	
Circulatory	Move material around the body	Heart, veins, arteries, capillaries and blood	
Digestive	Break down food and absorb nutrients the body needs	Mouth, esophagus, stomach, small intestine, large intestine, and anus	
Excretory	Rids the body of waste	Integumentary, digestive, respiratory, & urinary	

Skeletal	Structure, support, protection, stores calcium and aids in movement	Bones, cartilage, & ligaments	
Muscular	Shape and aids in movement	Muscles and tendons	
Integumentary (SKIN)	Regulates body temperature, sensory response, rids body of waste and protection	Skin and sweat glands	
Nervous	Controls thinking, senses and regulates homeostasis	Central Nervous System: brain and spinal cord; Peripheral Nervous System: sensory organs and nerves	

Homeostasis Response

Homeostasis - a state of balance within the body; maintaining a stable internal environment

The body reactions to various stimulus with an response that is meant to return the body to a stable state.

- **Stimulus** - Something that can elicit or evoke a response in a cell, a tissue, or an organism. A stimulus can be **internal** or **external**.
- **Response** - A reaction to a specific stimulus.

Examples

Stimulus	Internal/External	Response	System
Ingest Poison	Internal	Vomit	Digestive
Strenuous Exercise (Excessive CO ₂)	Internal	Breathing Increases	Excretory
Touching Hot Stove	External	Move Hand	Nervous
Football Thrown to Wide Receiver	External	Raise Hands to Catch Ball	Nervous/Muscular