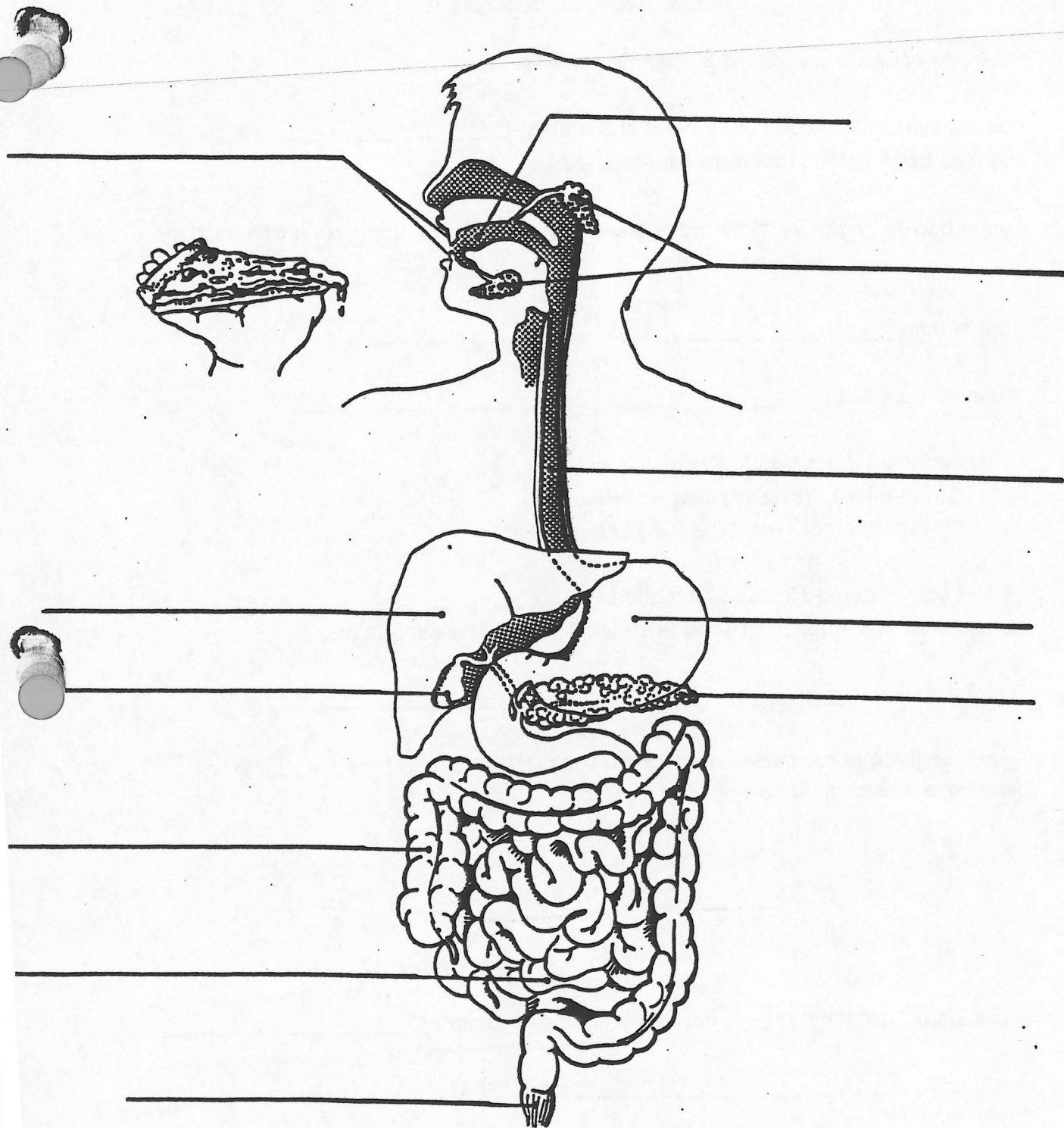


our Digestive System

Name _____

Label the parts of your digestive system.



WORD BANK

pancreas
stomach
esophagus
salivary glands

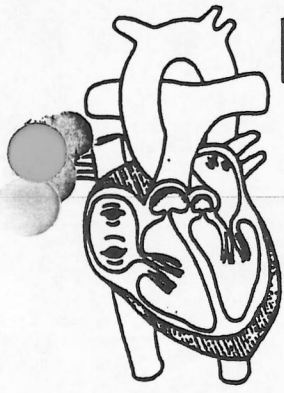
liver
mouth
teeth
anus

gall bladder
large intestine
small intestine

Topic 3.1 Digestive System

Fill in the blanks in the following point form notes:

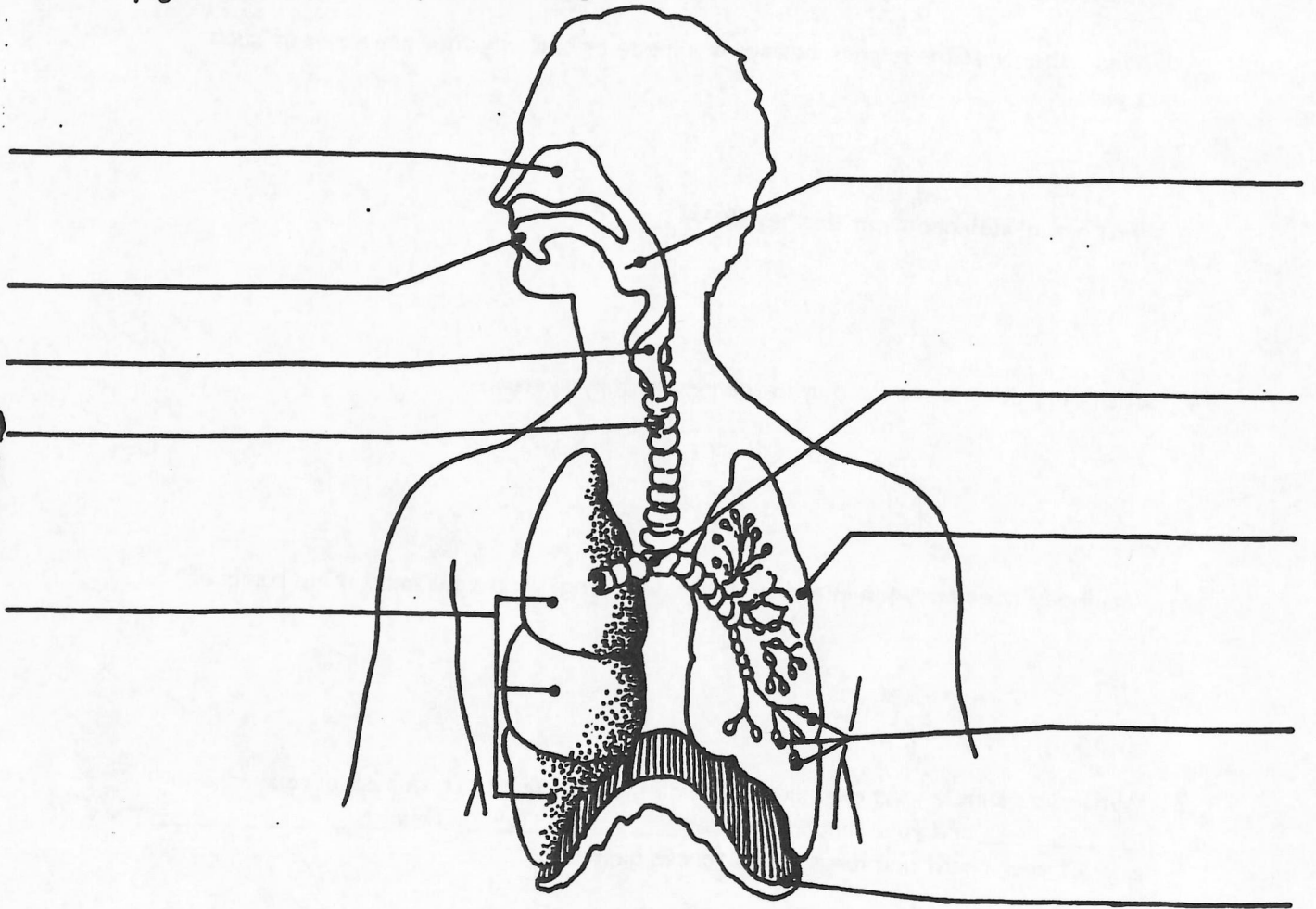
- organ systems in your body have the ability to _____ to changes both within and outside your body.
- your body's organ systems work together and depend upon each other; they _____ with each other.
- lipids are _____ and _____.
- carbohydrates are _____ and _____.
- two types of digestion:
 1. chemical - (describe and give an example)
 2. mechanical - (describe and give an example)
- when you chew, a flap of skin called the _____ moves across your windpipe, and food is funnelled into the esophagus.
- peristalsis is _____.
- gastric juice is composed of four different things. (List the four things and describe what each thing does)
 - 1.
 - 2.
 - 3.
 - 4.
- the small intestine is _____ meters long and it absorbs _____.
- villi are _____ that _____.
- microvilli _____.
- the large intestine is _____ meters long and it absorbs _____, _____ and _____.



The Respiratory System

Your body needs oxygen in order to survive, and it also must rid itself of carbon dioxide. Both of these needs are met by breathing. Breathing is the process your respiratory system uses to move air in and out of your lungs.

Using your knowledge of the *Respiratory System* and your Science in Action textbook, pages 132-134, correctly label the diagram below.



Unit B: Cells and Systems
Topic 3.2 Respiratory System
Vocabulary Exercise

- 1) Breathing occurs because of your rib cage and _____ muscles. When you inhale these muscles contract, pulling your _____ up and your _____ down.

- 2) A. The respiratory system draws air into the lungs through a series of tube-like passageways called _____.

B. Describe what these passageways are made of and why they are made of such material?

- 3) What are alveoli and what do they do?

- 4) What role do bronchioles play in the respiratory system?

- 5) Your body needs oxygen in order to survive. What waste gas must it rid itself of?

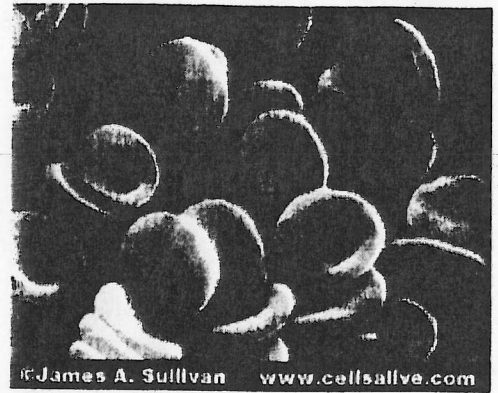
- 6) When you exhale your diaphragm and rib muscles relax. In this case, your ribs go _____ and your diaphragm goes _____. This _____ the size of your chest and lungs which forces air out.

- 7) Describe, in order, the pathway of air into the lungs.

Parts of Blood

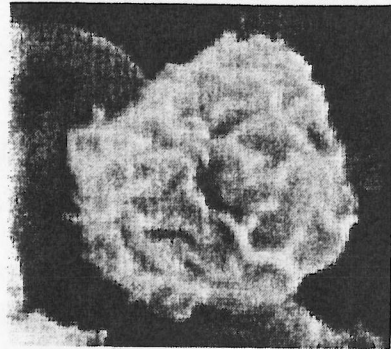
Part:

Function:



Part:

Function



Part:

Function



Part (fluid):

Function



Circulatory System

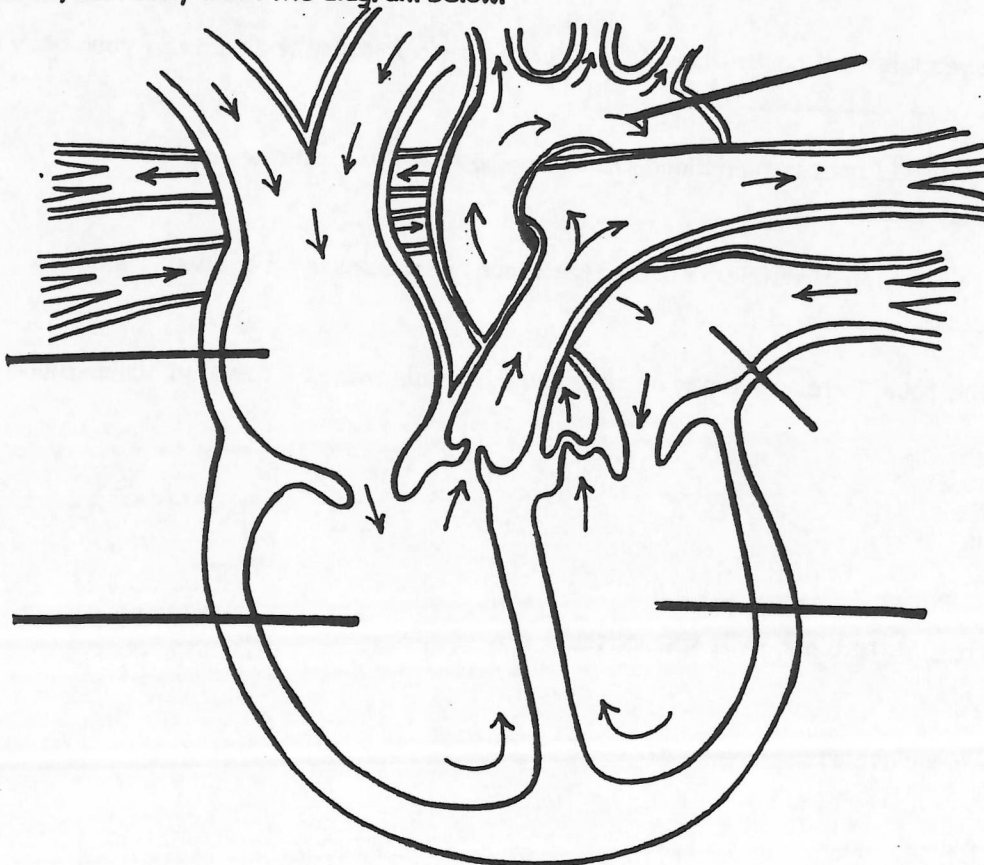
1. Using your own words, describe the role of the *left side* and *right side* of your heart.

2. Each side of the heart is divided into two chambers. What are these chambers called?

_____ and _____

3. Vessels that carry blood away from the heart are called _____. Blood is returned to the heart from the body in _____. Nutrients and gases are exchanged in special vessels called _____.

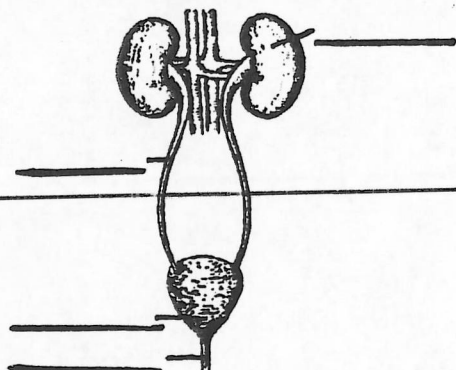
Using your knowledge of the *Circulatory System* and your *Science in Action* textbook, pages 135-140, correctly label the diagram below.



The Excretory System

Directions: Use Pages 141-145 in your textbook to complete the following.

1.) Label the following diagram:



2.) Define Excretion:

3.) When cells break down proteins, they produce _____.
The liver then takes that ammonia out of the bloodstream and converts it into _____.

4.) Every kidney is about _____ long. They act as _____ to the blood by straining out _____, _____, and _____ and they produce _____.

5.) The kidney is made up of millions of _____.

6.) Glands in your skin remove extra salt in your body by _____.

7.) People with diabetes will often have _____ in their urine. People with kidney failure will often have _____ in their urine. People with kidney dysfunction can use a technology called a _____ that performs the job of the kidney.

Formation of Urine

- 1) The bladder expands and can hold _____ of urine. When it is full, the bladder pushes the urine out through the _____.
- 2) The blood enters the kidney by the _____.
- 3) The ureter transports the urine from the kidney to the _____.
- 4) The nephrons filter the blood.
- 5) The clean filtered blood returns to the body through the _____ and the urine flows out of the kidney through the _____.

The steps listed above (1-5) are NOT in the correct order for the formation of urine. Place these steps in the correct order starting with the first step involved in the formation of urine and ending in the last step.

(first step) _____ (last step)



THE NERVOUS SYSTEM

NAME: _____

DATE: _____

1) The nervous system is made up of millions of specialized cells called _____.

2) List and describe the roles of the two main divisions of the nervous system?

3) On a diagram, draw and label the 2 main divisions of the nervous system.

4) Compare the roles of the Sensory neurons and the Motor neurons.

5) What is the main difference between the Somatic Nervous System and the Autonomic Nervous System ?

Label the Neuron

Read the definitions, then label the neuron diagram below.

axon - the long extension of a neuron that carries nerve impulses away from the body of the cell.

axon terminals - the hair-like ends of the axon

cell body - the cell body of the neuron; it contains the nucleus (also called the soma)

dendrites - the branching structure of a neuron that receives messages (attached to the cell body)

myelin sheath - the fatty substance that surrounds and protects some nerve fibers

node of Ranvier - one of the many gaps in the myelin sheath - this is where the action potential occurs during saltatory conduction along the axon

nucleus - the organelle in the cell body of the neuron that contains the genetic material of the cell

Schwann's cells - cells that produce myelin - they are located within the myelin sheath.

