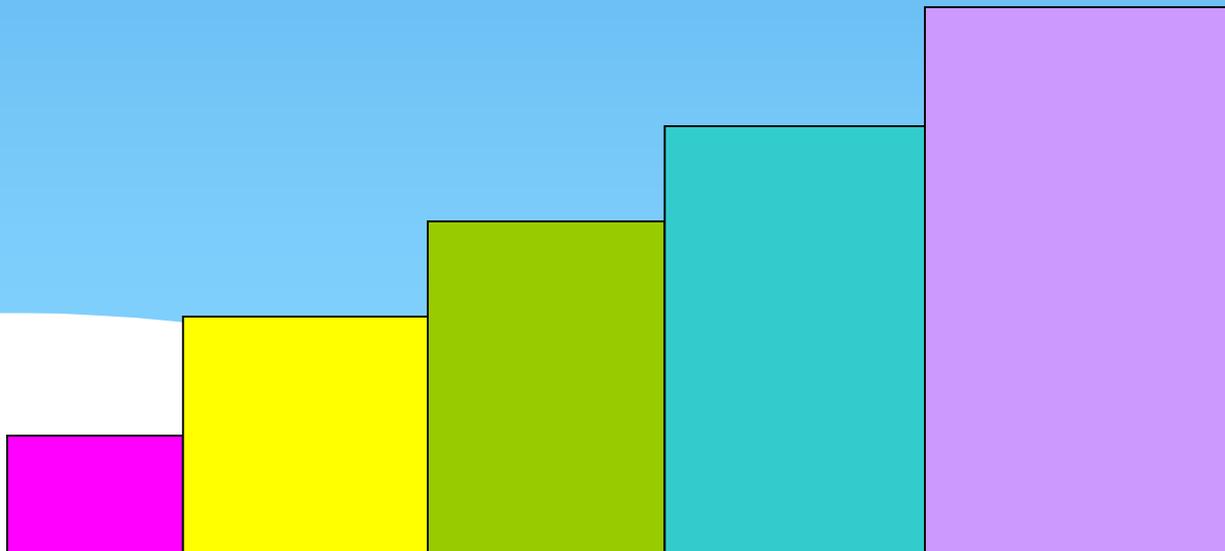


# The 5 levels of Organization



# What are the 5 levels?

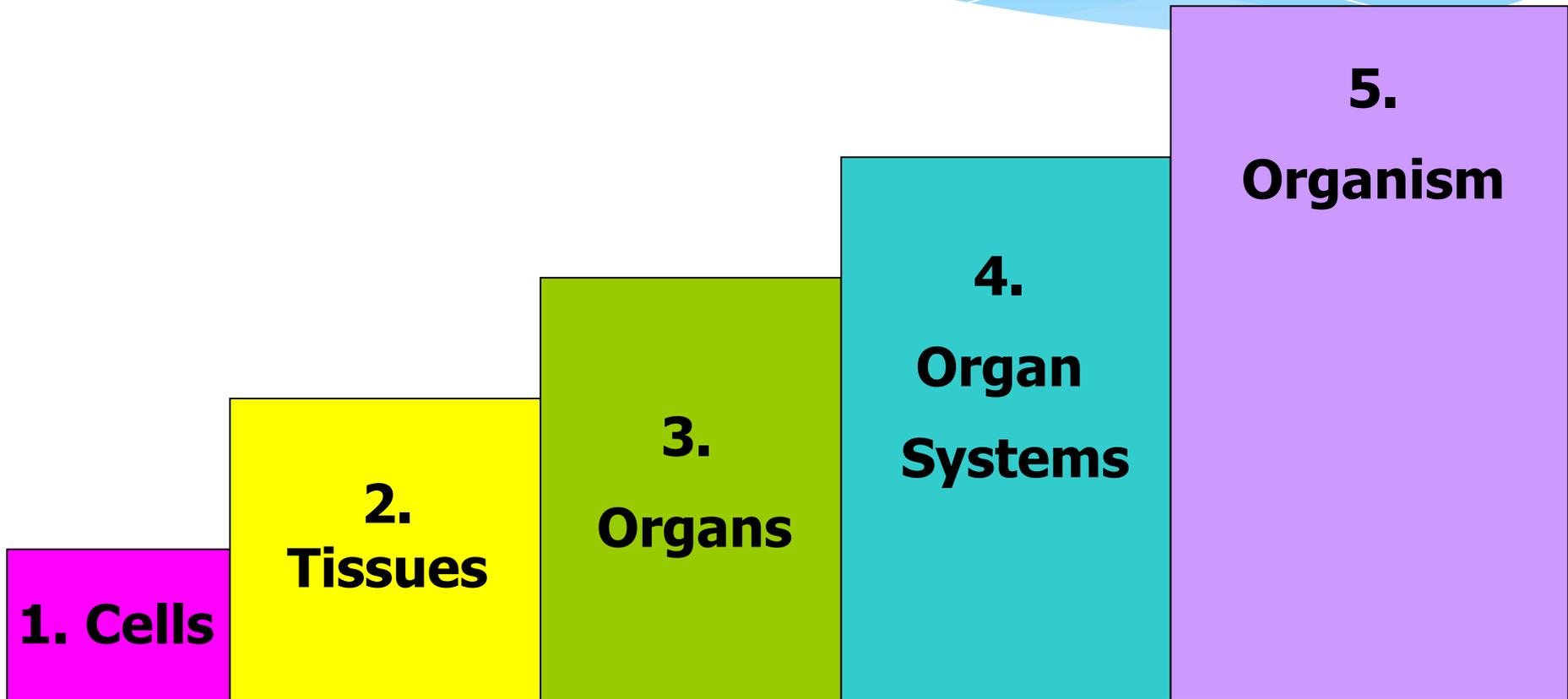
**1. Cells**

**2.  
Tissues**

**3.  
Organs**

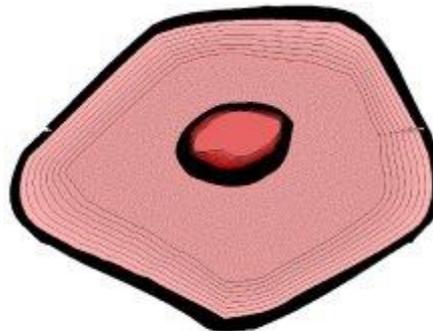
**4.  
Organ  
Systems**

**5.  
Organism**



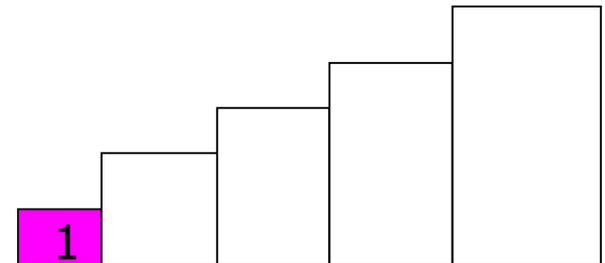
# 1. Cells

- \* Cells are the basic unit of all living things.
- \* Each type of cell performs a different function.
- \* Examples: blood cells, bone cells and skin cells



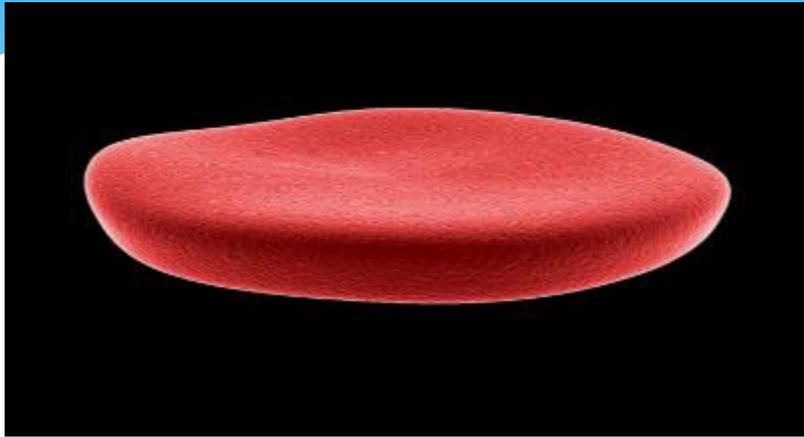
Skin C II

<http://www.manatee.k12.fl.us>



# EXAMPLES OF CELLS

dept.kent.edu/projects/cell/TM2.JPG

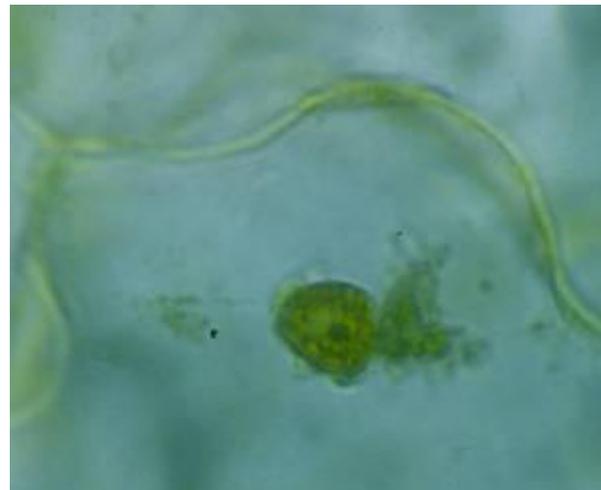


[www.turbosquid.com](http://www.turbosquid.com)

Blood Cell



Muscle Cell

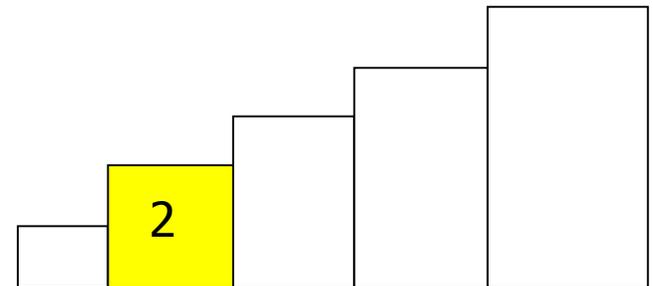
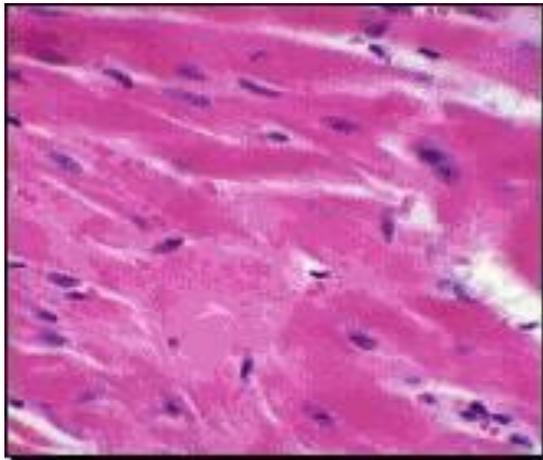


<http://plantpath.ifas.ufl.edu>

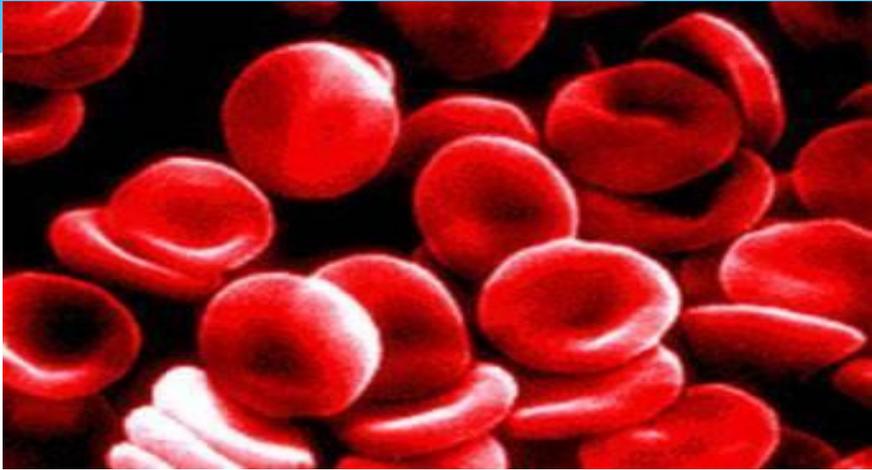
Plant Epidermal Cell

# 2. Tissues

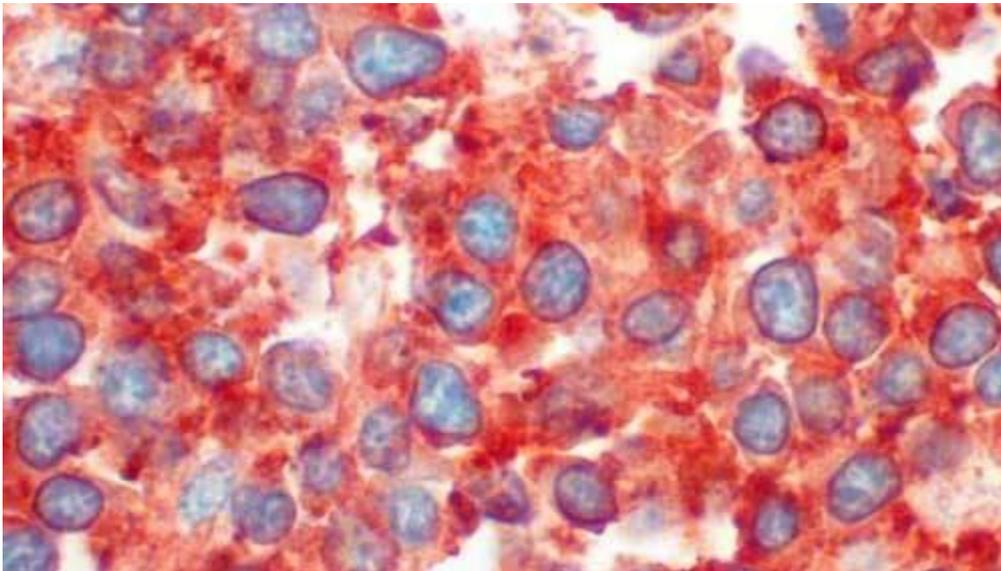
- \* Made up of many cells → (hint! Look for nuclei!)
- \* A group of cells that work together to perform a specific job.
- \* Examples: Blood, muscle, and fat.



# Examples of Tissue



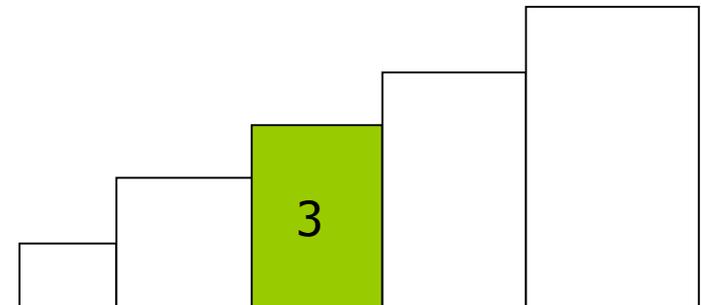
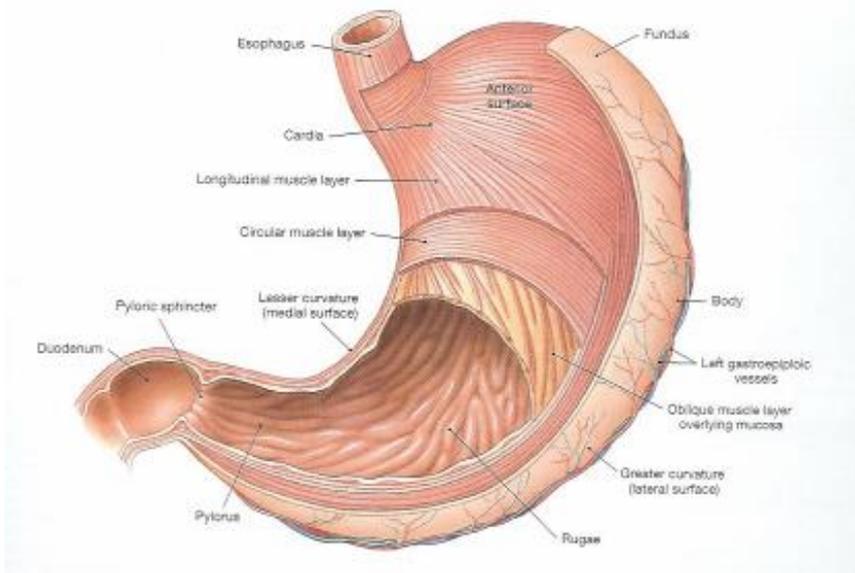
Blood ?!



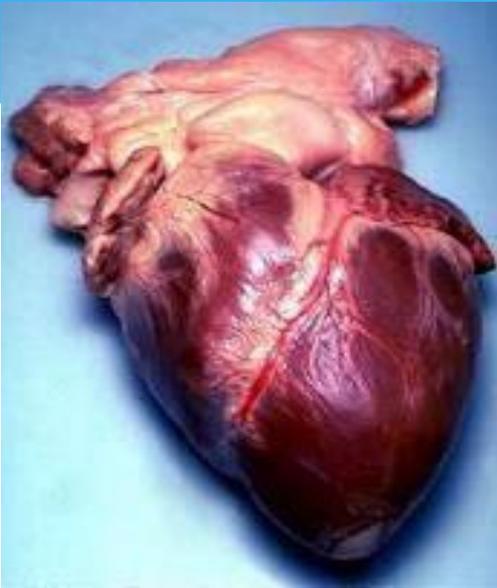
Kidney tissue

# 3. Organs

- \* Two or more tissues working together to perform a specific job.
- \* Examples: stomach, intestines, heart.



# Examples of Organs



The Heart

In a plant:

a leaf



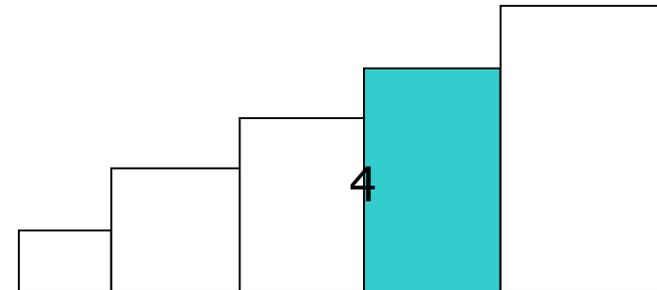
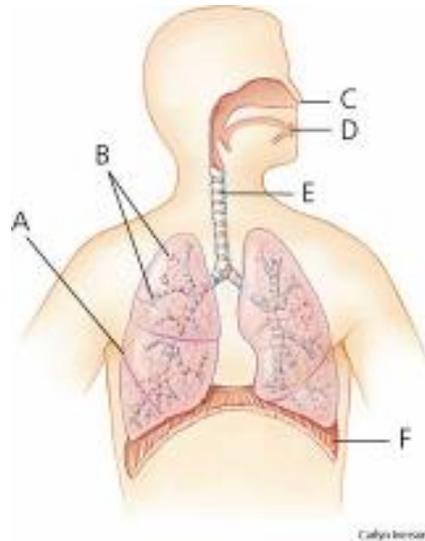
# Examples of Organs



**Skin!**

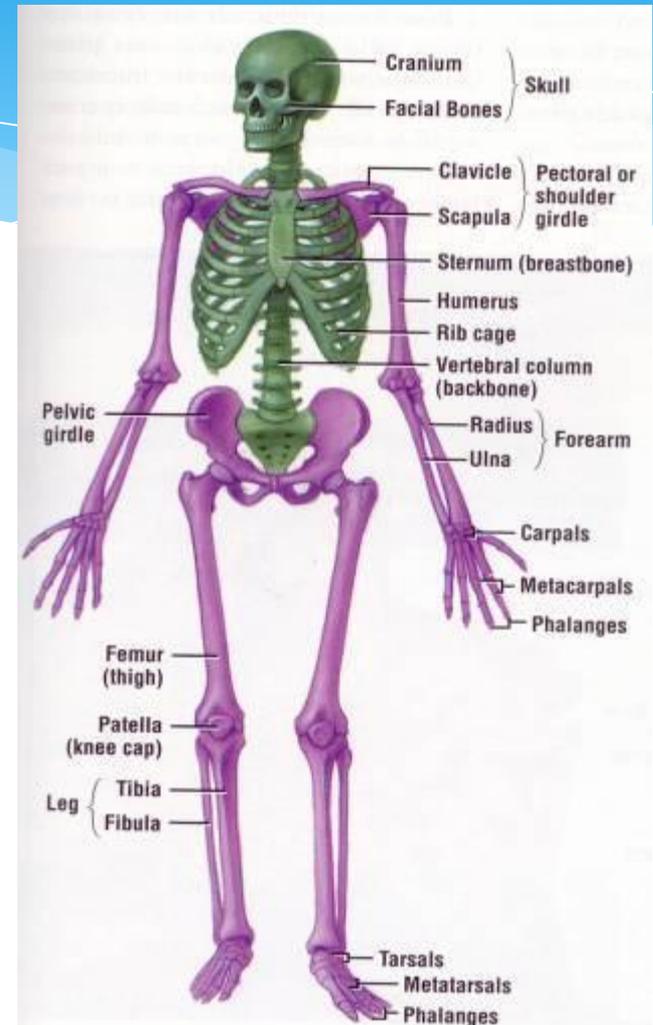
# 4. Organ Systems

- \* A group of organs working together to perform a specific job.
- \* If one part of the system fails, it has an effect on the whole system.
- \* What would happen if your stomach stopped working?



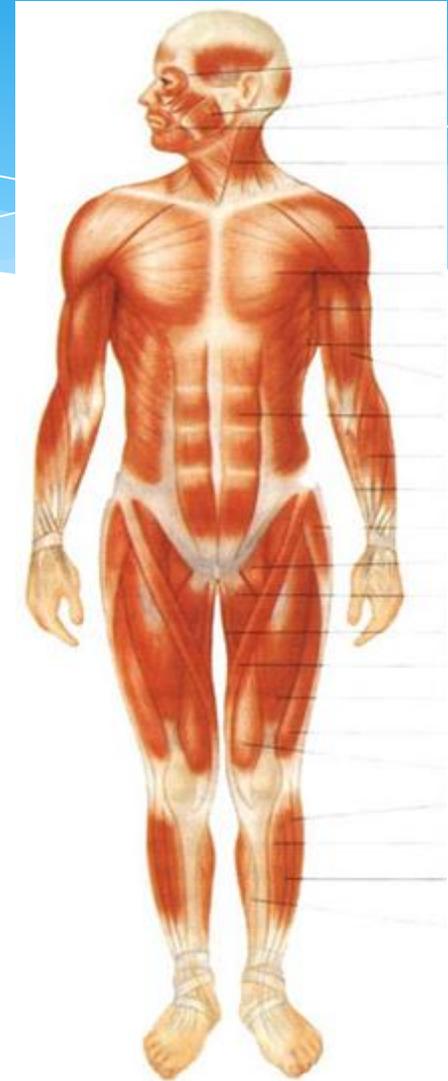
# Skeletal System

- \* BONES
- \* What are some of the functions of the skeletal system?
- \* Protection
- \* Storage of minerals
- \* Movement
- \* Blood cell formation



# Muscular System

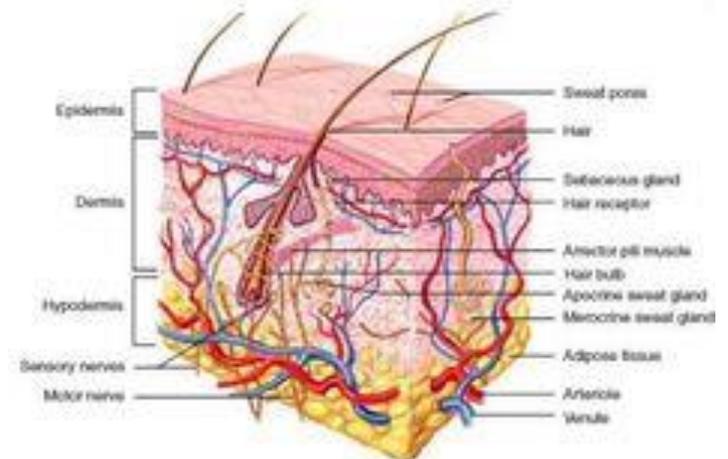
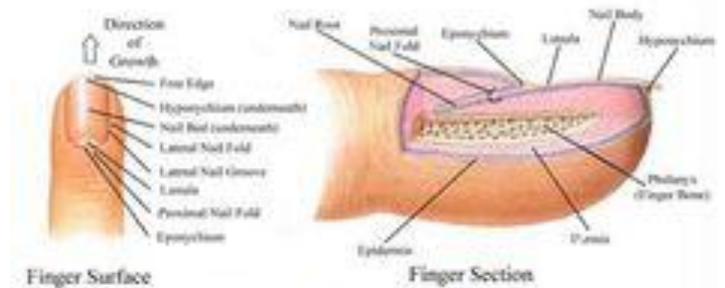
- \* MUSCLES
- \* What are some things our muscles do?
- \* Holds you upright
- \* Assist in breathing
- \* Helps you to move



# Integumentary System

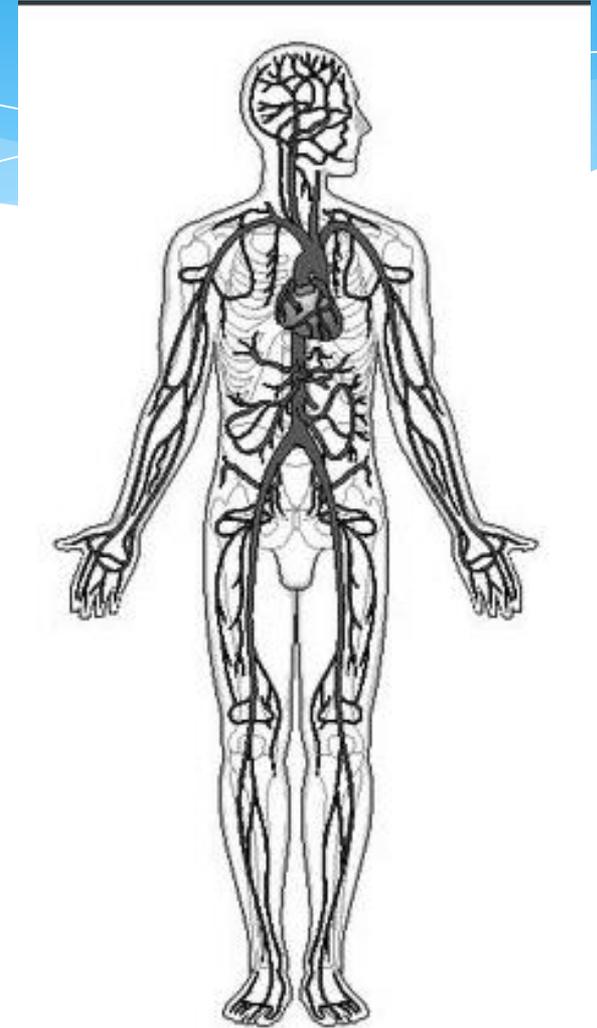
## INTEGUMENTARY SYSTEM

- \* SKIN, HAIR, NAILS
- \* Protects the interior of the body
- \* First barrier of defense
- \* Helps regulate temperature
- \* Insulates
- \* Absorbs shock



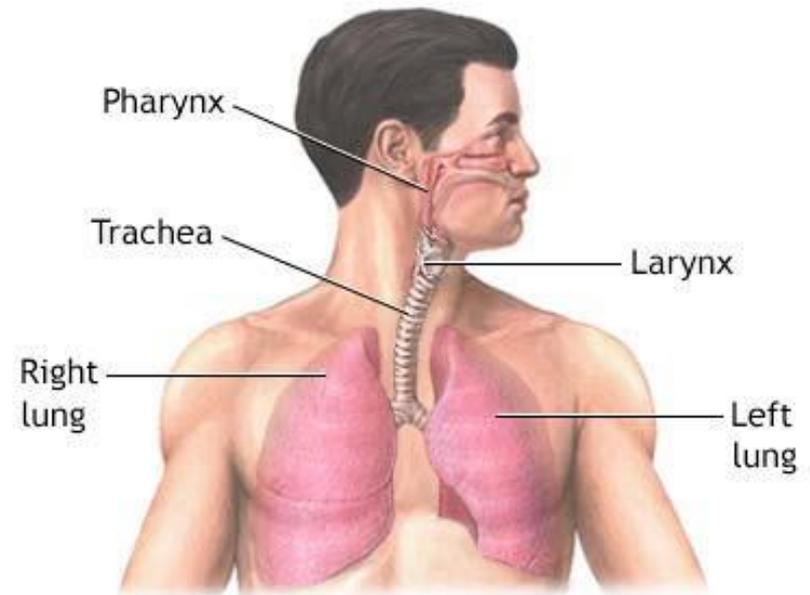
# Circulatory System

- \* HEART, VEINS, ARTERIES AND BLOOD.
- \* Stops bleeding (platelets)
- \* Fights off germs (white blood cells)
- \* Transports materials, like oxygen, to and from the cells



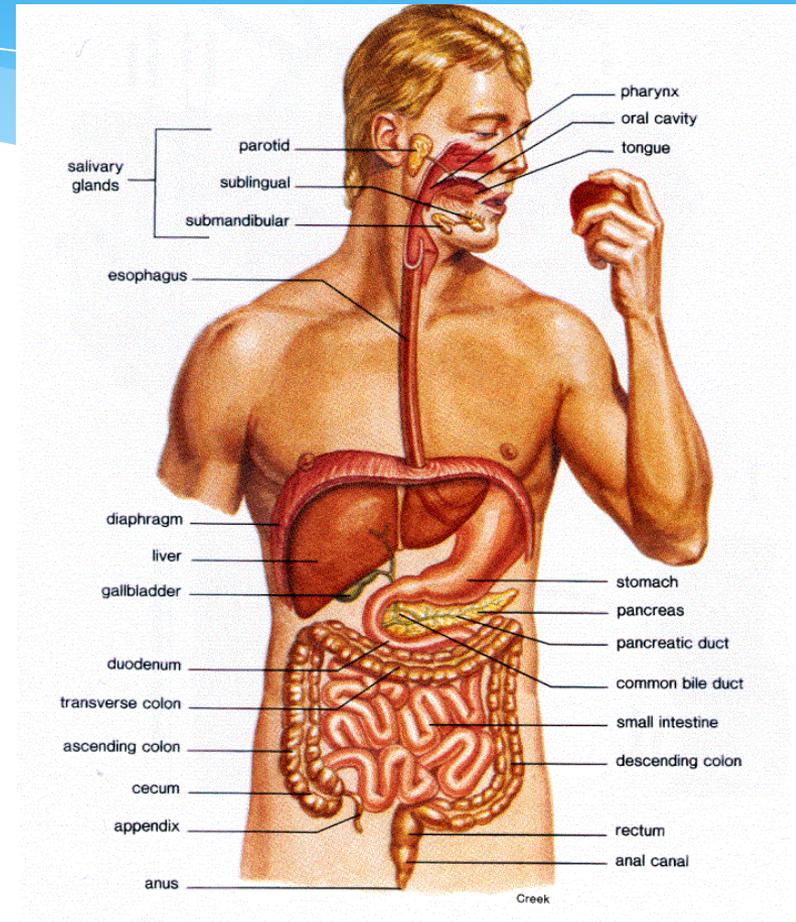
# Respiratory System

- \* MOUTH, TRACHEA, LUNGS
- \* Allows the body to obtain and use oxygen
- \* It also gets rid of carbon dioxide (CO<sub>2</sub>)



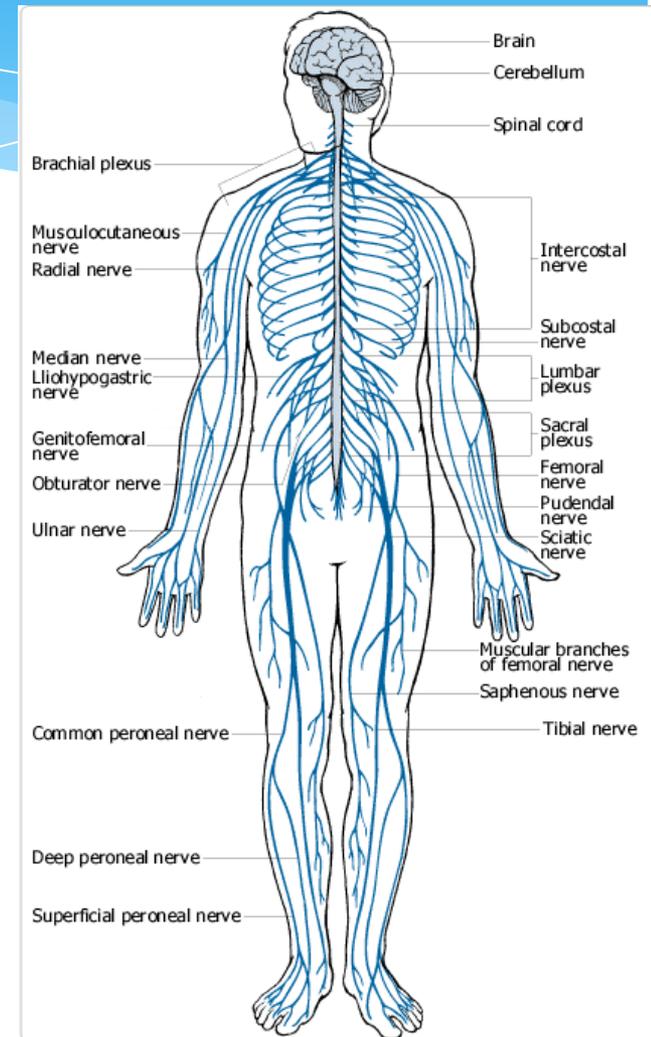
# Digestive System

- \* MOUTH, ESOPHAGUS, STOMACH, SMALL INTESTINE, LARGE INTESTINE, LIVER, PANCREAS
- \* Digests food into small particles to be used by the body.



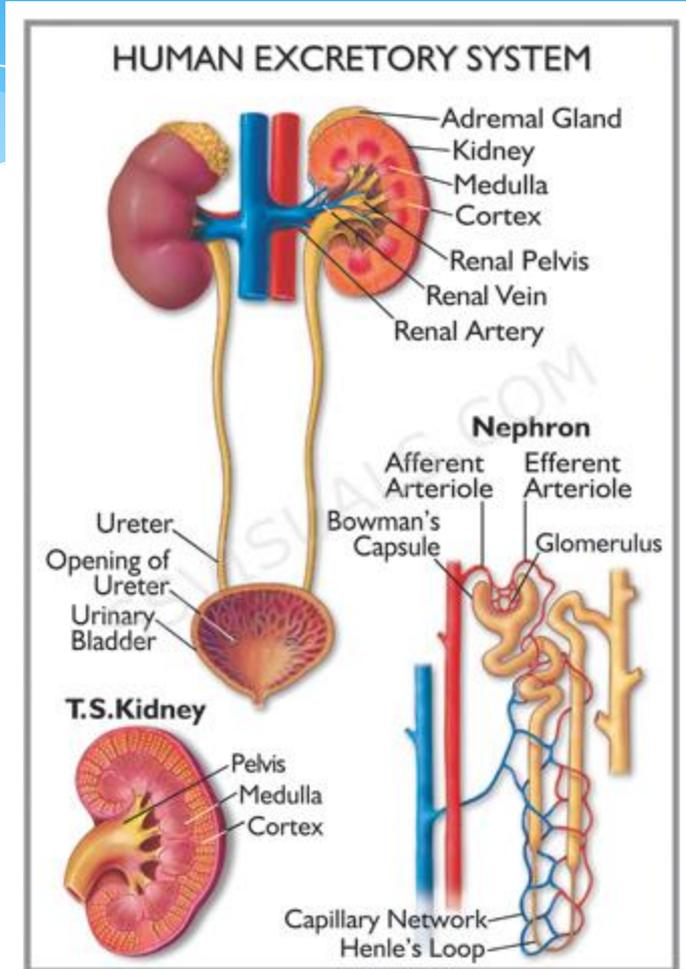
# Nervous System

- \* **BRAIN AND NERVES**
- \* Controls and coordinates many things in the body.
- \* Collects and processes information.



# Excretory System

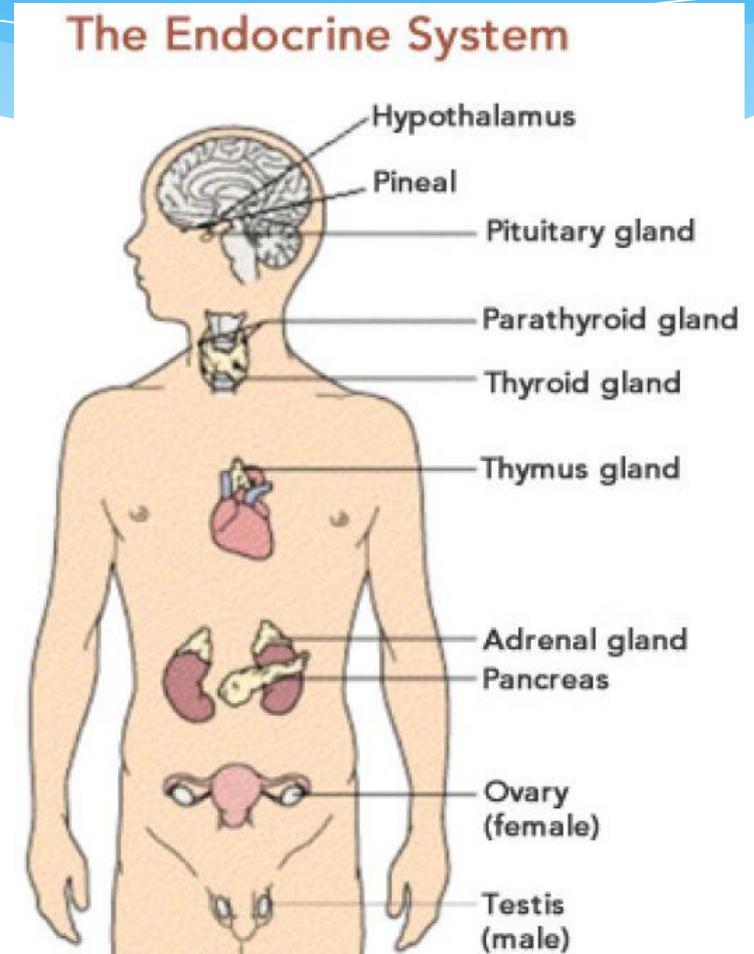
- \* KIDNEYS, URETER, BLADDER, URETHRA, SKIN
- \* Removes wastes from the body that are produced during homeostasis in the body.
- \* Includes the skin and sweat production



# Endocrine System

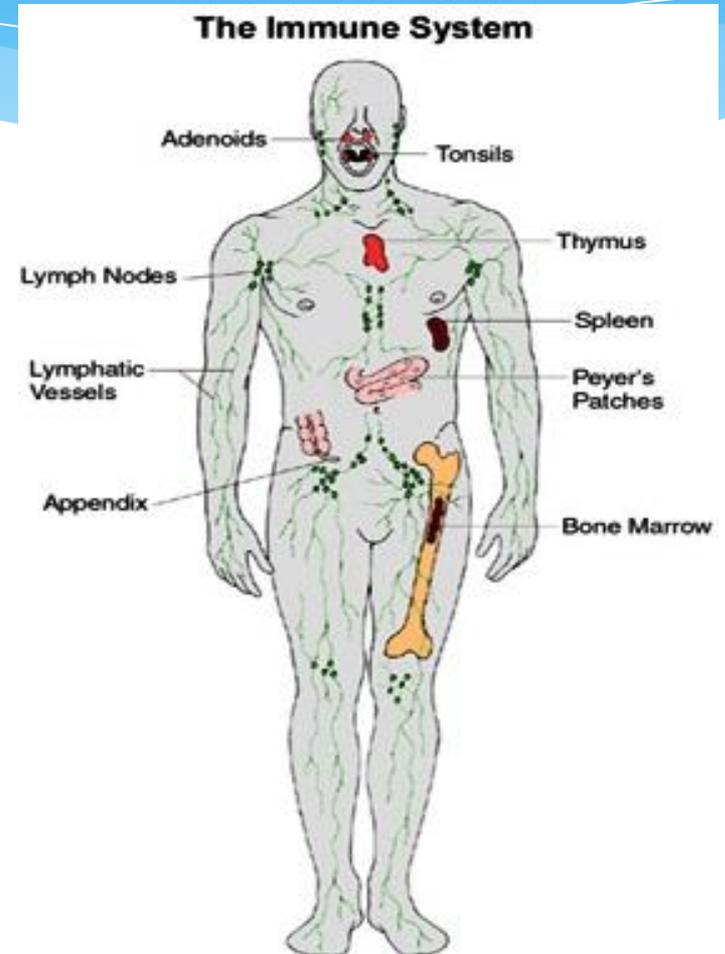
- \* HYPOTHALAMUS, PINEAL, PITUITARY, THYROID, ADRENAL, PANCREAS, OVARY, TESTIS
- \* Endocrine glands release hormones into the blood stream as they are needed.
- \* For example, pituitary hormones regulate growth of the skeleton.

[hubpages.com](http://hubpages.com)



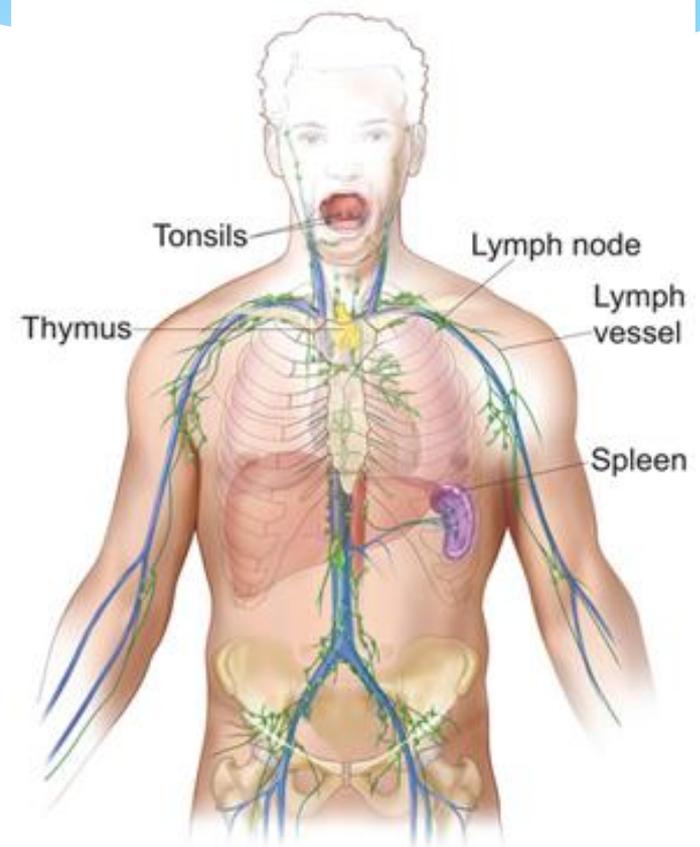
# Immune System

- \* ADENOIDS, TONSILS, LYMPH NODES, SPLEEN, APPENDIX, BONE MARROW
- \* Protects the organism from outside threats (e.g. bacteria, viruses, etc.)
- \* Assists the body in fighting of disease and infections.



# Lymphatic System

- \* LYMPH VESSELS, LYMPH NODES, TONSILS, THYMUS, SPLEEN
- \* Transports clean fluids back to the blood
- \* Drains excess fluids from tissues
- \* Removes “debris” from cells of body
- \* Transports fats from digestive system

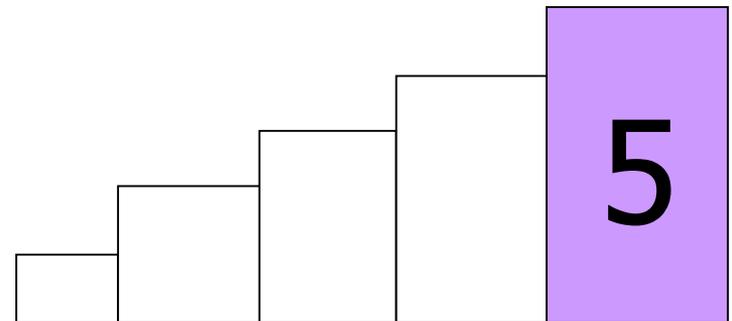


# Reproductive System

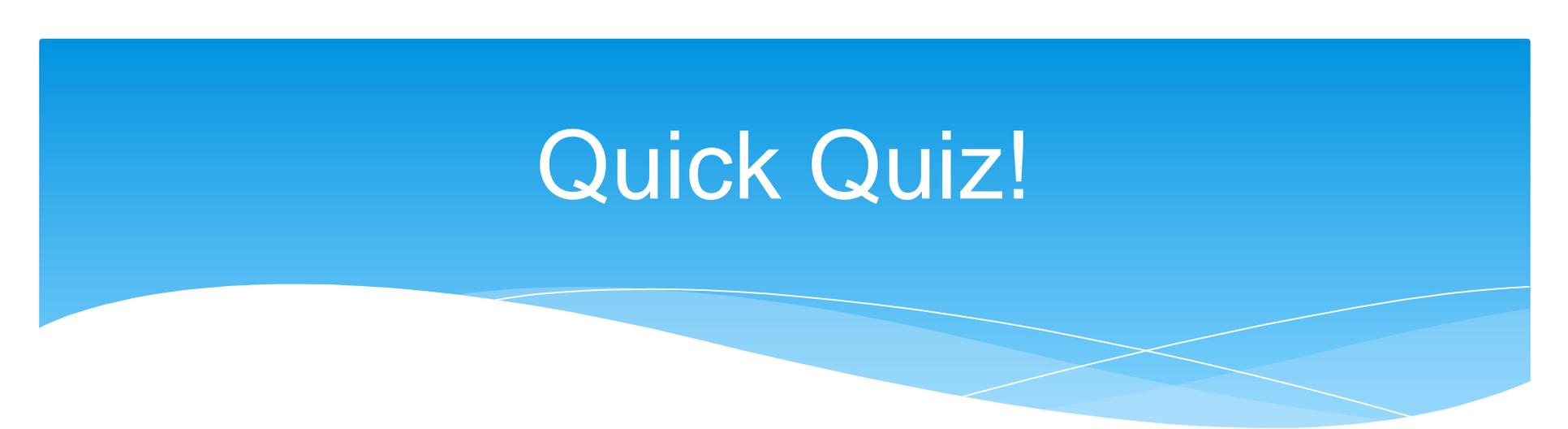
- \* Produce haploid cells.
- \* Include parts of the body that are responsible for the continuation of the human species.

# 5. Organism

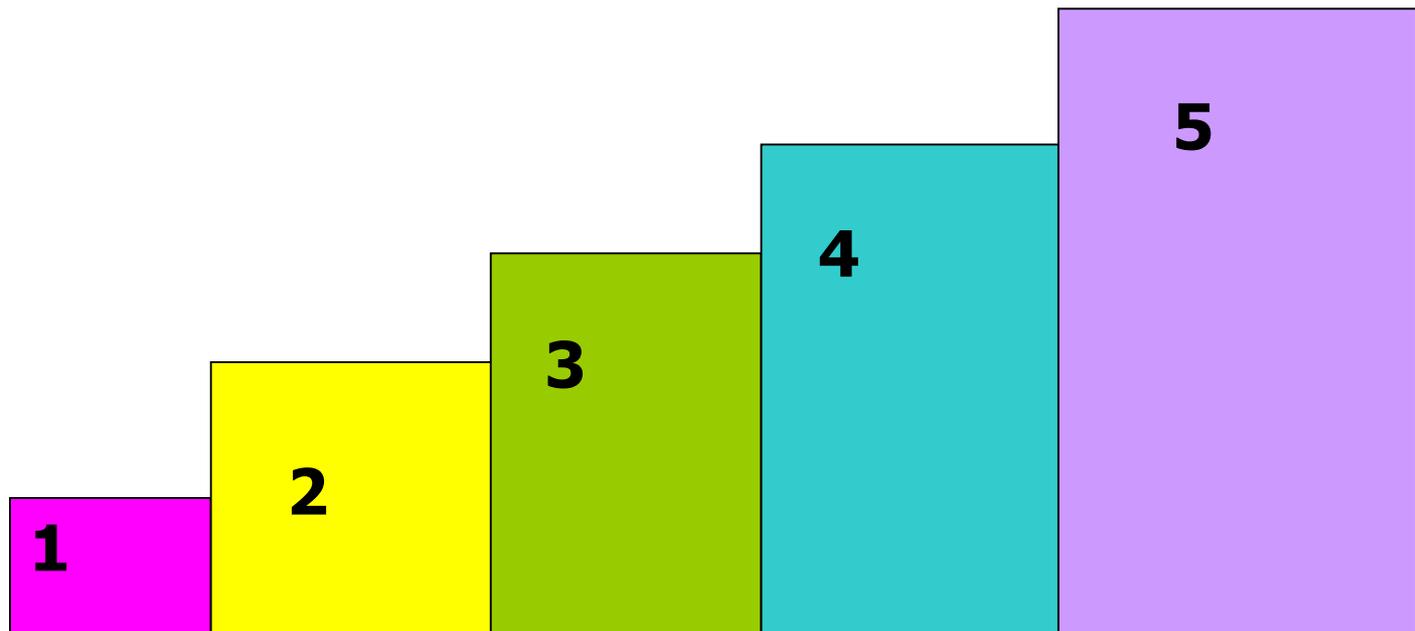
- \* Anything that can live on its own.
- \* Are made up of at least 1 cell.
- \* Examples: rabbit, bacteria, pine tree



# Quick Quiz!

The image features a solid blue header at the top. Below the header, there are several overlapping, wavy, light blue shapes that create a sense of motion or a decorative border. The rest of the page is plain white.

1-5. What are the 5 levels of organization (simplest to most complex)?

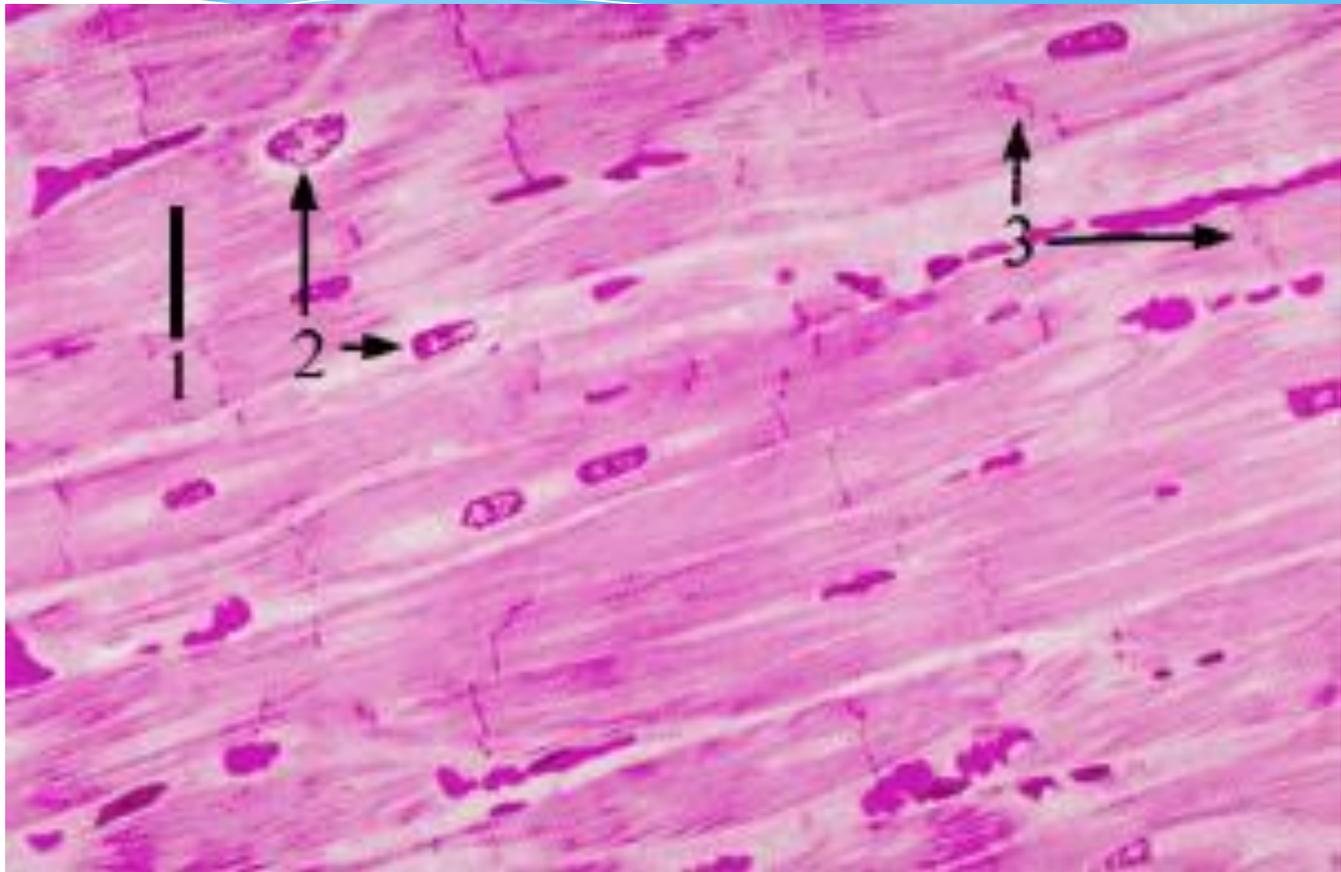


6. What level is this in?  
(write the name of the level)



**AN EGG**

# 7. What level of organization is this?

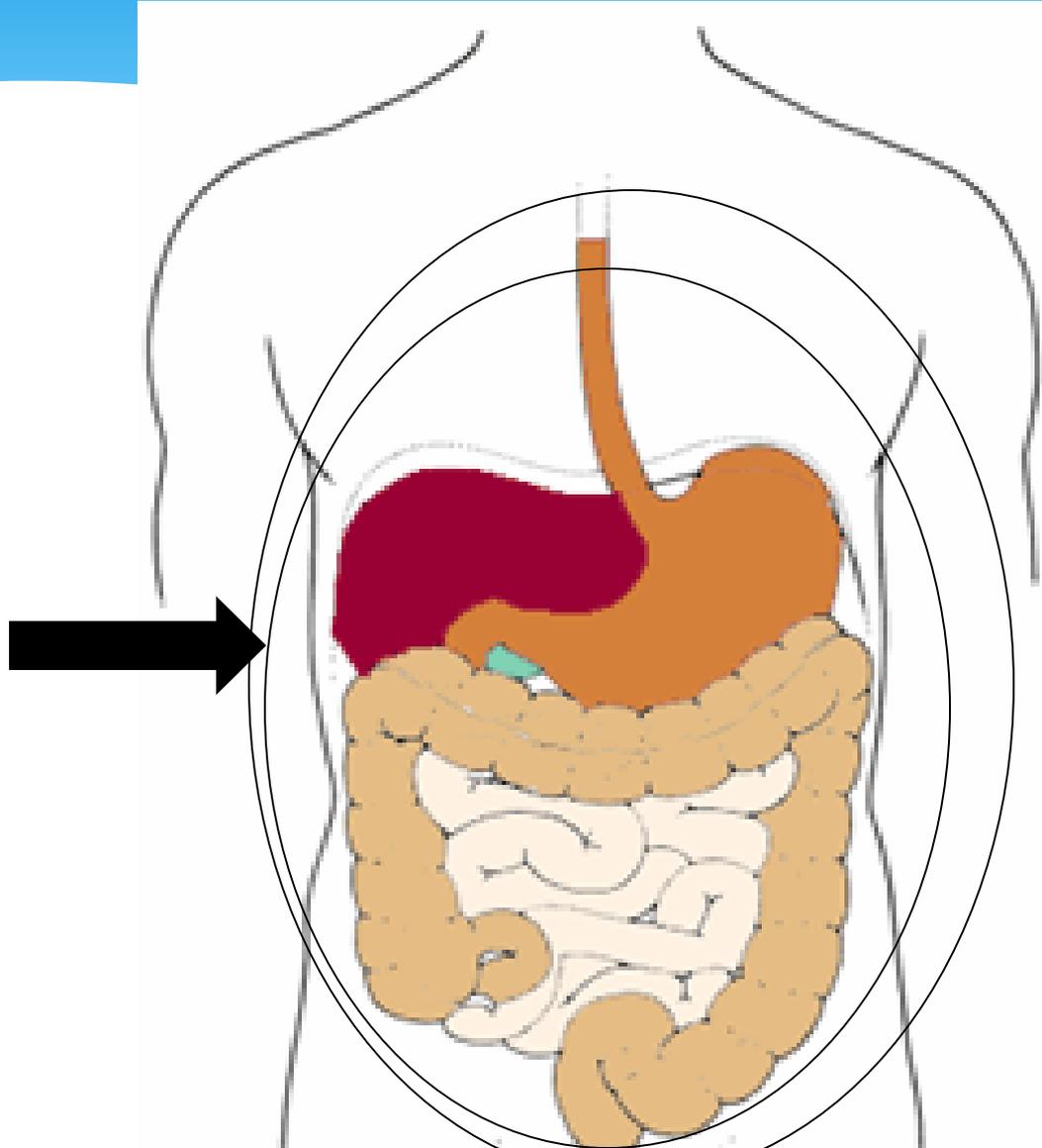


# 8. (The hippo)

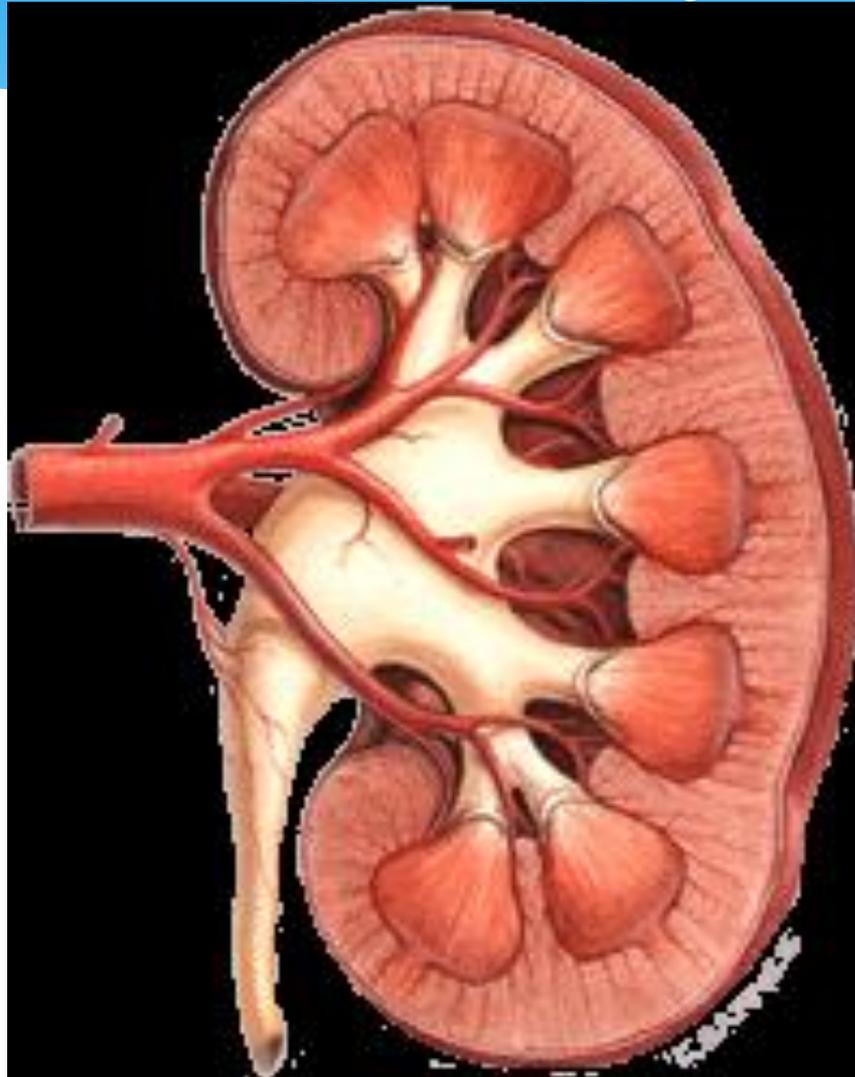
[www.dwsops.net/series/hippo](http://www.dwsops.net/series/hippo)



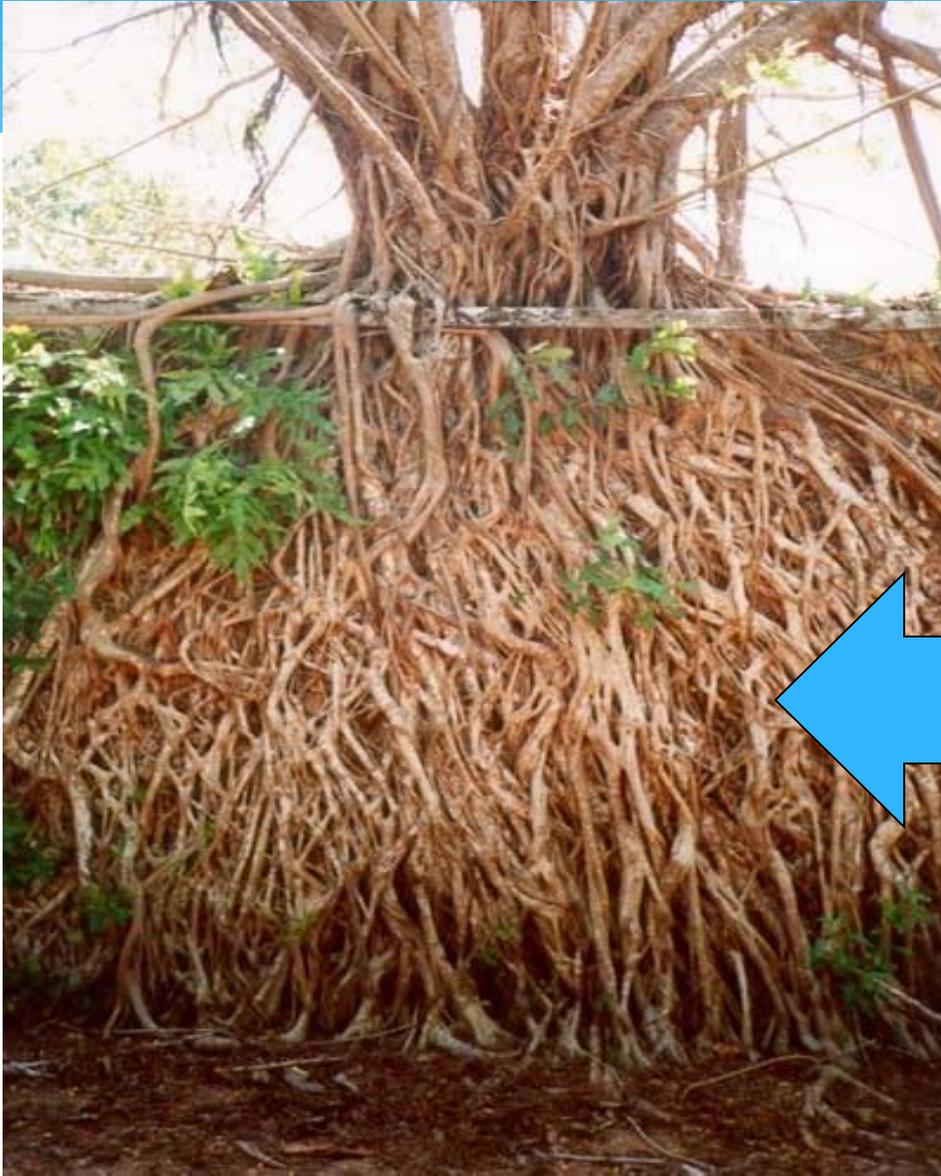
# 9. What level of organization is this?



# 10. Kidney



# BONUS!



A single root.