

Essential Question:

How do major organ systems work together in living organisms?

Standards:

S7L2d. Explain that tissues, organs, and organ systems serve the needs cells have for oxygen, food, and waste removal.

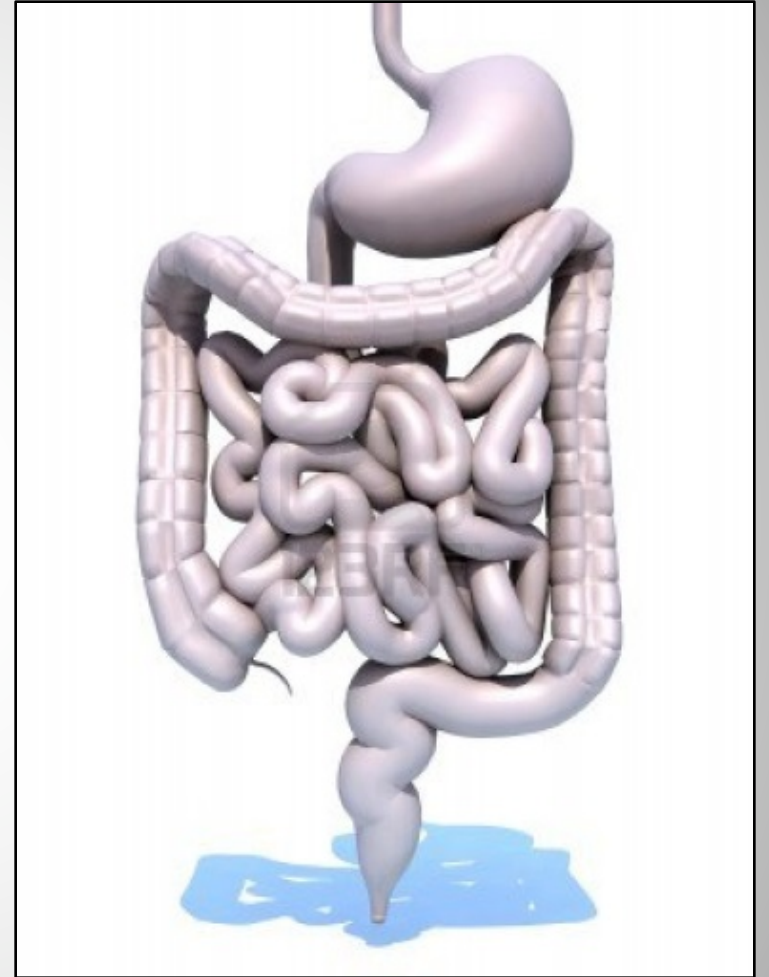
S7L2e. Explain the purpose of the major organ systems in the human body (i.e., digestion, respiration, reproduction, circulation, excretion, movement, control and coordination, and for protection from disease).

Watch the video clip below and identify which system of the body has a similar function.

[http://www.youtube.com/
watch?v=8er0a6W67IM](http://www.youtube.com/watch?v=8er0a6W67IM)

[watch 1 min 30 seconds]

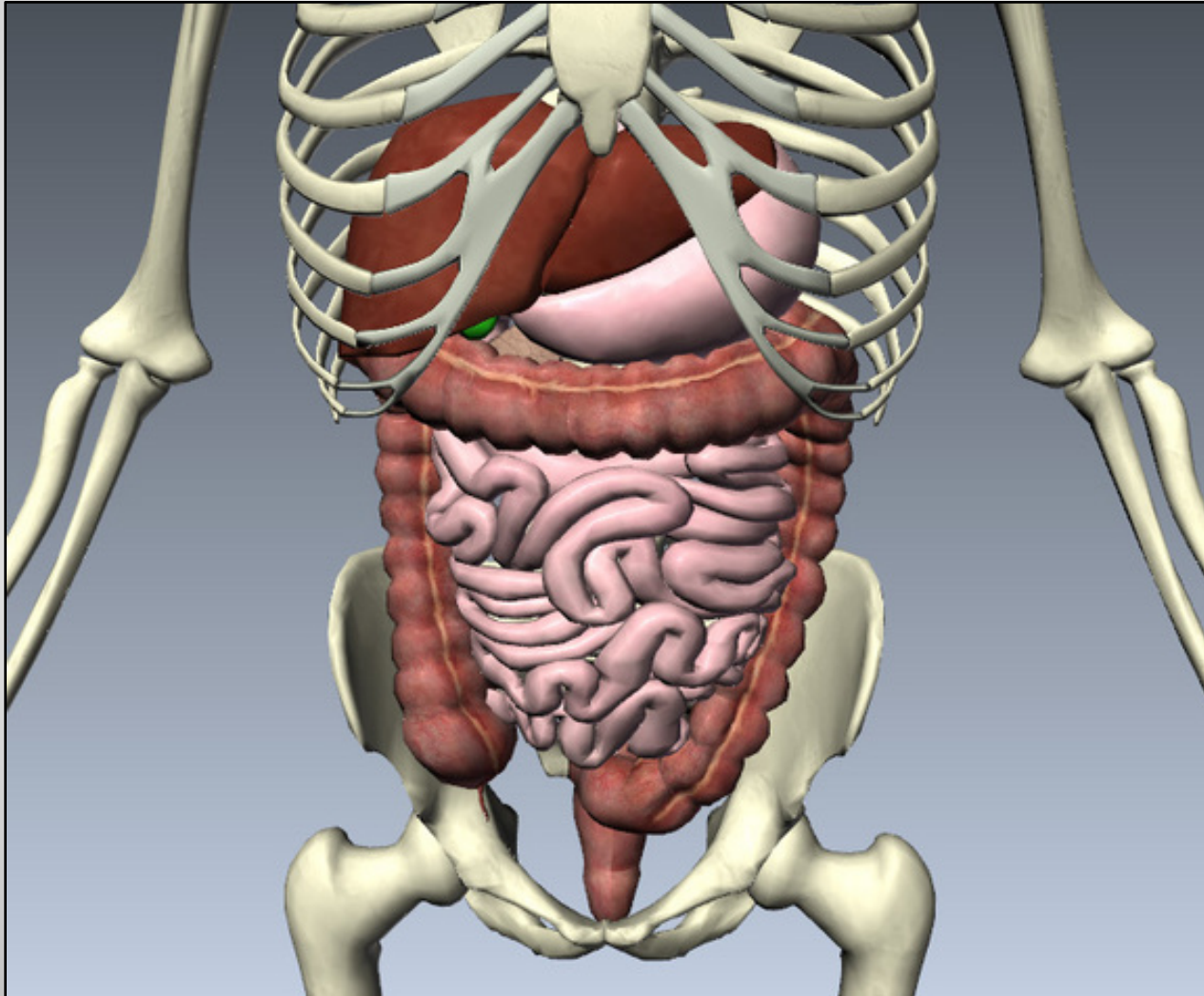
Digestive System



Role of the Digestive System

**Series of organs that
convert food into essential
nutrients, and moves
unwanted waste out**

How does it do it?



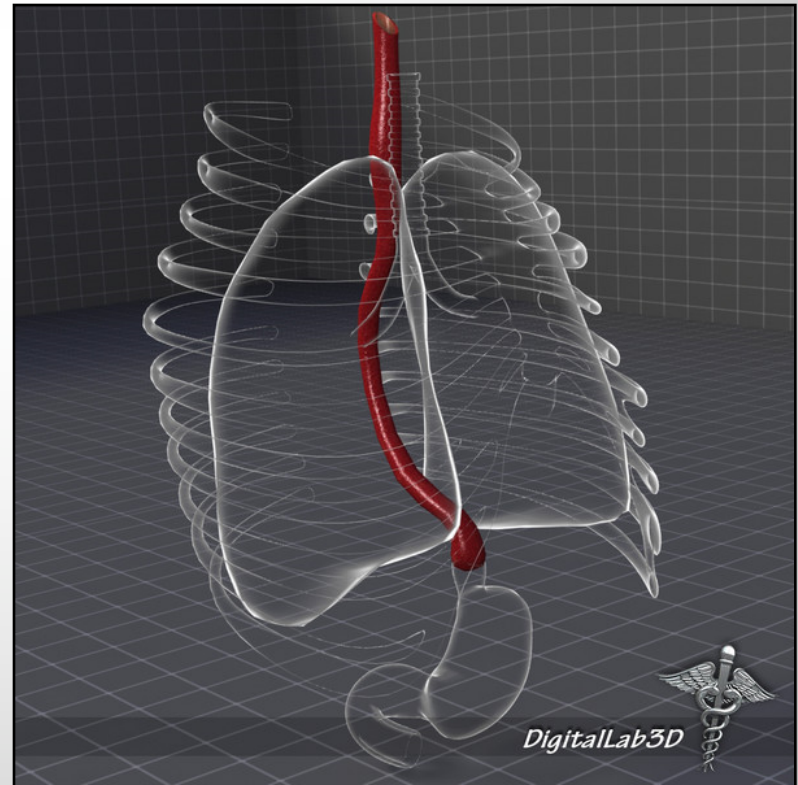
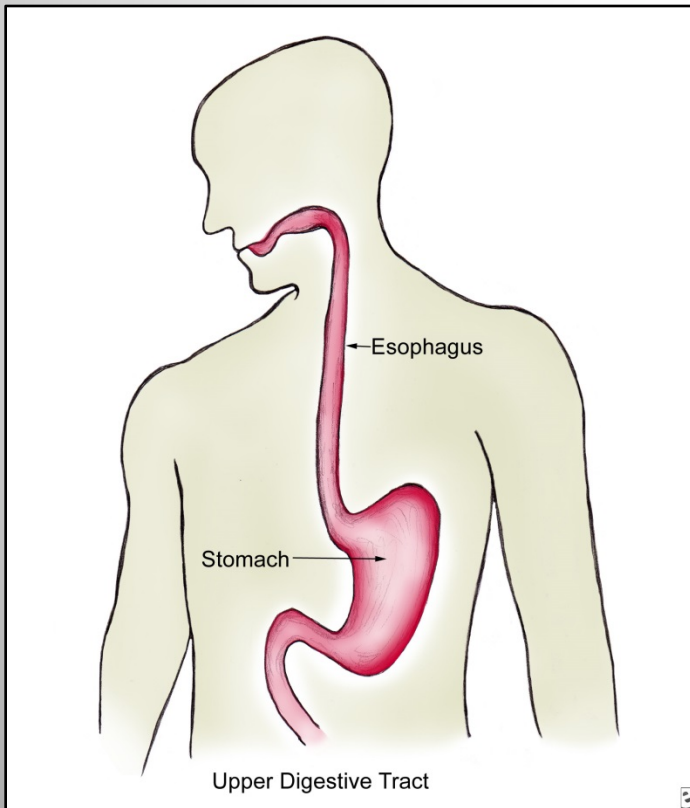
Chewing

- **Mechanical Digestion – Breaking down food into smaller pieces**
- **Teeth are used to break food into smaller pieces**



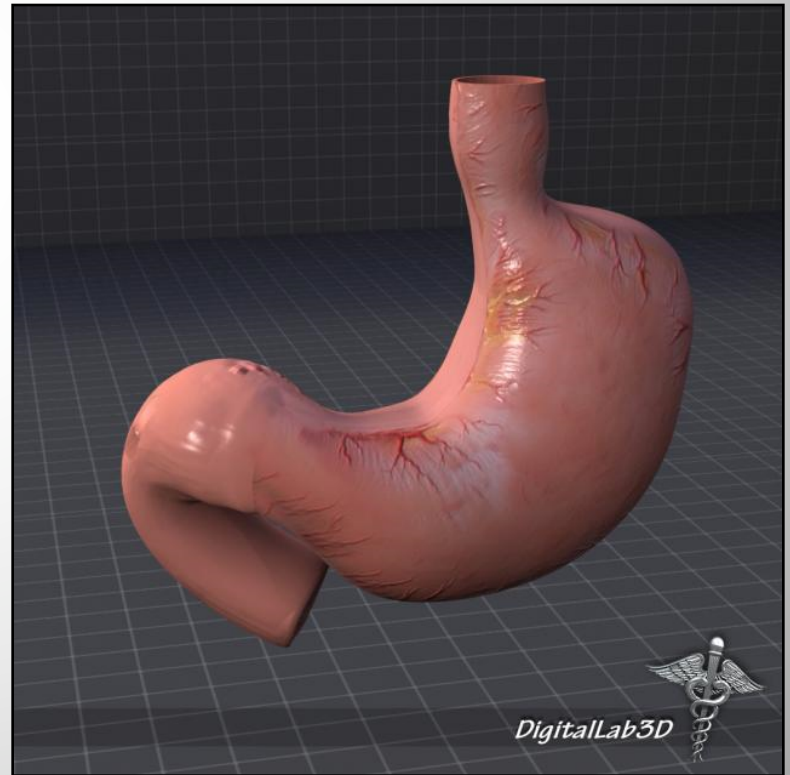
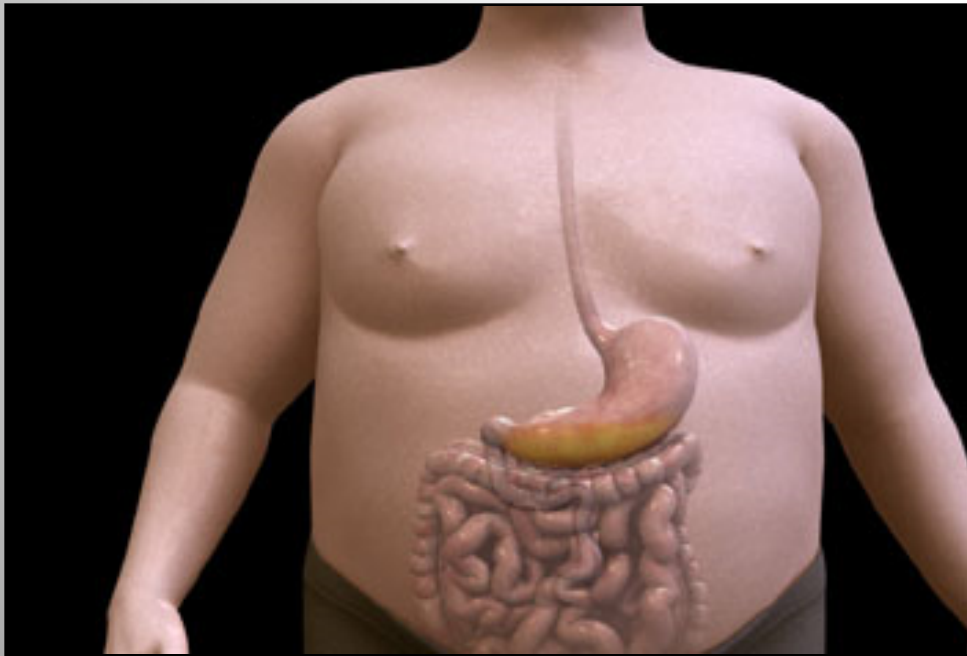
Esophagus

Pipe connecting the mouth to the stomach (involuntary muscles)



Stomach

Food is chemically broken down by acid to form paste called Chyme

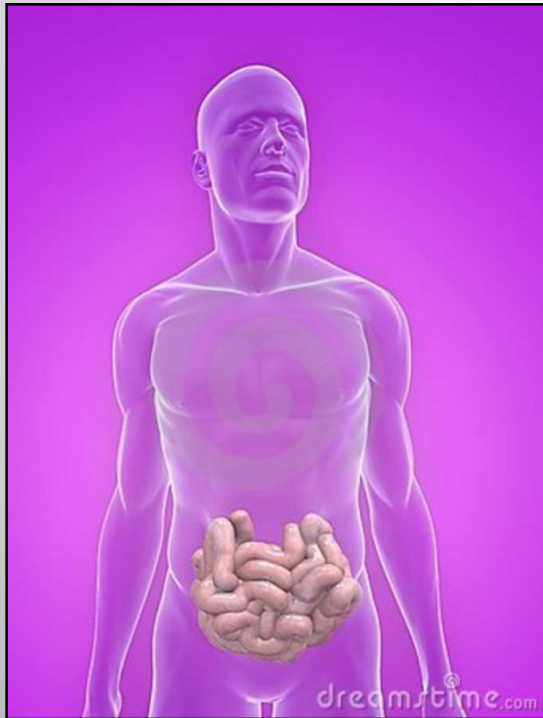


Chemical Digestion

**Food is converted
(changed) into
substances that can be
absorbed by the body**

Small Intestine

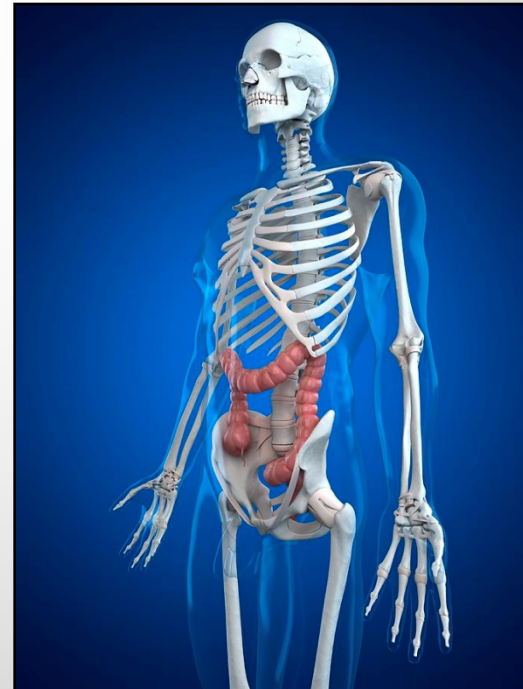
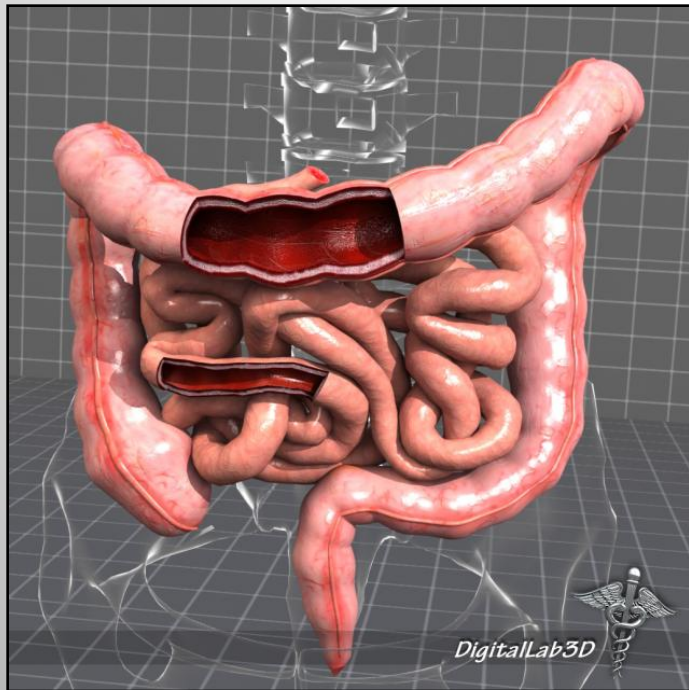
Where the nutrients (glucose, protein, etc.) are absorbed into the bloodstream

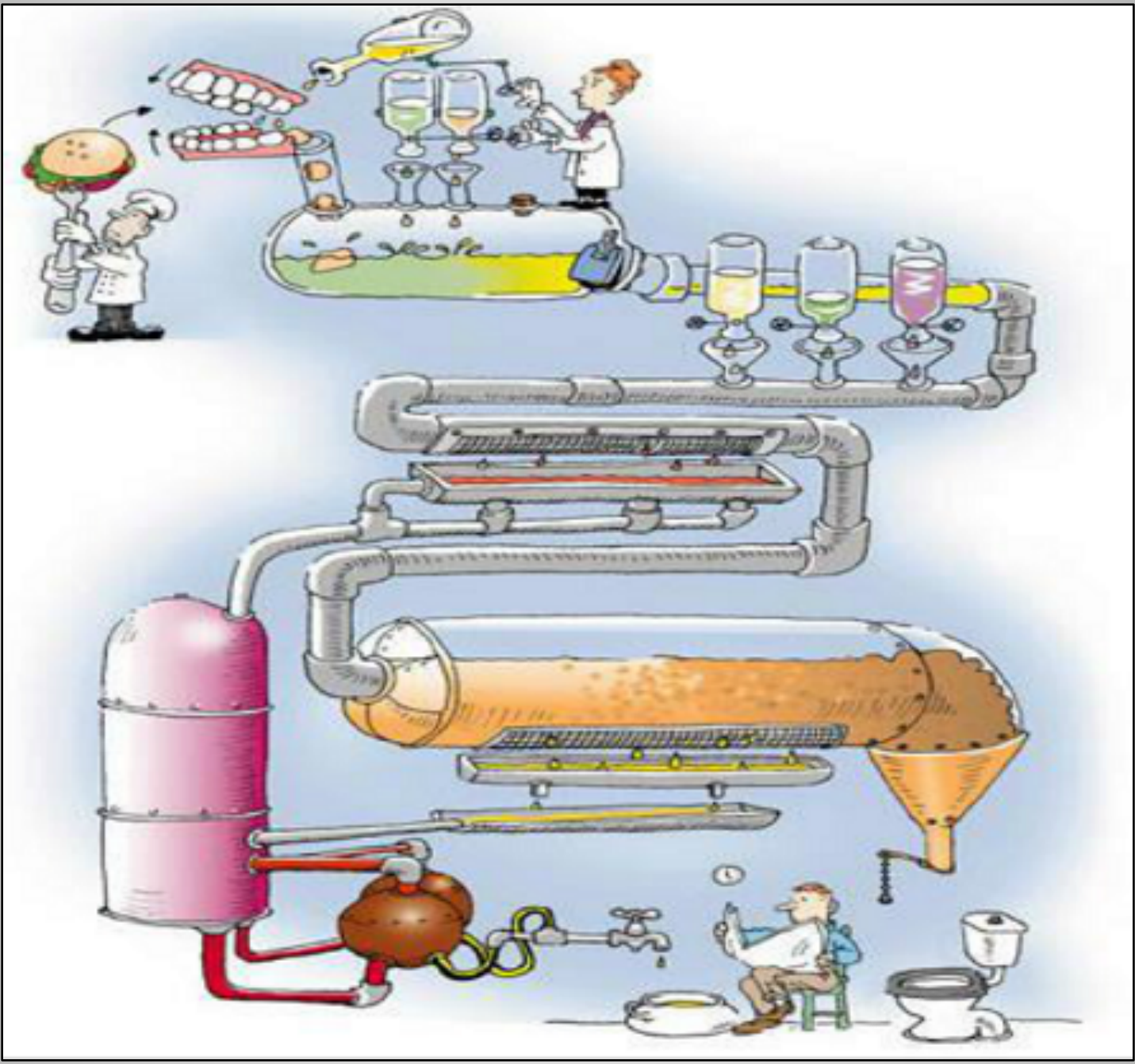




Large Intestine

- Pulls out water from left overs
- Last portion called rectum
- Anus is the opening at the end







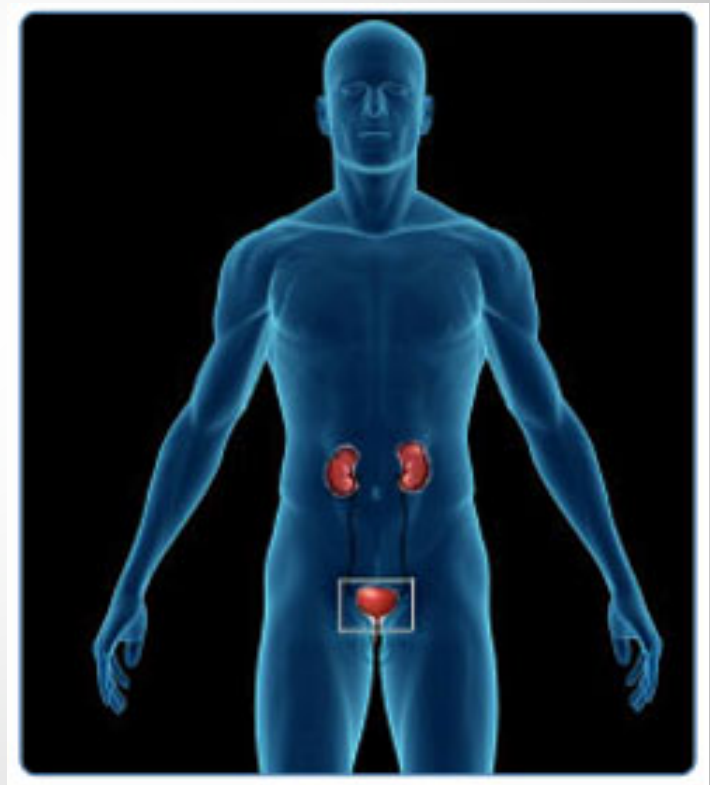
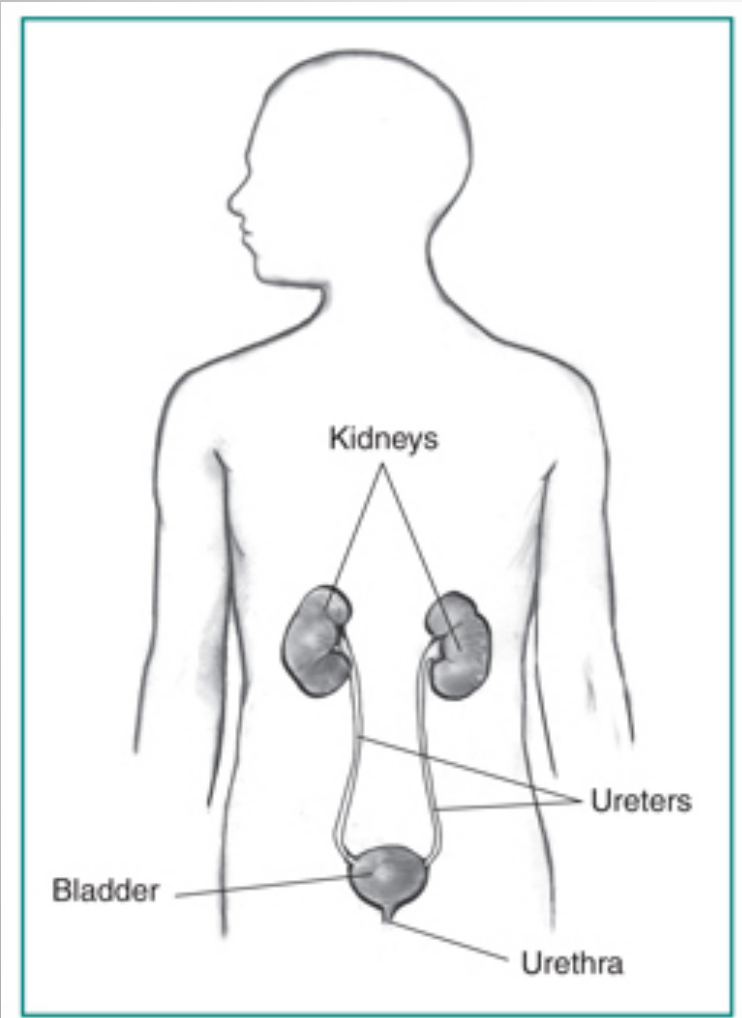
Finish the Story



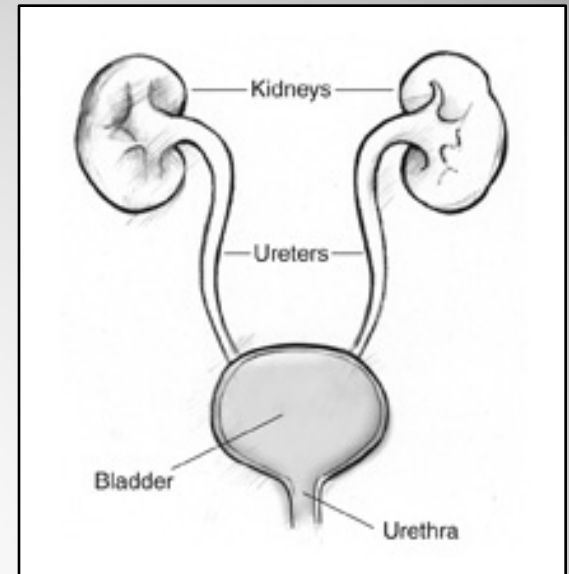
Because Mrs. Fizzle's class doesn't want to exit Arnold "the back way", they decide to go back the way they came. Write a brief explanation of the route they will take and what they will see and experience as they go back the way they came.



The Urinary System



The Urinary System



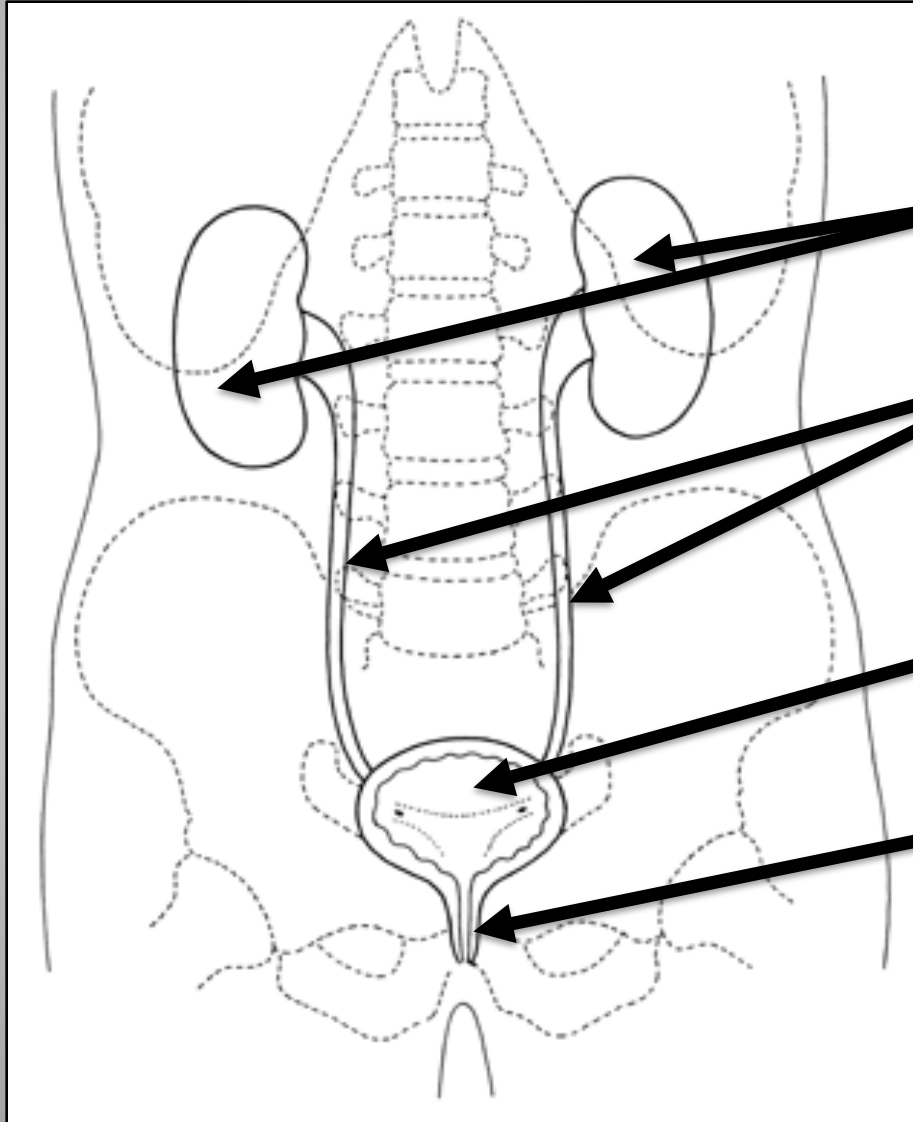
Role: Our urinary system produces, stores and eliminates urine, the fluid waste excreted by the kidneys



What does excreted mean?

**Synonyms:
Eject, Remove,
Expel, Pass**

Parts of the Urinary System



Kidney

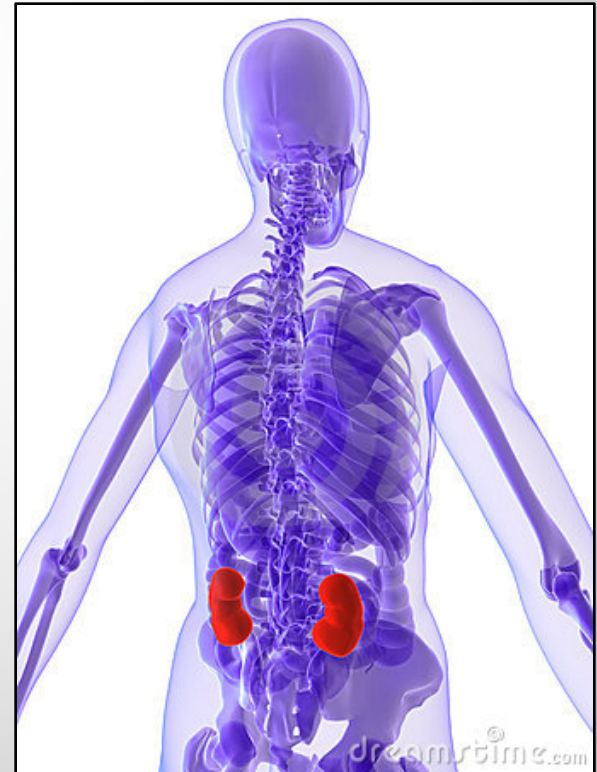
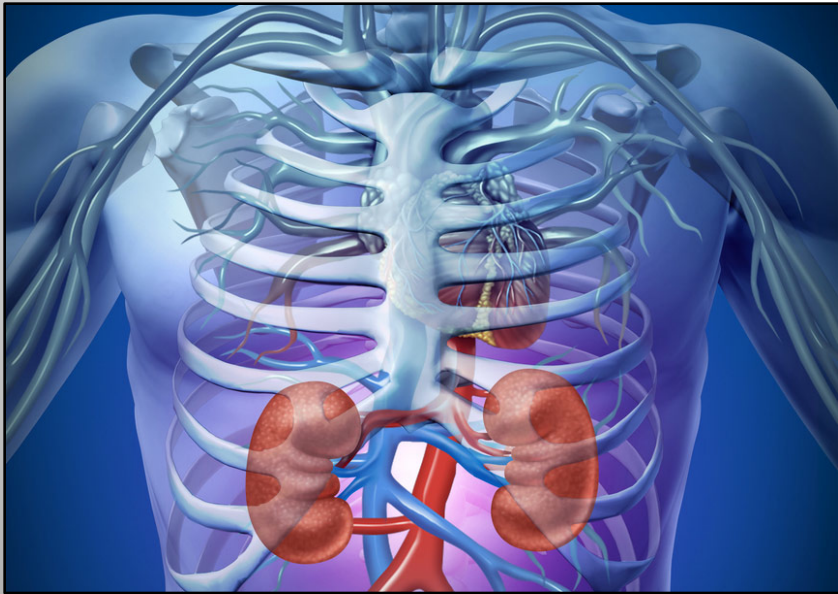
Ureters

Bladder

Urethra

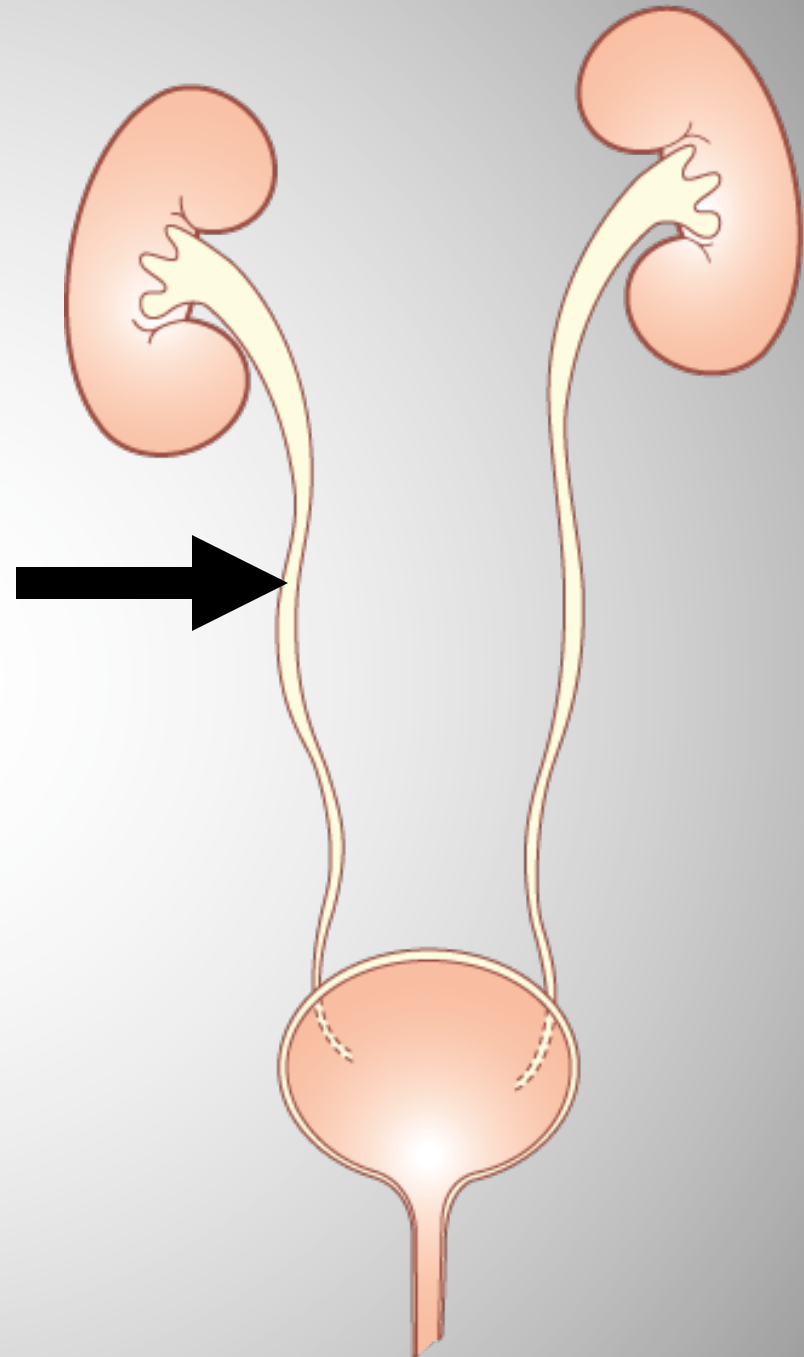
Kidneys

Act as filters for your body to clean waste from the blood and remove urea [a waste product formed by the breakdown of proteins]



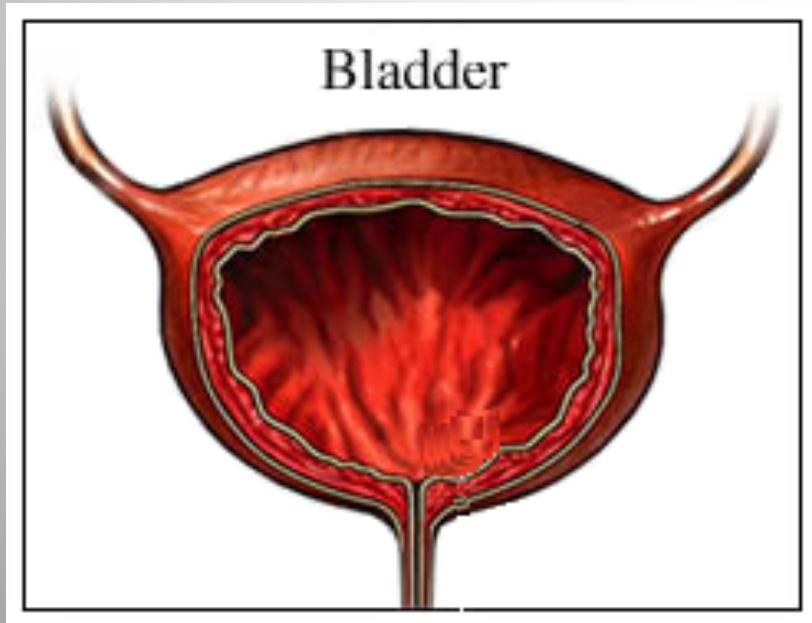
Ureters

A set of tubes
connecting the
kidneys to the
bladder



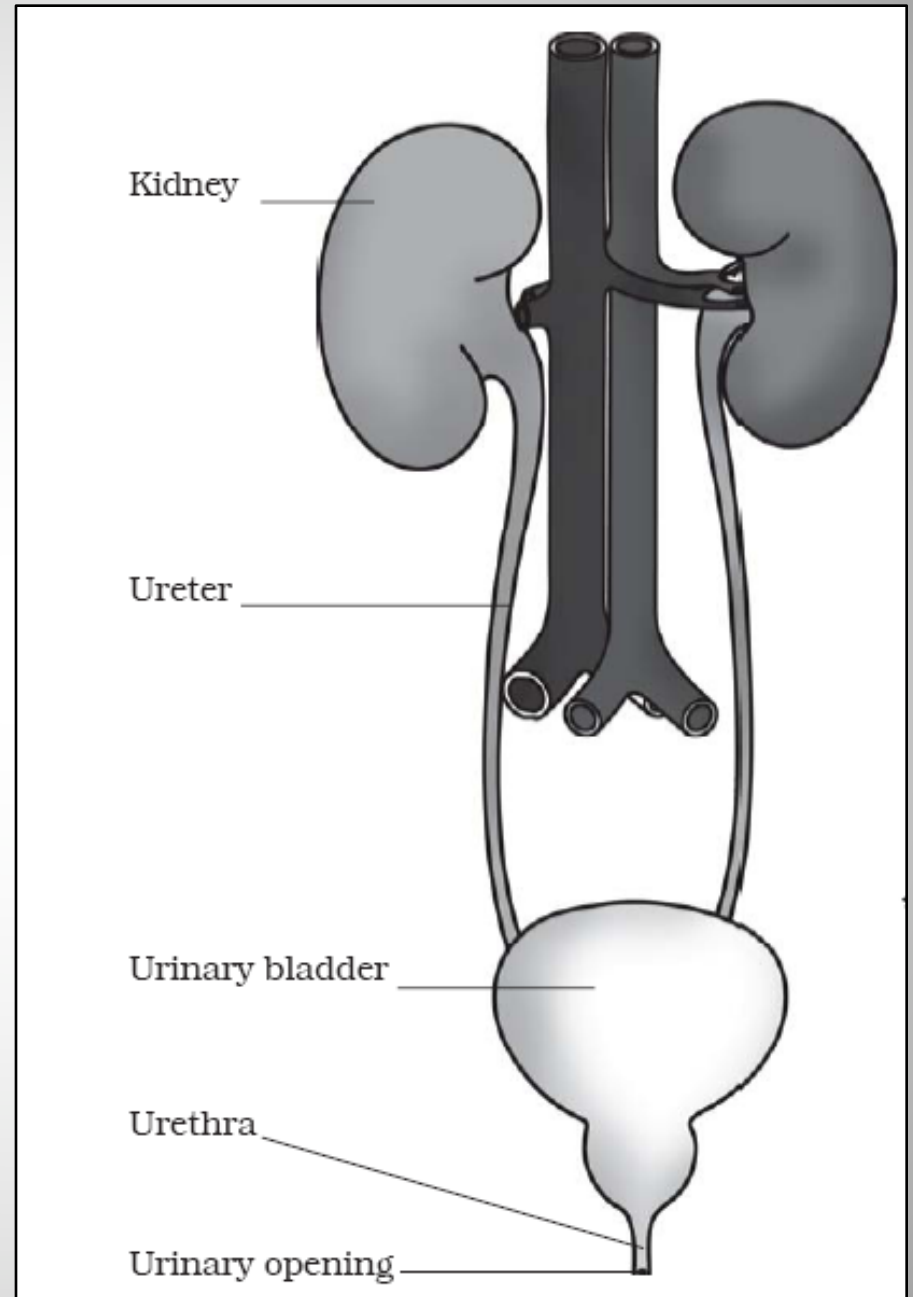
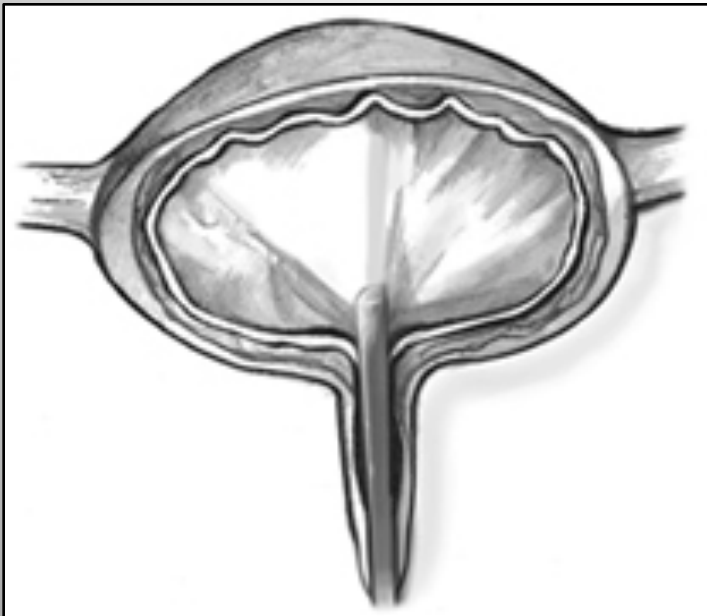
Bladder

A hollow muscular organ shaped like a balloon, that stores urine until you are ready to empty it. The bladder can hold up to 16 ounces (almost half a liter) of urine comfortably for 2 to 5 hours.



Urethra

A tube that connects the bladder to the outside of the body



Urinary System Video Clip

<http://bcove.me/0n6bc6vq>

[only first 3-4 mins]

Excretory System

The role of the Excretory System is to remove wastes from the body.



Organs that Excrete Waste

Organ	What it Excretes
Lungs	Carbon Dioxide
Kidney/Bladder	Urine
Large Intestine	Feces (food waste)
Skin	Excess water/Salt

Skin



- **Our Body sweats to maintain temperature**
- **You may have noticed you sweat more in places like your feet, your hands or your forehead**
- **This is because you have more sweat glands in those areas**

Write it Down

On a scratch sheet of paper write a brief statement explaining how this trash truck is similar to the organs in your excretory system and how it is different.

