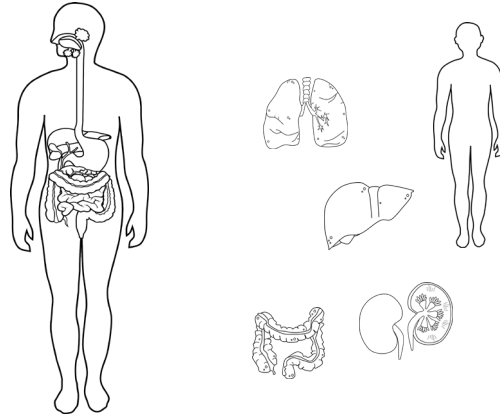


Digestive System and Excretory System



Anticipation Guide

Before completing the lesson, read the statements below, think about your prior knowledge, and put an x in the box for true or false (column 1 and 2). As you go through the lesson, look for evidence to support or refute your ideas. You will revisit this anticipation guide after completing this lesson. For now, only complete columns 1 and 2.

True	False	Statement	True	False	Evidence
		The digestive system breaks down food.			
		There are two types of digestion: mechanical and chemical.			
		Breaking food down with chemicals and enzymes is called mechanical digestion.			
		Chyme is the solid food that you begin to chew in your mouth.			
		The pancreas stores bile.			
		Skin is an organ in the excretory system.			
		Oxygen is the waste product that the lungs excrete.			
		The large intestine removes digested food from the body.			
		The kidneys filter the blood to create urine.			
		Urine exits the body through the urethra.			

Digestive System and Excretory System

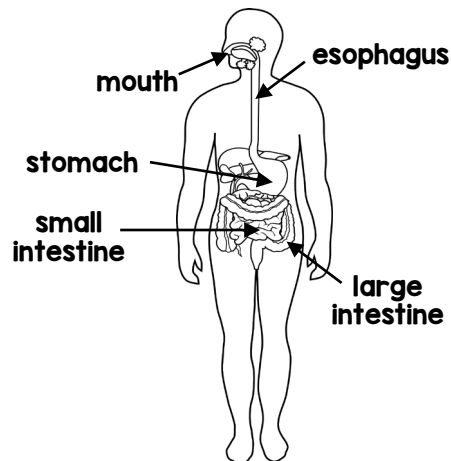


Describe what you think happens to your food after you eat it.

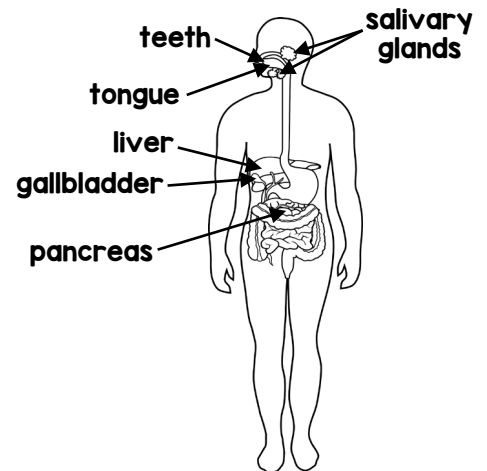
Digestive System

- breaks down
- provides body with energy, ..., and minerals

The digestive (organs in which food passes) includes:



There are accessory organs that help in the digestion process.



Which of the following is NOT a part of the digestive system? (bubble in answer)

- | | |
|-------------------------------|---------------------------------------|
| ☐ stomach | ☐ liver |
| ☐ bladder | ☐ large intestine |

Digestive System and Excretory System

Two Types of Digestion

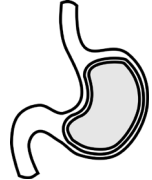
- **mechanical:** food is ----- broken down into smaller pieces

Example:
chewing



- -----: food is chemically broken down by different types of enzymes

Example:
acids in stomach



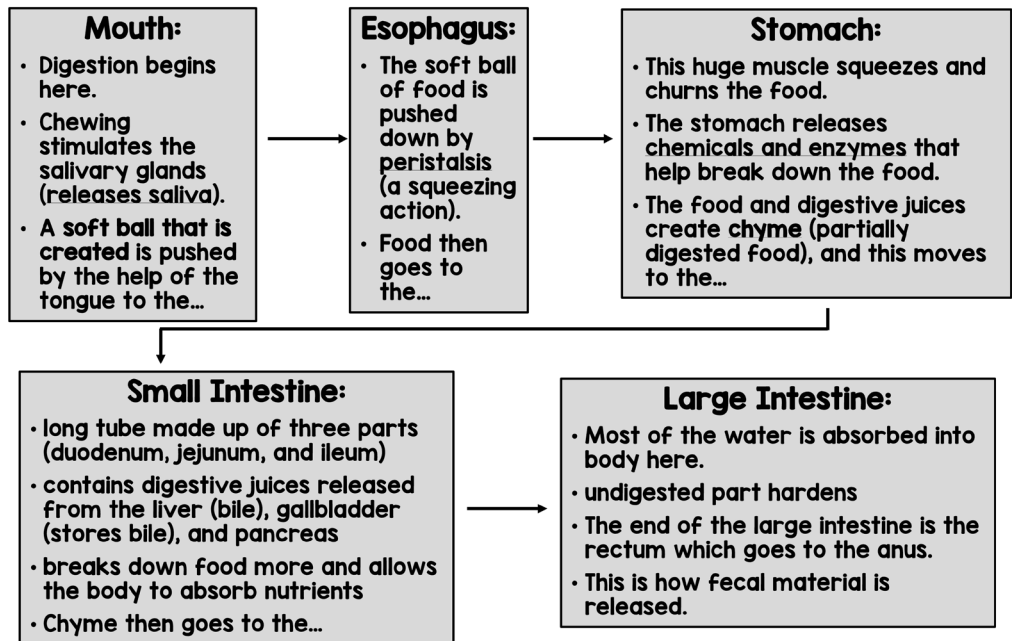
Circle the correct answer.

Breaking down food physically is called chemical digestion.

True

False

Digestion Process



Describe the difference between the organs in the digestive tract and the accessory organs.

Digestive System and Excretory System



Food and digestive juices create a semifluid called:
(bubble in answer)



pancreas



chyme



bile



stomach



Digestion begins in the:
(bubble in answer)



mouth



stomach



esophagus



small intestine



Draw a circle around the example of mechanical digestion.



peristalsis
in the
esophagus



stomach acid
breaking up
food



Draw a square around the example of chemical digestion.



peristalsis in
the stomach



saliva from
the salivary
glands
breaking
down food



Describe how the digestive system works with other systems such as the circulatory system and respiratory system.

Digestive System and Excretory System



Match each digestive system structure to its function.

mouth

chews food (mechanical digestion)

teeth

food is pushed to the stomach using peristalsis

salivary glands

digestion begins here

tongue

helps push food to the esophagus

esophagus

releases saliva

stomach

produces bile which aids in digestion of fats

liver

most of the water is absorbed into body here; undigested part hardens

pancreas

stores bile

gallbladder

breaks down food more and allows the body to absorb nutrients

small intestine

food is mixed with acids and churned

large intestine

produces enzymes and is located below the stomach

Digestive System and Excretory System

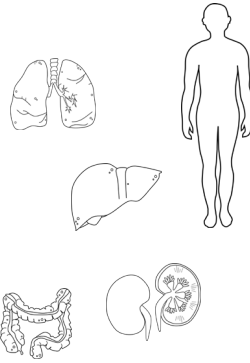


Create your own digestion story!

Write a story about the journey of food through your body.
Don't forget all the organs involved!

Digestive System and Excretory System

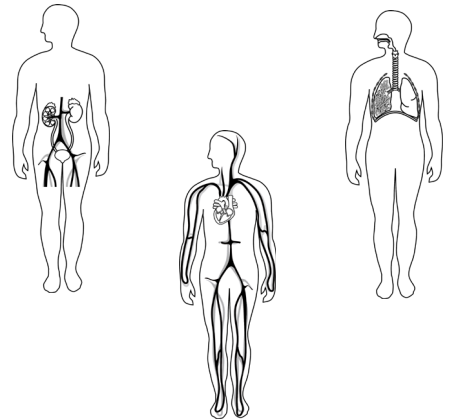
Excretory System



- _____ wastes
- maintains the _____ of fluids and salts in your body

Wastes

- Wastes that _____ removed include carbon dioxide, water, salt, urea and uric acid.
- All excreted wastes _____ at some time in the blood.

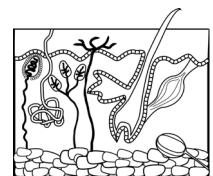
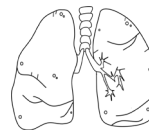


Many people _____ the name urinary system and excretory system synonymously.

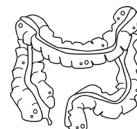
However, although the urinary system is a _____ part of the excretory system, there are other systems involved with releasing wastes as well.

Structures of the Excretory System

urinary system



skin



large intestine



liver

Digestive System and Excretory System



Which of the following is NOT a part of the excretory system?
(bubble in answer)

☐ lungs

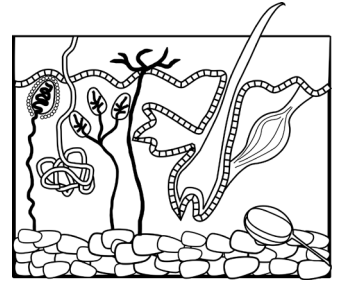
☐ kidneys

☐ skin

☐ brain

Skin

Wastes such as ----- water,
salt, urea and uric acid are removed
from the body in sweat.



Circle the correct answer.

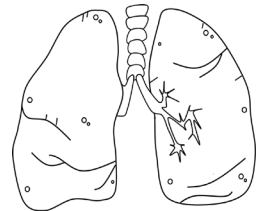
Wastes are removed from skin
through sweat.

True

False

Lungs

----- carbon dioxide waste is
removed from the body when we exhale.



Which of the following is a waste product that the lungs excrete?
(bubble in answer)

☐ bile

☐ carbon dioxide

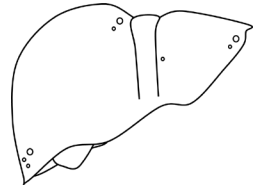
☐ oxygen

☐ sweat

Digestive System and Excretory System

Liver

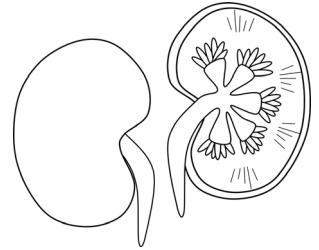
- breaks down substances in the _____, including toxins
- by-products are excreted into _____ or blood



Liver _____ to the Urinary System

The liver produces **urea** and **uric acid** as a by-product.

They are _____ to the kidneys to be processed.

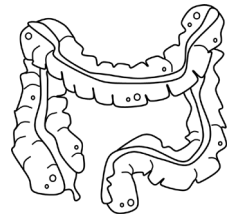


What is one function of the liver?
(bubble in answer)

- ☐ breaking down toxins
- ☐ producing sweat
- ☐ storing urine
- ☐ supporting the shape of the body

Large Intestine

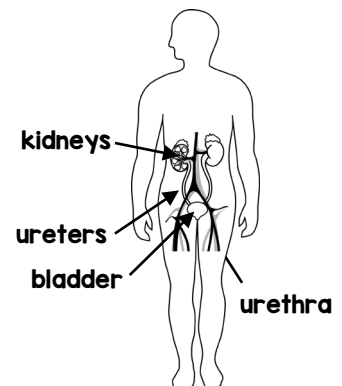
- removes solid, _____ food from the body after it passes through the digestive system
- waste is _____ in rectum until it is excreted from the body as solid waste



Urinary System

The kidneys _____ the blood (nephrons) to form urine, which is excess water, salt, urea, and uric acid.

- The urine _____ to the bladder through the ureters.
- Urine exits the body through the urethra.



Digestive System and Excretory System



Circle the correct answer.

The structures in the kidneys that filter the blood are called nephrons.

True

False



Describe how the excretory system ties in many body systems together.

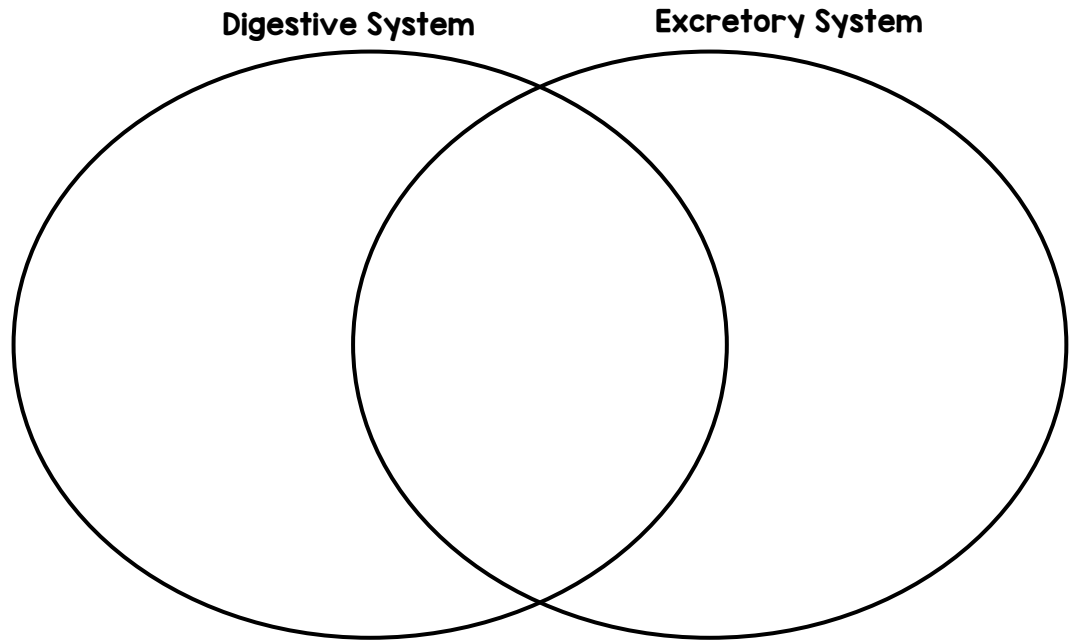


Describe something new you learned about the excretory system during exploration.

Digestive System and Excretory System



In the diagram below, compare the digestive system and excretory system.



DON'T FORGET TO REVISIT THE ANTICIPATION GUIDE!

SUMMARY