

REVIEW: Body Systems

Organ Systems

- *Specialized organs that contain specialized cells*
-

Circulatory System

A TRANSPORT system

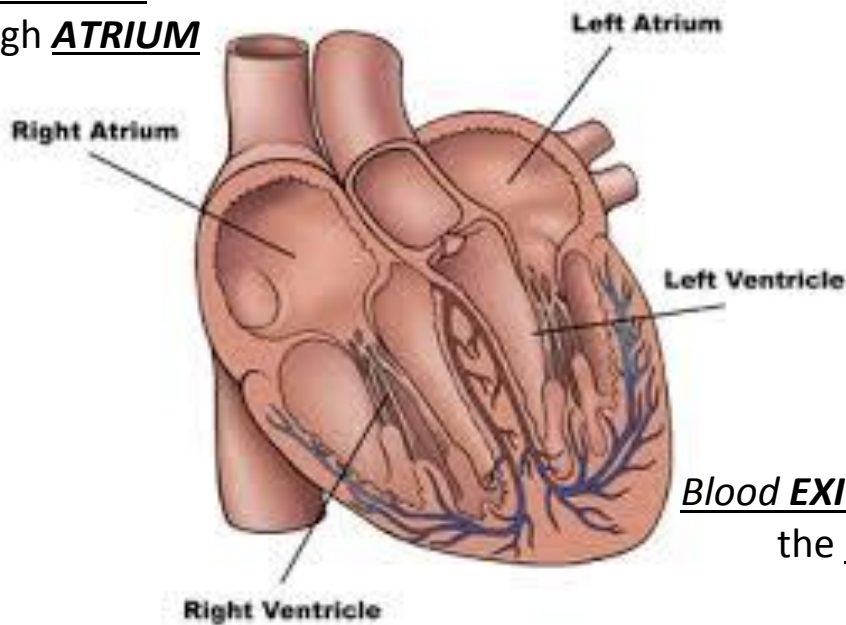
- Absorb and distribute materials to and from cells
- Carries waste materials
- Carries needed materials



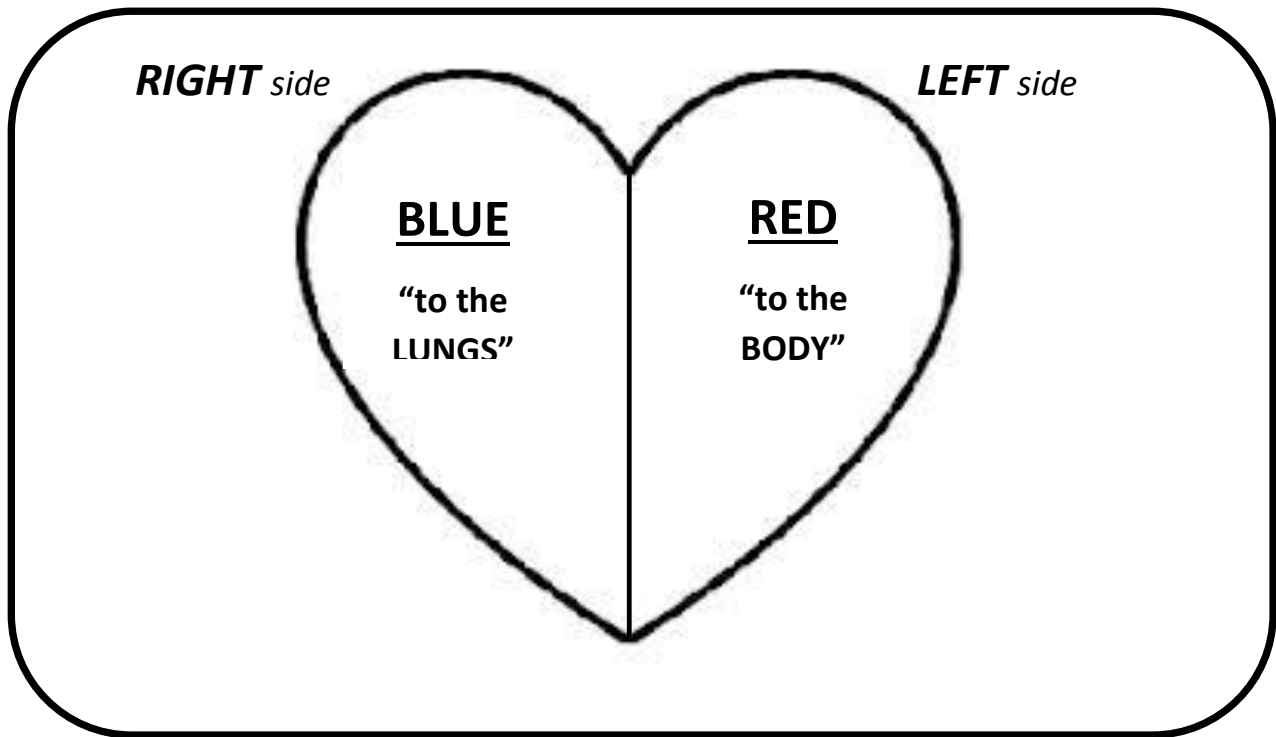
Heart: PUMP that moves blood



Blood ENTERS heart
through ATRIUM



Blood EXITS heart through
the VENTRICLE



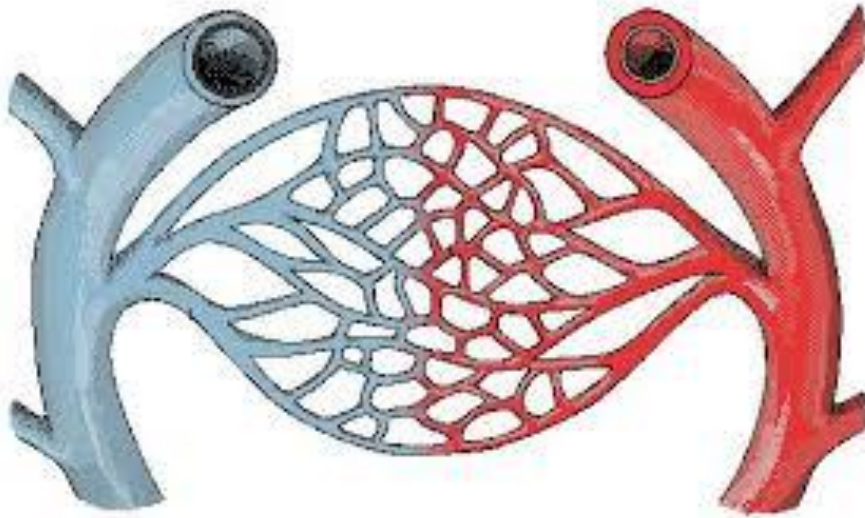
Blood

Carries oxygen and carbon dioxide



Blood Vessels

- ♥ *Tubes that carry blood to body*
- ♥ *Veins carry blood INTO the heart*
- ♥ *Arteries carry blood AWAY from the heart*



VeINs carry blood Into
the heart

Arteries carry blood Away from
the heart.

Exercise → heart beats faster → more OXYGEN and GLUCOSE
to muscles



REMEMBER.....

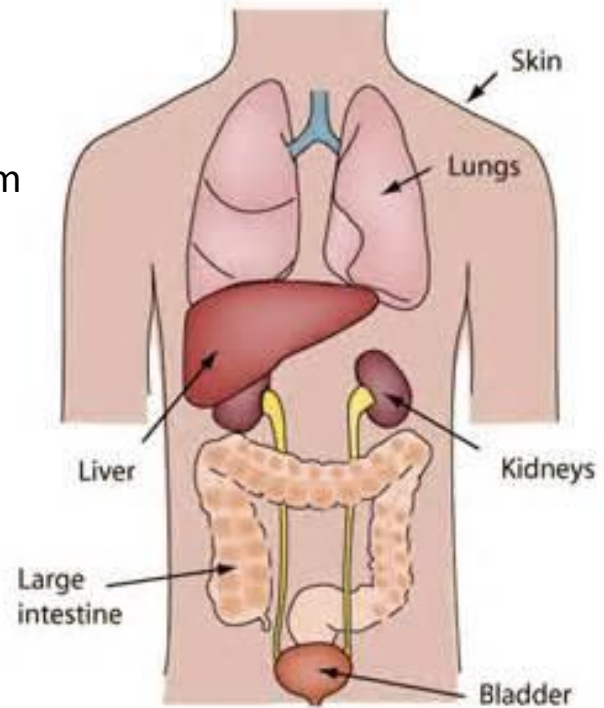
The CIRCULATORY SYSTEM is like the CYTOPLASM of a cell
They transport materials.



Excretory System

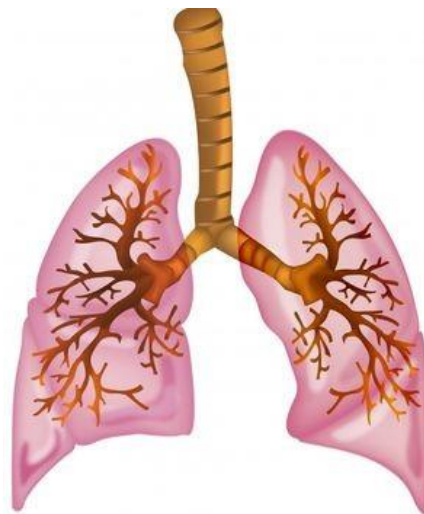
a WASTE MANAGEMENT system

- FILTERS blood
- REMOVES waste



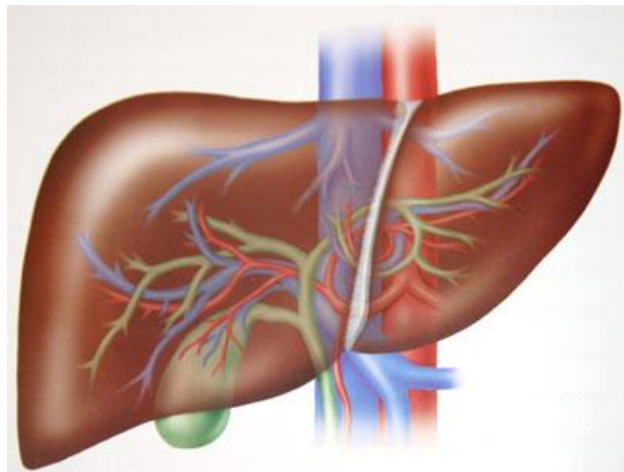
Lungs

Release CARBON DIOXIDE
by exhaling



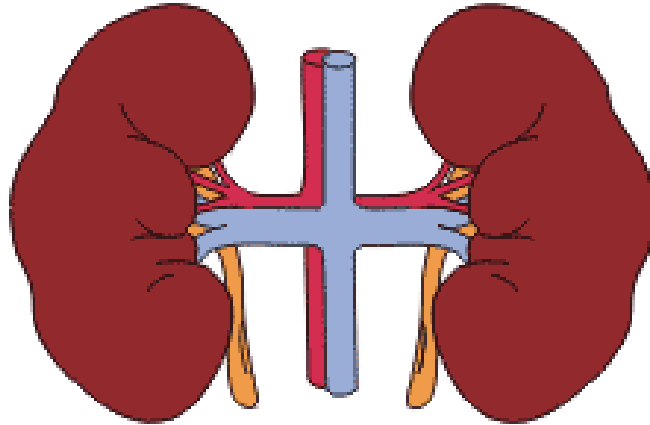
Liver

FILTERS the blood



Kidneys

FILTER the blood



The kidneys contain NEPHRONS that collect waste (*urine*).

NEPHRONS carry what your body **DOES NOT NEED**.

Skin

➤ Excretes SWEAT



REMEMBER.....



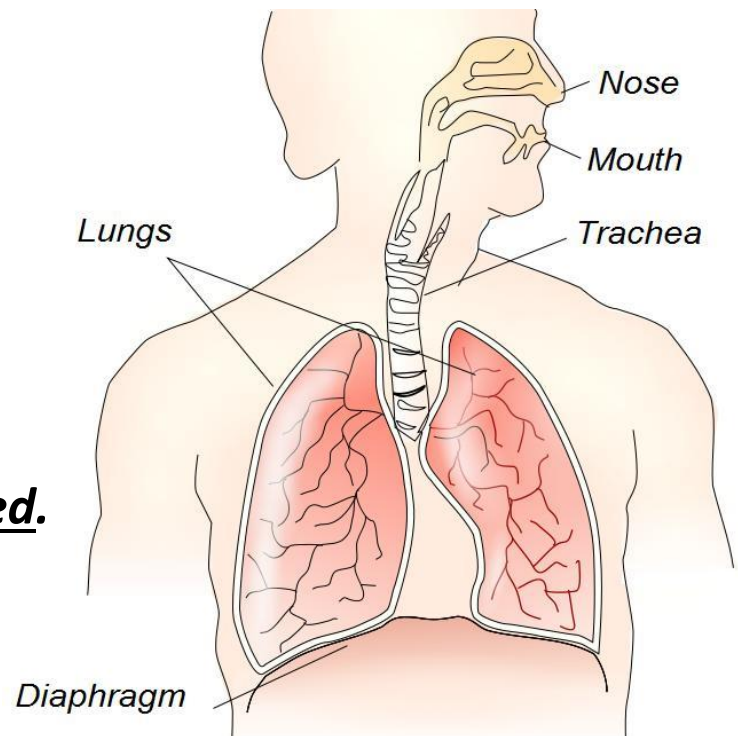
The EXCRETORY SYSTEM is like the CELL MEMBRANE in a cell
They both remove waste by excretion

Respiratory System

a GAS EXCHANGE system

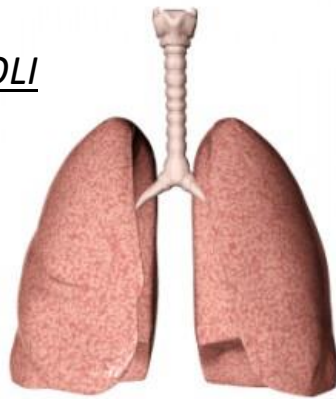
OXYGEN taken in....

CARBON DIOXIDE released.



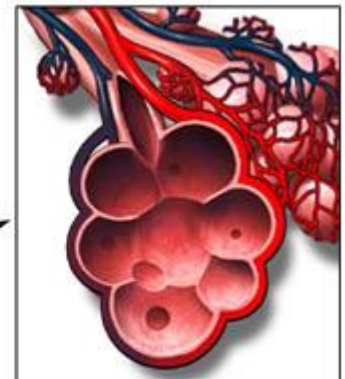
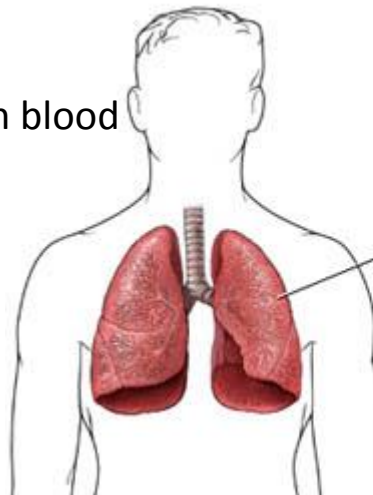
Lungs

- Contain the ALVEOLI



Alveoli

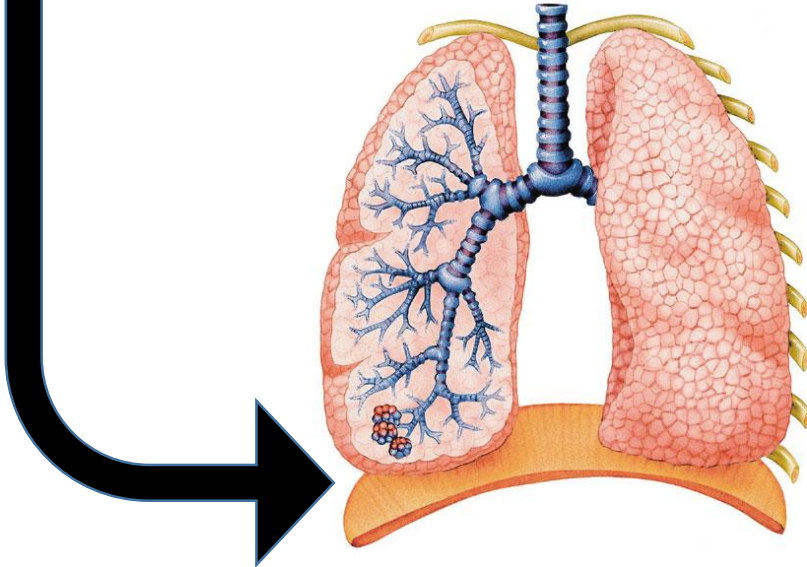
- Tiny air sacs
- SITE of gas exchange with blood



Microscopic view of
air sacs (alveoli) in the lungs

Diaphragm

- Muscle that expands and contracts as you breathe
- It CHANGES PRESSURE in your CHEST cavity



Exercise ➡ INCREASE breathing rate ➡ more OXYGEN to muscles



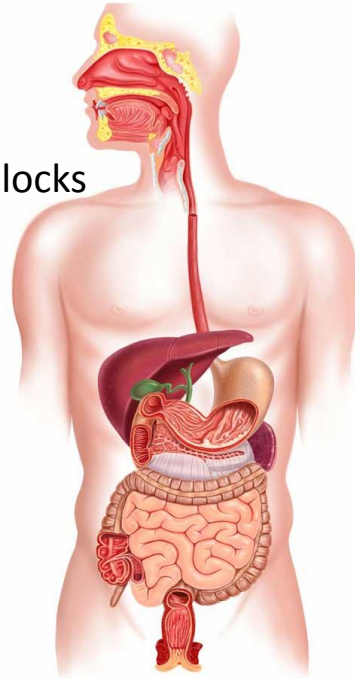
Remember.....



The RESPIRATORY SYSTEM is like the CELL MEMBRANE in a cell
It is where GAS EXCHANGE occurs.

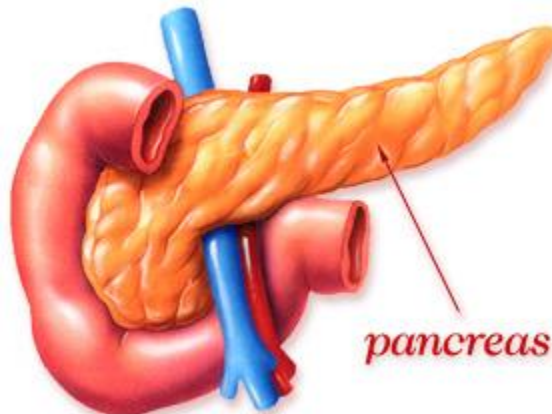
Digestive System

- BREAKS DOWN FOOD into building blocks



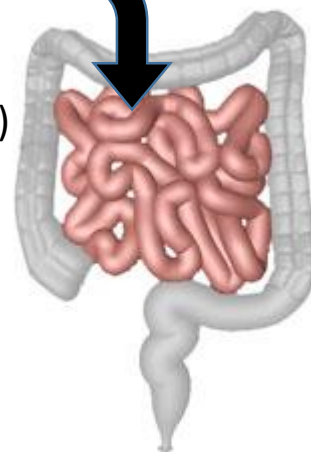
Pancreas

- secretes ENZYMES for digestion



Small Intestine

- site where DIGESTION is COMPLETED
- contain VILLI (where GLUCOSE is absorbed)



If you see....Look for.....

Body Systems

Sweating

- Feedback mechanism

Digestive

- ATP
- Break down

Respiratory

- ATP
- Gas exchange

Circulatory

- Transport
- Similar to function of cytoplasm

Excretion

- Elimination
- Metabolic wastes

Levels of organization

- Cell → tissue → organs → organ system → organism

Diaphragm

- Pressure change

Nephrons

- Forms urea