

Name Key  
Date \_\_\_\_\_

### Cell Organelle Vocabulary Review

- 1) cell the smallest unit that can perform life processes.
- 2) homeostasis maintenance of a constant internal state in a changing environment
- 3) multicellular made up of many cells
- 4) unicellular an organism made of one cell
- 5) organelle one of the small bodies in a cell's cytoplasm that perform a specific function
- 6) nucleus organelle that contains cell DNA and has role in cell functions like growth, metabolism, and reproduction
- 7) cell membrane layer that covers a cell's surface and surrounds the cell. It acts as a barrier between inside of cell and cell's environment
- 8) cytoplasm the gel-like fluid inside of a cell where organelles are
- 9) mitochondria a cell organelle that provides energy for the cell; it is surrounded by two membranes and is the site of cell respiration (in eukaryotic cells only)
- 10) vacuole storage area for the cell
- 11) ribosome cell organelle that has RNA and protein; conducts protein synthesis
- 12) lysosome a cell organelle that contains digestive enzymes
- 13) chloroplast made of green pigments, performs photosynthesis, stores sugars

- 14) cell wall rigid structure that surrounds the plant cell membrane and provides support for the cell
- 15) plant cell a eukaryotic cell that contains chloroplasts and has a cell wall
- 16) animal cell eukaryotic cells that lack chloroplasts and a cell wall
- 17) organ system a group of organs that work together to perform body functions
- 18) tissue a group of similar cells that perform a common function
- 19) organ a collection of tissues that carry out a function of the body
- 20) organism a living thing, can carry out life processes independently

homeostasis	lysosome	unicellular
cell membrane	animal cell	organelle
cell wall	organ	cytoplasm
chloroplast	ribosome	mitochondria
nucleus	multicellular	plant cell
organism	cell	organ system
tissues	vacuole	

<p>euglena</p> <p><b>7</b></p> <p>nucleus</p> <p>amoeba</p>	<p>organ</p> <p><b>6</b></p> <p>ribosome</p> <p>control center of the cell</p>	<p>tissue</p> <p><b>9</b></p> <p>organism</p> <p>organelle in which proteins are made</p>
<p>volvox</p> <p><b>4</b></p> <p>cytoplasm</p> <p>controls which substances enter and leave cell</p>	<p>mitochondria</p> <p><b>3</b></p> <p>rigid barrier for plant cells</p> <p>jellylike fluid inside cell</p>	<p>eukaryote</p> <p><b>8</b></p> <p>organelle</p> <p>tail like structure that enables a cell to move</p> <p>powerhouse of the cell</p>
<p>paramecium</p> <p><b>1</b></p> <p>lysosome</p> <p>cell organelle that stores materials</p> <p>cell</p>	<p>pseudopod</p> <p><b>2</b></p> <p>photosynthesis occurs here</p> <p>hairlike projections that are used for locomotion</p> <p>breaks down things inside cell</p>	<p>homeostasis</p> <p><b>5</b></p> <p>prokaryote</p> <p>chloroplast</p> <p>carries out specific function within a cell</p>

Name \_\_\_\_\_

# Unicellular Organisms Task Cards Answer Sheet

1 Euglena	2 Amoeba	3 Amoeba	4 Paramecium	5 Volvox	6 Paramecium
7 unicellular	8 flagella	9 Euglena Volvox	10 Volvox	11 cilia	12 true
13 pseudopod	14 Euglena	15 prokaryotic	16 eukaryotic	17 Euglena	18 cilia
19 one	20 multicellular organism	21 autotroph	22 flagellum	23 heterotroph	24 paramecium

**Genetics Challenge**

Name \_\_\_\_\_

1. The abbreviation for deoxyribonucleic acid is DNA.
2. A member of a gene pair that determines a specific trait is a(n) allele.
3. Mendel is known as the Father of Genetics.
4. A hybrid has genes that are different for a trait, such as Tt.
5. The actual gene makeup of an organism is its genotype.
6. Traits are physical characteristics of an organism that are passed down from one generation to the next.
7. Incomplete dominance is a condition in which neither of the two genes in a gene pair masks the other.
8. Chromosomes are rod-shaped structures found in the nucleus of every cell in an organism.
9. A dominant trait is expressed when two different genes for the same trait are present.
10. The physical appearance of a trait is called the phenotype.
11. Mendel experimented with pea plants to learn about genetics.
12. A homozygous gene pair consists of two dominant alleles or two recessive alleles.
- 13. According to the law of segregation one gene from each gene pair goes to each sex cell.
14. The traits of an organism are controlled by its genes.
15. A Punnett Square is a chart used to show the possible gene combinations in across between two organisms.
16. A heterozygous gene pair that consists of a dominant allele and a recessive allele.
- 17. The first filial generation is the offspring of the P, or parental, generation.
18. A Geneticist is a scientist who studies heredity.
19. A recessive trait seems to disappear when two different genes for the same trait are present.
20. Organisms inherit genes in pairs, one from each parent.
21. Genetics is the study of heredity.
- 22. The law of independent assortment states that each gene pair is inherited independently of the gene pairs for other traits.

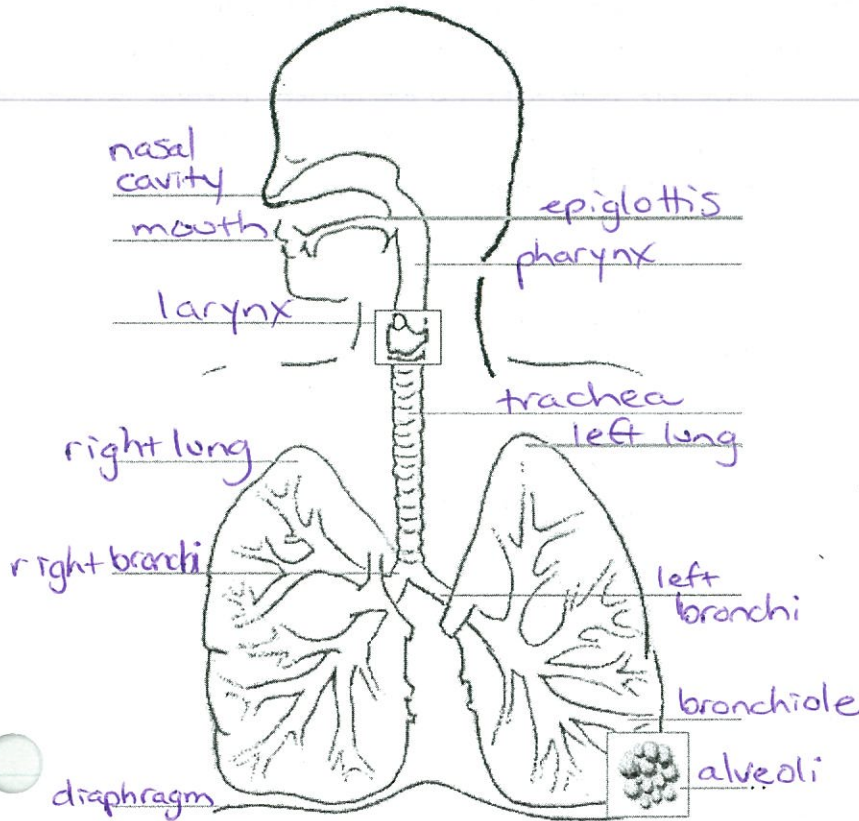
**Use the letters from the terms to complete the joke!**

Why did the teacher wear sunglasses?  
Because her pupils were so bright!

# Human Body Systems Review

## I. Respiratory System:

1. Label the following diagram



Word Bank:

trachea    pharynx    mouth    alveoli  
 nasal cavity    right lung    left lung  
 larynx    left bronchi    right bronchi  
 bronchiole    diaphragm    epiglottis

2. Describe the role of the diaphragm in the breathing process.

When the diaphragm contracts, the chest cavity gets bigger and air goes into the lungs. When it relaxes, the chest cavity gets smaller and air is forced out of the lungs.

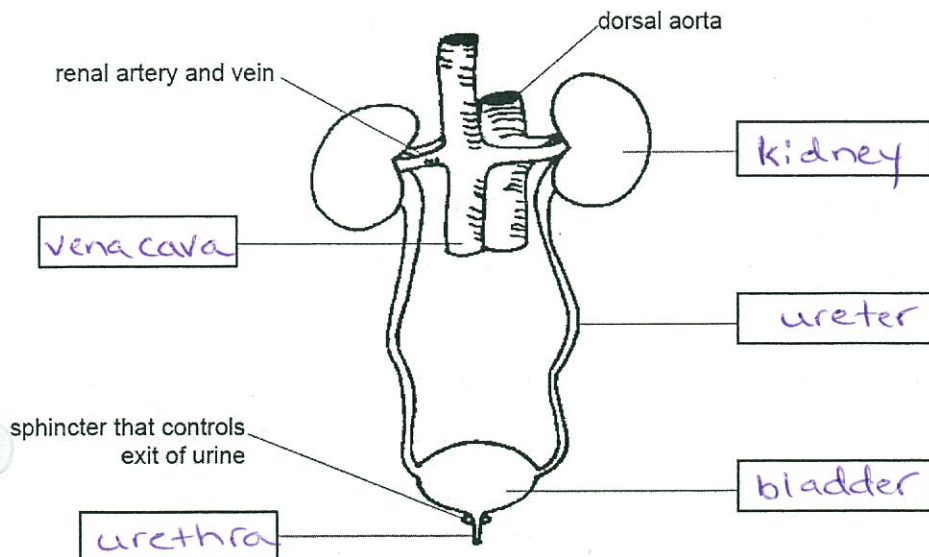
3. Explain how gas exchange occurs in the alveoli.

The alveoli are surrounded by capillaries. Across the membranes of the alveoli and the capillaries, oxygen and carbon dioxide are exchanged.

## II. Excretory System

1. Label the following diagram.

bladder    kidney    ureter    vena cava    urethra



2. Explain how the nephrons in the kidneys remove wastes from the body.

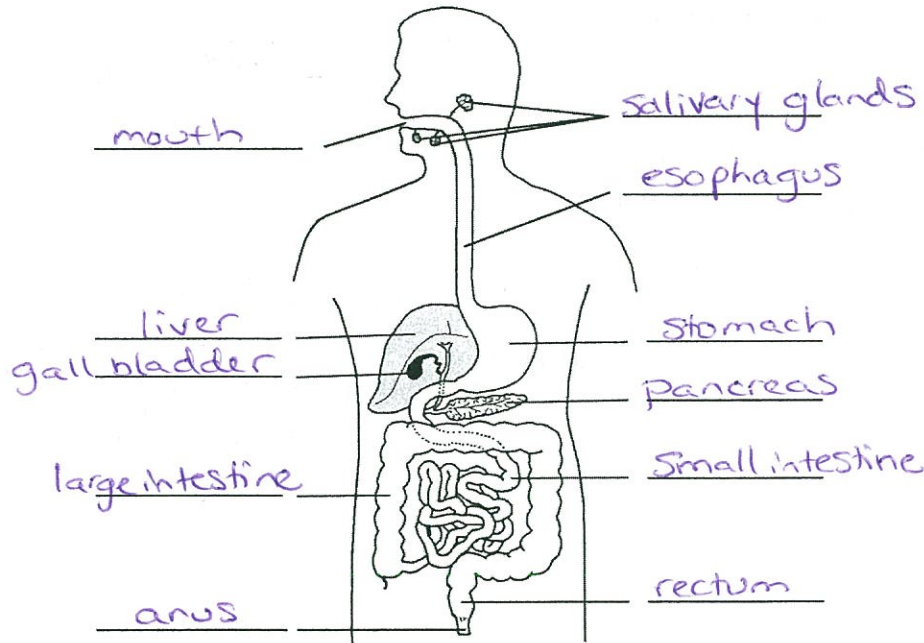
Each kidney has up to 1 million nephrons. Each is surrounded by capillaries. The nephron filters waste and excess water from the blood.

3. Complete the chart below for how the different body systems work to remove wastes from the body.

Body System	Waste(s) removed	How the system removes the wastes
respiratory	carbon dioxide	Sent to alveoli from capillaries and expelled
digestive	solid	Usable nutrients, excess water removed in intestines, rest is waste
urinary	liquid	Nephrons filter waste & excess H <sub>2</sub> O
Integumentary (skin)	H <sub>2</sub> O, sweat, salt, etc.	Through sweating

### III. Digestive System

1. Label the diagram with the organs of the digestive system: mouth, salivary glands, esophagus, gall bladder, large intestine, liver, pancreas, small intestine, stomach, rectum, anus.



2. Describe the path food travels through the digestive system beginning with the mouth.

mouth → esophagus → stomach → small intestine → large intestine → rectum → anus

3. Describe the role of the pancreas, the gall bladder, and the liver in digestion.

Add chemicals that aid in digestion.

4. Describe chemical and mechanical digestion including their role in digestion and where they take place.

chemical - mouth w/ saliva, stomach w/ enzymes and digestive acids

mechanical - mouth w/ teeth, stomach and small intestine w/ peristalsis (muscle contractions)

5. Explain peristalsis and its role in digestion.

Peristalsis is the rhythmic muscular contractions that mechanically digest food and move it through the digestive system.