

## Levels of organization found in living things

imp.

1. Cells
2. Tissues – groups of cells
3. Organs – groups of tissues
4. Organ systems – groups of organs

Digestive system

Respiratory system

Nervous system

Circulatory system

Excretory system

Muscular system

Reproductive system

5. Organism

### ANALOGY

Bricks



Brick wall



Room



Floor level



Multi level house

cells



tissues



organ



organ system



organism

**3 things cells and organisms need to survive:**

**imp.**

1. OXYGEN
2. FOOD
3. WASTE REMOVAL

**TERMS to KNOW CHAPTER 11**

**cells**

**Organ**

**Organ systems**

**Organelle**

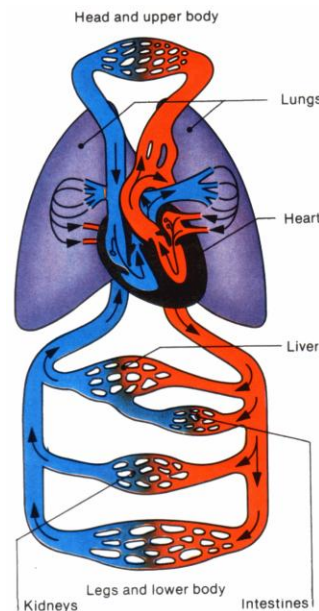
**Tissue**

**CHAPTER 12: health and its interdependent systems**

**Organ systems to know:**

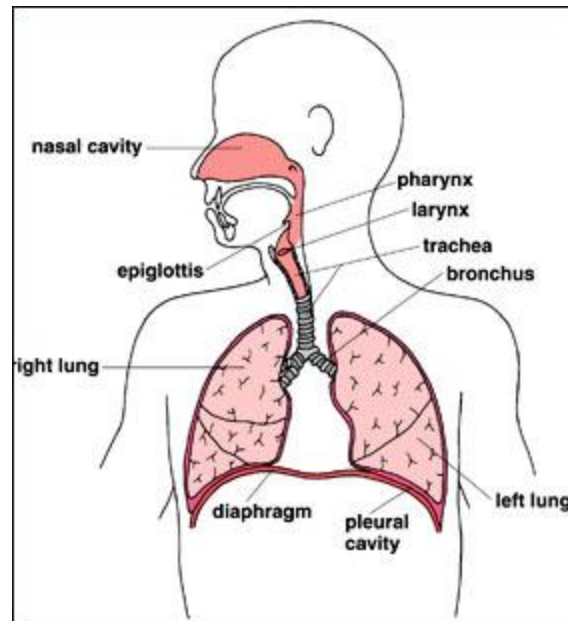
**1. CIRCULATORY SYSTEM**

- **Consists of heart, arteries, veins, and capillaries**
- **FUNCTION: to transport blood, nutrients, gases and waste**



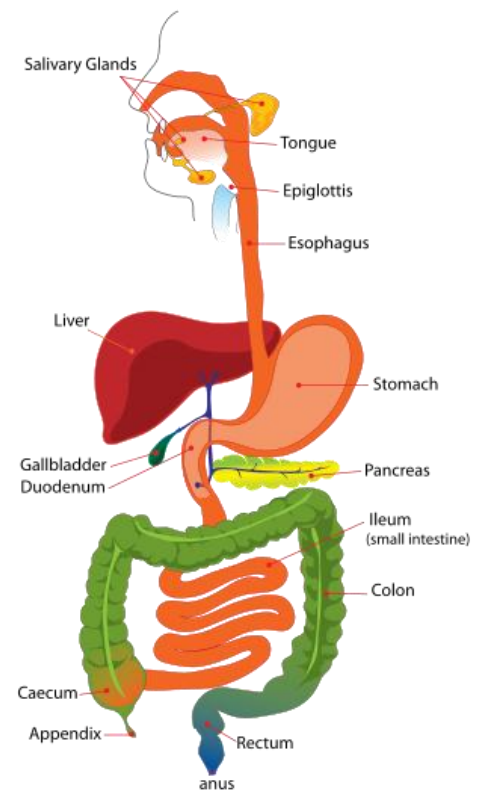
## 2. RESPIRATORY SYSTEM

- Consists of nasal cavity, trachea and lungs
- **FUNCTION:** control breathing, and exchanging gases in the lungs and tissues



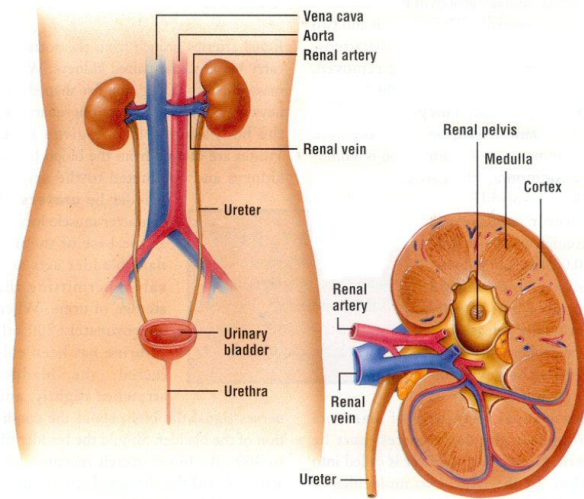
## 3. DIGESTIVE SYSTEM

- Mouth, esophagus, stomach, small intestine, large intestine, liver, gall bladder, and pancreas
- **FUNCTION:** to take in and break down food, absorb the nutrients then eliminate solid waste



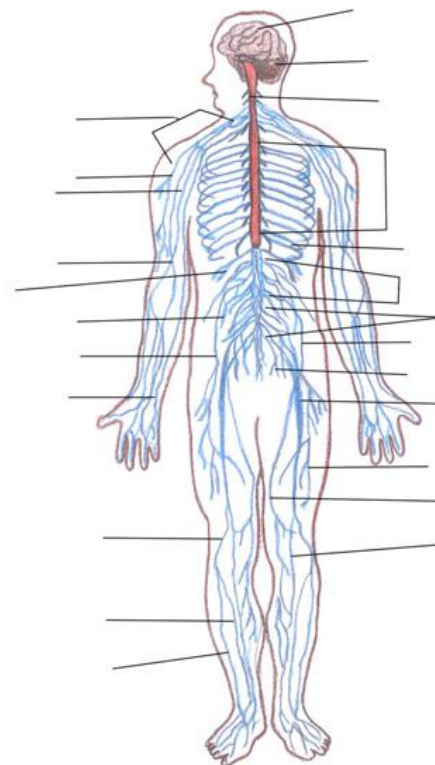
#### 4. EXCRETORY SYSTEM

- Consists of the kidneys and urinary bladder
- **FUNCTION:** to remove liquid and gas waste from the blood
- **NOTE:** sometime the lungs are considered part of this system since they excrete CO<sub>2</sub>



#### 5. NERVOUS SYSTEM

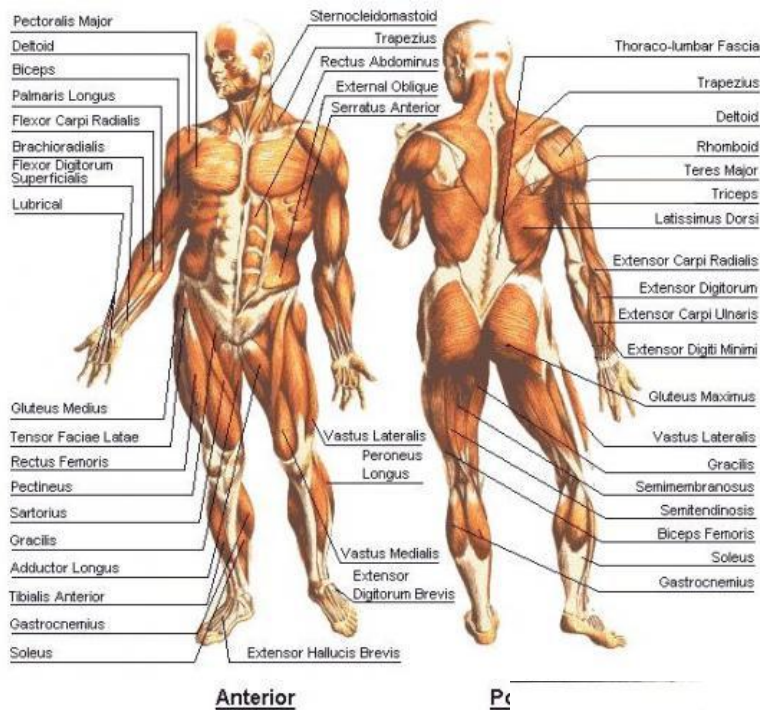
- Consists of brain, spinal cord, nerves and senses organs
- **FUNCTION:** to detect changes in the environment and signal these changes to the body which then carries out a response



**Nervous System Diagram**

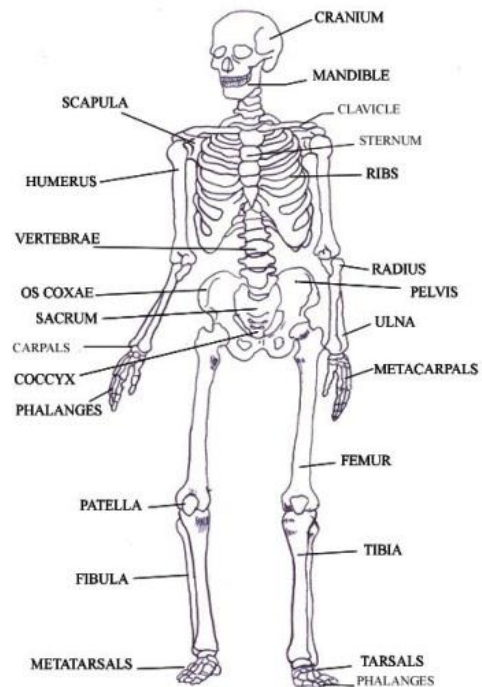
## 6. MUSCULAR SYSTEM

- Consists of muscles attached to bones throughout the body
- **FUNCTION:** to work with the bones to move its body parts



## 7. SKELETAL SYSTEM

- Consists of bones, ligaments and tendons
- **FUNCTION:** to provide support for the body



Sketch by Abhishale Sharma

**LABELED DIAGRAM OF SKELETON**

**Basic factors which negatively affect these systems:**

1. Diet and nutrition
2. Exercise
3. STRESS

**See page 449**

**Terms to know Chapter 12**

<b>Circulatory system</b> <b>Digestive system</b> <b>Digestive System</b> <b>Excretory System</b> <b>Muscular System</b> <b>Nervous System</b> <b>Nutrients</b> <b>Respiratory system</b> <b>Skeletal System</b>	<b>Genetic factors</b> <b>Homeostasis</b> <b>Lifestyle factors</b>
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