

Study Guide - Human Body Systems**Respiratory and Digestive Systems****A. Fill-in-the-Blank**

- a. Which system works to break down food into useable materials?

- b. Which system brings oxygen to your body and removes carbon dioxide?

- c. Which system disposes liquid wastes from the body? _____
- d. The larynx, trachea and lungs are all part of which system? _____
- e. The voice box is also known as the _____.

B. Fill-in-the-Blank

- a. Digestive organ responsible for producing bile _____.
- b. Digestive organ responsible for absorbing water from food material
_____.
- c. Digestive organ responsible for absorbing most of the nutrients from food material _____.
- d. Asthma is a disorder that mainly affects which system _____.
- e. The liquid waste removed by the urinary system is called _____.

C. What is the path your dinner will take as it travels through the digestive system? (List the organs used in order.)

D. Explain how CO_2 and O_2 are exchanged in the lungs using the following terms: inhale, exhale, CO_2 , O_2 , mouth, trachea, bronchi, alveoli.

E. Compare and contrast chemical and mechanical digestion in the mouth. (You can use a Venn diagram.)

F. Predict what would happen to the body if the kidneys were to stop working.

G. Predict what would happen to the body if the liver stopped working.

H. Matching

- Muscle responsible for breathing _____
- Tube-like structure that moves food from the mouth to the stomach

- Small finger-like structures found in the lining of the small intestine, these work to absorb nutrients from the food _____
- Tube-like structure that moves air from the mouth to the lungs

- Type of digestion that chemically changes food in the system _____

I. Matching

- Type of digestion that produces only physical changes in food

- Excretory organ that works to filter wastes and poison from the blood

- Wave-like motion that moves food down the digestive tract _____
- Small, round sacs in the lungs where CO_2 and O_2 are exchanged

- Structure that directs air down the respiratory path and food down the digestive path _____

Word Bank for Parts H and I

A. Mechanical	B. Kidney	C. Alveoli	D. Trachea
E. Peristalsis	F. Villi	G. Diaphragm	H. Epiglottis
I. Chemical	J. Esophagus		

Circulatory and Excretory Systems

A. Define **circulatory** system:

B. Define **excretory** system:

Word Bank for Part C

- | | |
|----------------------|-----------------|
| a. white blood cells | b. blood |
| c. red blood cells | d. heart attack |
| e. plasma | f. septum |

C. Fill-in-the-Blank

- _____ In blood, _____ pick up oxygen in the lungs and deliver it to cells throughout the body.
- _____ The circulatory system is made up of the heart, _____, and blood vessels.
- _____ The watery part of the blood that holds gases, nutrients, hormones, and chemicals is called _____.
- _____ The _____ is the wall inside the heart that separates oxygenated blood from deoxygenated blood.
- _____ The _____ are the cells that fight infection.
- _____ A _____ happens when the vessels carrying blood to the heart get clogged stopping blood from flowing to the heart.

- D. The following paragraph describes the path that blood takes through the body. Write terms in each blank to make a correct description of the process.

The heart is responsible for pumping blood so that it will travel throughout the vessels of the body. As blood leaves the heart, it travels through vessels called ___a.____ which carry it to the cells of the body.

As the blood travels further from the heart, it moves into smaller vessels called ___b.____. In these vessels, oxygen is absorbed into body cells where it is used to perform the functions of the body. In exchange, the blood picks up carbon dioxide waste that will be removed through the ___c.____.

It is time for the blood to head back towards the heart and it is now considered ___d.____ because it is low in oxygen and rich in carbon dioxide. The capillaries send the blood into larger vessels called ___e.____ that will return the blood to the heart.

When blood returns to the heart, it will enter collecting chambers called ___f.____. These chambers send the blood through valves to the pumping chambers called ___g.____. These pumping chambers are very muscular because they must pump the blood to either the lungs or the rest of the body.

Blood that has been sent to the lungs must be refreshed so that it is ___h.____ and can be pumped throughout the body; starting the cycle all over again.

- a. _____
- b. _____
- c. _____
- d. _____

- e. _____
- f. _____
- g. _____
- h. _____

Reproductive System

- A. What is the function of the reproductive system?
- B. Define testes.
- C. Define ovaries.
- D. The union of the sperm and egg is called _____. When this occurs, an embryo will attach to the wall of the _____ for a period of 9 months.
- E. The structure that connects the ovaries to the uterus is called the _____.