

Name: _____

Date: _____

HUMAN BODY SYSTEMS

Human Body Organs and Systems

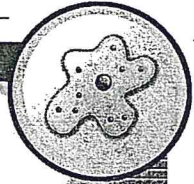
WORD SEARCH

DIRECTIONS: Find the human body organs and systems vocabulary words in the word search below. Words can be found down, across, and diagonally. Then, on a separate piece of paper, write sentences for five of the words.

WORD BANK

cell	digestive	circulatory	brain	small intestine
tissue	muscular	excretory	spinal cord	liver
organ	nervous	heart	blood	kidneys
organ system	immune	lungs	stomach	veins
skeletal	respiratory	skin	large intestine	arteries

Y F P I Q X K W K N N E X C R E T O R Y
 C Y L U P Q P K A I C Z H S S D K S Z D
 V G C C A Q Y G Y M G E S E S F Y J O L
 S F A U Y G R M P X U E L G A N H O J A
 J K F S I O C B N E I S N L E R L S S R
 O T I S T R C S P R S U C E E B T I M G
 F U L N C O K B E L L V J U L Z M T A E
 S H R I V H M T T D X E X Y L E W I L I
 I J A C D O R A R I Y I U R T A P S L N
 E G R L I A M O C R A N T S N D R S I T
 S W I W U R C U O H B S Y E I M M U N E
 E C E V H L C T P K R S K J P D H E T S
 J I S K A U A U B S N W B X K I L S E T
 C W B N I R N V L A T N K I Z G D K S I
 F C I C I D U E G A I R G T E E F E T N
 I P X P P U N R R A T T A E D S J L I E
 S M S Q P Y O E R V G O W L M T E E N E
 G E T C V V X B Y N O H R T W I L T E I
 R T Z L I V E R M S K U I Y E V Q A V F
 M O N R C S C V V U U J S I D E K L A X



Organ Systems of the Human Body

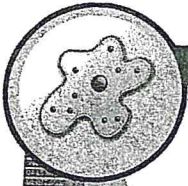
MATCHING / MAGIC NUMBER

DIRECTIONS: Match each definition with the correct human body system. Then, copy the number from each answer into the box below with the matching letter. When you add three numbers down, across, or diagonally, the sums should all be the same.

- | | |
|---|-----------------|
| 1. _____ made up of several types of organs that help the body perform different jobs | a. muscular |
| 2. _____ allows the body to move | b. excretory |
| 3. _____ breaks down food and absorbs nutrients | c. immune |
| 4. _____ helps protect the body from disease and infection | d. skeletal |
| 5. _____ controls the body's functions and senses the environment outside the body | e. nervous |
| 6. _____ takes oxygen into the body and releases carbon dioxide | f. digestive |
| 7. _____ supports the body and protects its internal organs | g. respiratory |
| 8. _____ uses blood to bring nutrients and oxygen to cells of the body | h. organ system |
| 9. _____ removes wastes | i. circulatory |

a.	b.	c.
d.	e.	f.
g.	h.	i.

MAGIC NUMBER = _____



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HUMAN BODY SYSTEMS

Name That Body System

W H O A M I ?

DIRECTIONS: Each system of the body has a specific job. It works together with other body systems to keep the body healthy. Match each body system to its description below.

WORD BANK

muscular

circulatory

digestive

skeletal

nervous

respiratory

1. I bring supplies, such as food and oxygen, to cells. I also pick up wastes, such as carbon dioxide, from these cells and deliver them to the lungs.

I help fight diseases with special blood cells.

Some of my organs are the heart, arteries, and veins.

Who am I? _____

2. I take food into the body and break it down into smaller pieces. I also get rid of unused food materials.

I place nutrients in the blood stream, which carries them to all of the body's cells.

Some of my organs are the stomach, esophagus, large intestine, and small intestine.

Who am I? _____

3. One of my jobs is to protect the body's internal organs. I also produce red and white blood cells.

I give the body shape and work with muscles to help the body move, jump, and stand.

Some of my organs are the skull, femur, vertebrae, and rib cage.

Who am I? _____

4. One of my main jobs is to help the body move, walk, run, and stretch.

I also help blood move through the body, push food down the esophagus, and help the stomach crush food into smaller pieces.

Some of my organs are the stomach, heart, biceps, and triceps.

Who am I? _____

5. I take oxygen into the lungs. I place this oxygen in the blood stream.

I also remove carbon dioxide from the body.

Some of my organs are the lungs, trachea, nose, and mouth.

Who am I? _____

6. My main job is to help the body sense its environment. I also control all of the other systems of the body.

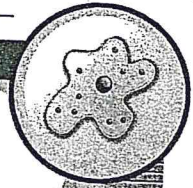
When the body comes into contact with hot objects, I use reflexes to prevent bodily injury.

Some of my organs include the brain, spinal cord, and nerves.

Who am I? _____

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HUMAN BODY SYSTEMS

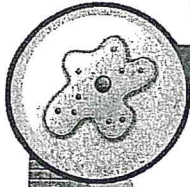


Human Organs and Organ Systems

CATEGORIZING

DIRECTIONS: Place a check mark in the box to show which body system each organ is a part of. Remember, an organ can work with several body systems.

Organ	Skeletal	Digestive	Muscular	Nervous	Immune	Respiratory	Circulatory	Excretory
skull								
femur								
vertebrae								
stomach								
intestines								
mouth								
esophagus								
kidneys								
eyes								
brain								
spinal cord								
nose								
skin								
lungs								
trachea								
epiglottis								
heart								
arteries								
capillaries								
veins								



Name: _____ Date: _____

HUMAN BODY SYSTEMS

How Does Exercise Affect Your Heart Rate?

INQUIRY INVESTIGATION

What causes your **pulse**? Each time the ventricles of the heart contract, or get smaller, blood is forced into the arteries. Each beat of the heart makes the arteries stretch, which causes the pulsing sensation that you feel. As blood is being pushed out of the heart with great force, it moves very quickly so that it can reach parts of the body that are far from the heart.

In this activity, you will find your pulse rate and calculate the number of times that your heart beats per minute. Then, you will look at the class data to see if boys and girls have different pulse rates.

PROCEDURE:

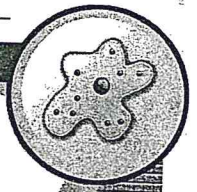
1. Sit in a chair and relax for 1 minute. Use your index and middle fingers to locate your pulse on your wrist or neck.
2. Count the number of times that you feel your pulse for 15 seconds. Multiply this number by 4. This will be your resting pulse rate for 1 minute. Record this number on the chart below.
3. Jog in place for 1 minute. After 1 minute, stop jogging and use your index and middle fingers to locate your pulse on your wrist or neck. Calculate your pulse rate as you did in step 2. Record this number in the Active Pulse Rate column.
4. Repeat steps 1–3 two additional times. Then, calculate your average heart rate by adding the three trials and dividing by 3.

Trial	Resting Pulse Rate	Active Pulse Rate
1		
2		
3		
Average		

5. Your teacher will create two columns on the board, one for boys and one for girls. Write your average resting and active pulse rates in the correct columns. Then, calculate the average pulse rate for boys and girls in your class. Do boys and girls have different pulse rates? How can you explain this?

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HUMAN BODY SYSTEMS



Amazing Human Body Math Facts

MATH SKILLS

DIRECTIONS: Answer the following math problems. Use the space below each problem or a separate piece of paper to show your work.

1. When the human brain is developing, it creates 250,000 neurons (brain cells) a minute. How many brain cells does it create in one day?

Answer: _____

4. 15,000,000 blood cells are destroyed every second to make room for new blood cells. How many blood cells are destroyed every hour?

Answer: _____

2. The average human head weighs about 8 pounds. If an average man weighs 160 pounds, what percentage of his weight does his head make up?

Answer: _____

5. An average human body is 80% water. How many pounds of water are found in a 150-pound human?

Answer: _____

3. Average humans blink their eyes 6,205,000 times each year. If a person is awake for 16 hours a day, how many times will she blink a day? An hour? A minute?

Answers: _____

6. During a 24-hour period, average humans will breathe 23,000 times. How many times will they breathe in one year? 20 years? 50 years?

Answers: _____

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Date: _____

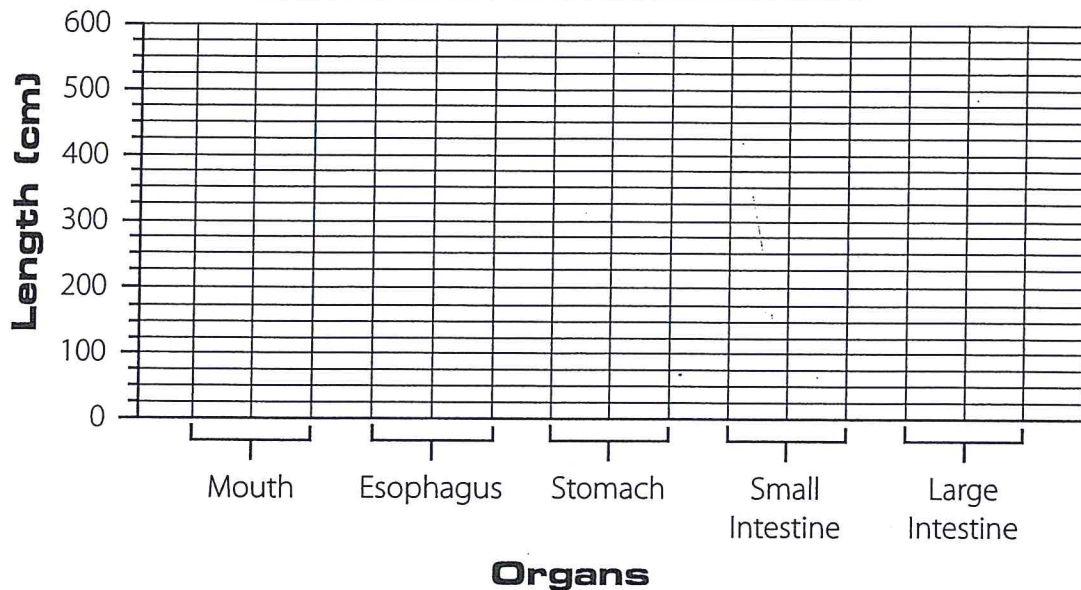
HUMAN BODY SYSTEMS

Digestion Math

GRAPHING AND ANALYZING DATA

DIRECTIONS: Food travels a long distance through the digestive system. Use the following information to create a bar graph. Then, answer the questions below.

Organ	Length (cm)
Mouth	7.5 cm
Esophagus	25 cm
Stomach	25 cm
Small intestine	600 cm
Large intestine	150 cm



1. What is the total distance that food will travel through the digestive system?

Answer: _____

2. What percentage of the distance in the digestive system does the small intestine make up?

Answer: _____

3. What percentage of the distance in the digestive system does the large intestine make up?

Answer: _____

4. How many times longer than the large intestine is the small intestine?

Answer: _____

