

7th Grade Science Packet

Week: March 23 – March 27, 2020

Name: _____

Class: _____

Body Systems

circulatory system - The body system that transports oxygen, food, and waste through the body. Heart, blood vessels, and blood

respiratory system - The body system that helps the body use air that is inhaled. Lungs are the main organ of the respiratory system.

skeletal system - The body system that serves as a support framework, protects inner body parts, and helps with movement. bones: the skull and rib cage offer protection to organs.

muscular system - A body system that helps a person move and maintain posture. A muscle is a bundle of tissues that moves certain parts of the body.

digestive system - The body system that breaks food down so that it can be used by the body. mouth, esophagus, stomach, and intestine

excretory system - The body system that separates and eliminates waste from the blood or tissues or from active protoplasm, usually in the form of sweat or urine.

reproductive system - The body system that enables living beings to produce offspring.

integumentary system - The body system composed of skin, hair, and nails. Skin is the body's largest organ.

nervous system - The body system for communication. composed of the brain, spinal cord, nerves and neurons.

endocrine system - The body system made up of the glands that produce hormones. pituitary gland, thyroid gland

Match definition to correct word.

- | | |
|-------------------------|--|
| 1. Circulatory System | a.) Body system composed of skin, hair, nails |
| 2. Respiratory System | b.) Composed of brain, spinal cord, nerves, neurons; controls communication |
| 3. Skeletal System | c.) Breaks down food, mouth, esophagus, stomach, intestines |
| 4. Muscular System | d.) Transports oxygen, food, waste through the body; heart, blood vessels, blood |
| 5. Digestive System | e.) Helps body use air; lungs |
| 6. Excretory System | f.) Made up of glands that produce hormones; pituitary gland, thyroid gland |
| 7. Reproductive System | g.) separates and eliminates waste from blood or tissues; sweat, urine |
| 8. Integumentary System | h.) framework of body, protects inner parts, helps with movement; bones, skull, rib cage |
| 9. Nervous System | i.) enables living beings to produce offspring |
| 10. Endocrine System | j.) helps a person move; muscles |

****Watch the BrainPOP videos on the following Body Systems. Then, complete the worksheet.****



The Human Body

Major Human Body Systems

Please complete the chart below by filling out all of the necessary information for each Human Body system.

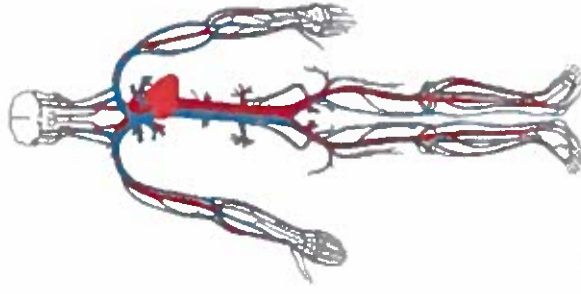
System	Organs/Parts Involved	Function/How it Works
Circulatory		
Respiratory		
Immune		
Digestive		
Muscular/Skeletal		
Nervous		

Circulatory System Video Quiz

Name:

Date:

1. Veins carry oxygen rich blood through the aorta to other parts of the body.
 - A. true
 - B. false
2. Are capillaries the largest or the smallest blood vessels in your body?
 - A. smallest
 - B. largest
3. Which artery is your body's main and largest artery?
 - A. pulmonary artery
 - B. gastric artery
 - C. aorta
4. Blue blood cells and platelets kill germs in your blood plasma.
 - A. true
 - B. false
5. Your veins have _____ to keep your blood flowing in one direction.
 - A. plasma
 - B. valves
 - C. waste

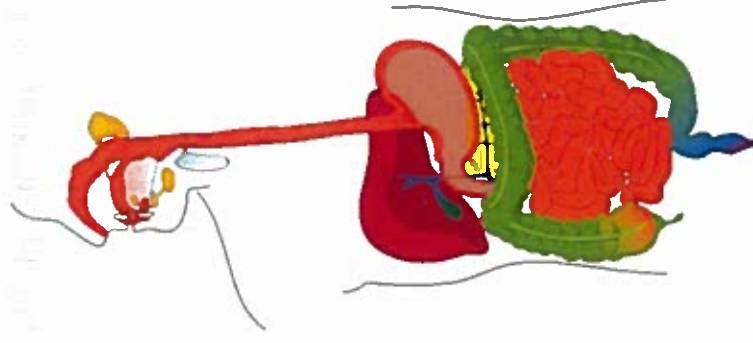


Digestive System Video Quiz

Name:

Date:

1. What is the tube connecting your mouth to your stomach?
 - A. trachea
 - B. esophagus
 - C. small intestine
2. One purpose of the stomach is to store food.
 - A. true
 - B. False
3. Your body absorbs many nutrients from the small intestine.
 - A. true
 - B. false
4. Your liver acts as a _____ for harmful substances.
 - A. filter
 - B. sponge
 - C. pump
5. Your food becomes waste in the area of the large intestine called the _____.
 - A. pancreas
 - B. colon
 - C. mouth



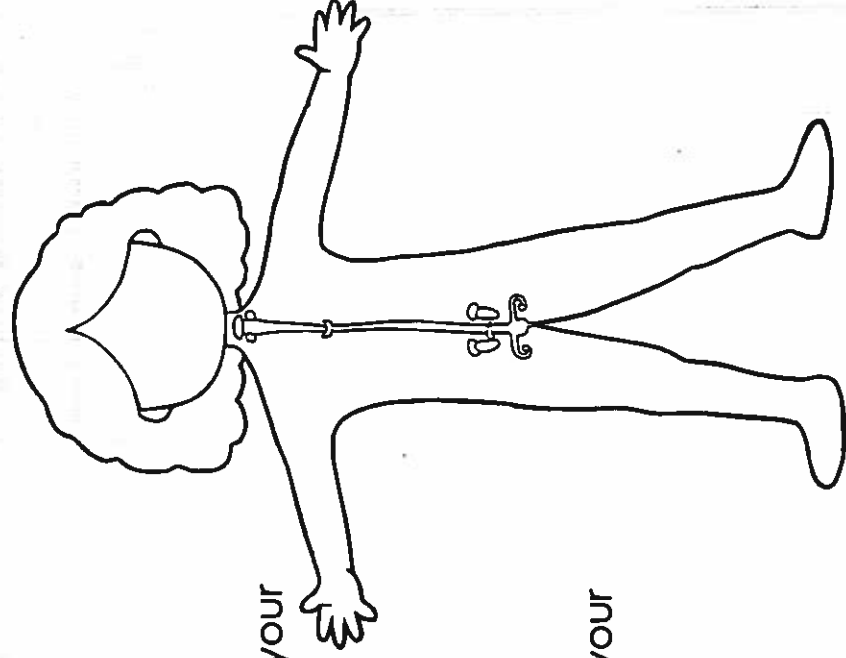
Endocrine System Video Quiz

Name:

Date:

1. What chemicals does the brain use to control certain body processes?

- A. metabolism
- B. hormones
- C. thymus gland



2. What main process does your thyroid gland control?

- A. blood pressure
- B. growth
- C. metabolism

3. Which hormone controls your blood sugar?

- A. adrenaline
- B. gastrin
- C. insulin

4. The adrenal glands produce the hormone that prepares your body to fight or to flee when you are stressed.

- A. true
- B. false

5. Your body's most important gland in your endocrine system is the _____?

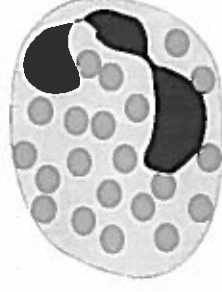
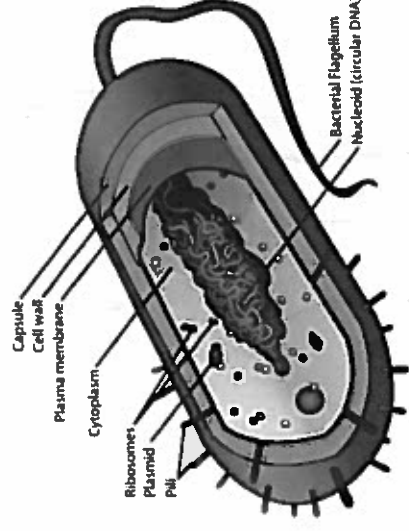
- A. parathyroid
- B. pituitary
- C. adrenal

Lymphatic and Immune Systems Video Quiz

Name:

Date:

1. The main function of the thymus gland is to produce _____.
A. blood
B. T-cells
C. bacteria
2. Lymph nodes contain white blood cells and lymph fluid.
A. true
B. false
3. What is an antigen?
A. blood cell
B. immunity
C. foreign substance
4. When your body builds a resistance to a virus, it is called an acquired _____.
A. deficiency
B. immunity
C. infection
5. What can expand to nearly twice its size when fighting a disease?
A. nose
B. lymph node
C. skin

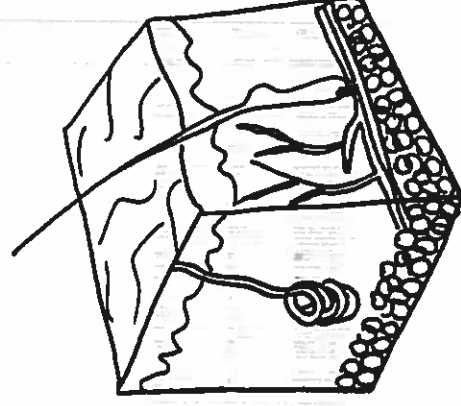


Integumentary System Video Quiz

Name:

Date:

1. Your skin produces Vitamin E.
 - A. true
 - B. false
2. Your outer-most layer of skin is the _____.
 - A. follicle
 - B. epidermis
 - C. sweat gland
3. What is the tough protein substance which comprises your hair and nails?
 - A. follicles
 - B. skin
 - C. keratin
4. The skin shields you from the sun's ultraviolet rays.
 - A. true
 - B. false
5. The hypodermis is mostly _____, which insulates and protects.
 - A. hair
 - B. fat
 - C. skin



Muscular System Video Quiz

Name: _____

Date: _____

1. Smooth muscles are also voluntary muscles.

- A. true
- B. false



2. Your heart is a cardiac muscle type.

- A. true
- B. false

3. When your triceps muscles contract, your arm _____.

- A. brakes
- B. straightens
- C. drags

4. Muscles are connected to bones by _____.

- A. muscles
- B. tendons
- C. ligaments

5. Three muscle types are cardiac, smooth and _____.

- A. skeletal
- B. heart
- C. tendons



Nervous System Video Quiz

Name:

Date:

1. Your spinal cord is part of your central nervous system.

- A. true
- B. false



2. Cranial nerves and spinal nerves are your peripheral nervous system.

- A. true
- B. false

3. Nerves that control heartbeat and digestion are _____ nerves.

- A. large
- B. autonomic
- C. chemical

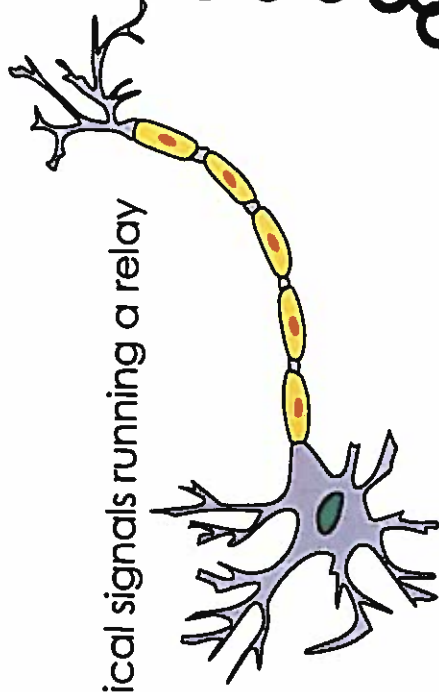


4. What type of nerves connect directly to the brain?

- A. eyes
- B. cranial
- C. spinal

5. _____ are the chemical signals running a relay across synapses.

- A. nerves
- B. dendrites
- C. neurotransmitters

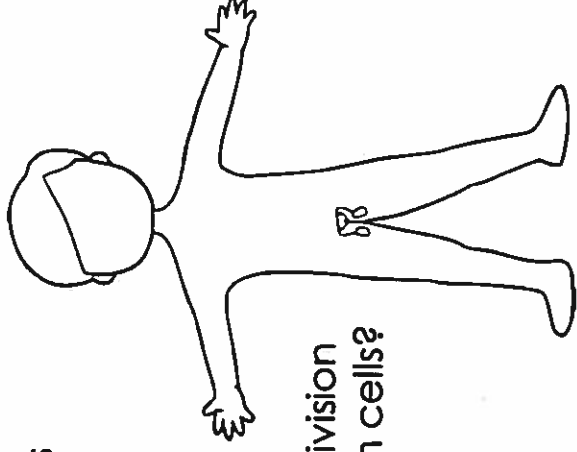
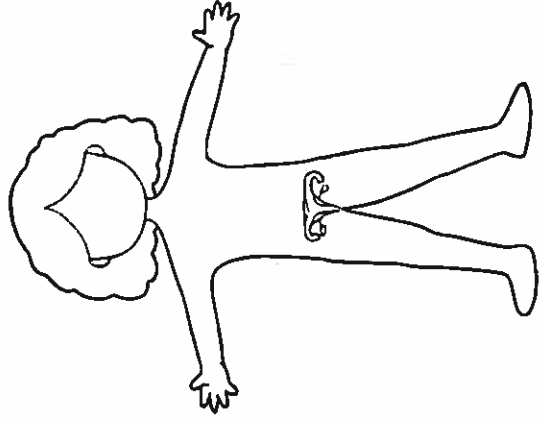


Reproductive System Video Quiz

Name:

Date:

1. Where does a fertilized egg implant and develop?
 - A. fallopian tube
 - B. uterus
 - C. ovary
2. What is the process called when an egg is released into the fallopian tube?
 - A. conception
 - B. fertilization
 - C. ovulation
3. What is produced in the male testes by the millions?
 - A. sperm
 - B. eggs
 - C. bacteria
4. Fertilization occurs when sperm joins with an egg.
 - A. true
 - B. False
5. What is the unique method of cell division required to produce egg and sperm cells?
 - A. chromosomes
 - B. meiosis
 - C. mitosis



Respiratory System Video Quiz

Name: _____

Date: _____

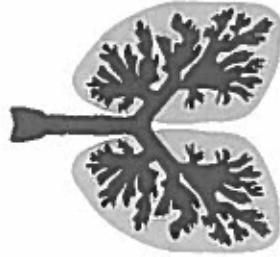
1. What are the main organs of the respiratory system?

A. nose
B. alveoli
C. lungs



2. The trachea filters dust.

A. true
B. false



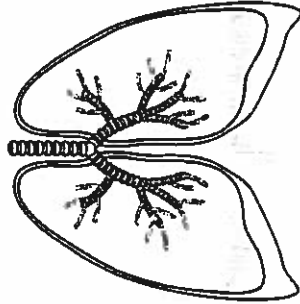
3. We exhale oxygen rich air from our lungs.

A. true
B. false



4. The two branches of the trachea that connect to each lung are _____.

A. alveoli
B. bronchi
C. lungs



5. The process of breathing is called _____.

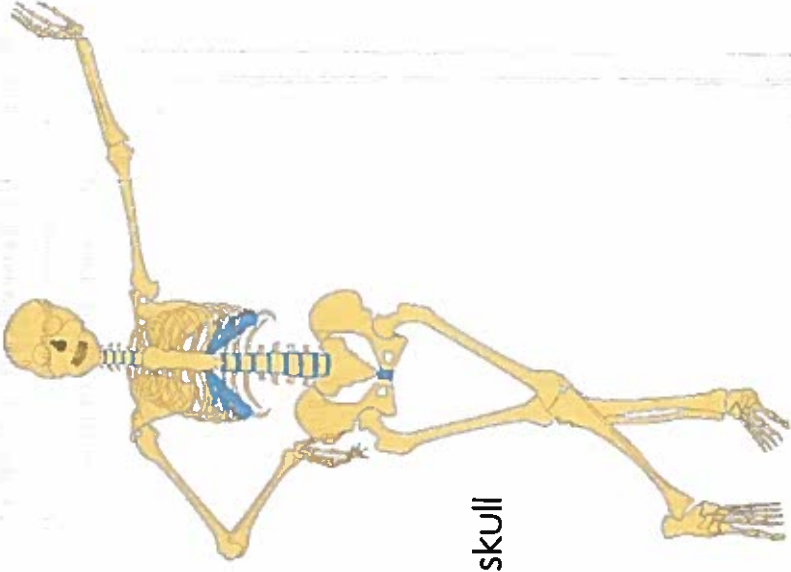
A. inhaling
B. respiration
C. oxygen

Skeletal System Video Quiz

Name:

Date:

1. Blood cells are produced in the muscle tissue.
A. true
B. false
2. Bones store calcium.
A. true
B. false
3. What vital, soft organ does the skull protect.
A. heart
B. ear
C. brain
4. Bones, cartilage and _____ make up the three components of the skeletal system.
A. muscles
B. ligaments
C. pump
5. The axial skeleton consists of the skull, spine and _____.
A. arms
B. feet
C. ribs

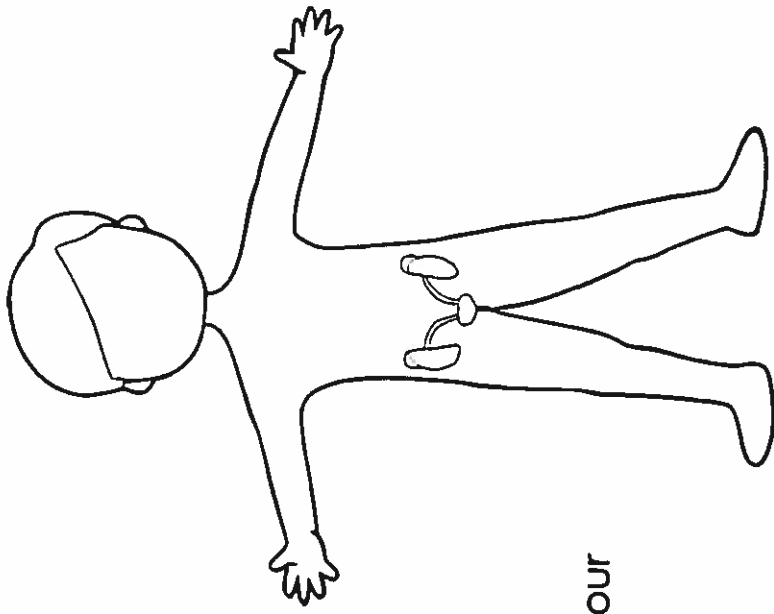


Urinary System Video Quiz

Name:

Date:

1. What is the most important organ in the urinary system?
 - A. liver
 - B. kidney
 - C. bladder
2. What are the microscopic filters within the kidneys called?
 - A. neurons
 - B. ureter
 - C. nephrons
3. Urine consists mainly of water and _____.
 - A. ammonia
 - B. urea
 - C. Mountain Dew
4. Kidneys filter all the blood in your body many times per day.
 - A. true
 - B. false
5. The _____ pass urine from the kidneys to the bladder for storage.
 - A. ureters
 - B. renal artery
 - C. urethra



Human Body Systems Review

1. Blood vessels called _____ carry oxygen-rich blood away from the heart.
2. The _____ removes wastes and maintains healthy water levels in the body.
3. Your body uses the _____ to deliver oxygen and remove carbon dioxide from your body.
4. Small food particles travel in the _____ into the blood.
5. Tiny blood vessels that connect arteries to veins are _____.
6. The central organ of the circulatory system is the _____.
7. The _____ churns food, then passes it to the small intestine.
8. Food travels from the mouth to the stomach through the _____.
9. Before passing from the body, urine collects in the _____.
10. The _____ brings oxygen and nutrients to all cells of the body, and carries away wastes.

Word Bank for #1-10

Bladder	capillaries	circulatory system
Arteries	digestive system	heart
Vein	excretory system	esophagus

11. Where are your kidneys located?
 - a. Near the middle of your back
 - b. behind the stomach
 - c. next to the liver
 - d. between the heart and lungs
12. Saliva works to break down starch into _____.
 - a. proteins
 - b. Fats
 - c. sugars
 - d. vitamins
13. How many chambers are in the human heart? _____
14. In the lungs, gas exchange occurs in tiny air sacs called _____.
15. What system moves gas into and out of the body? _____

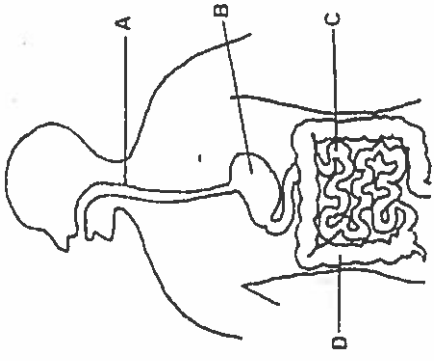
Please label the parts of the digestive system.

A. _____

B. _____

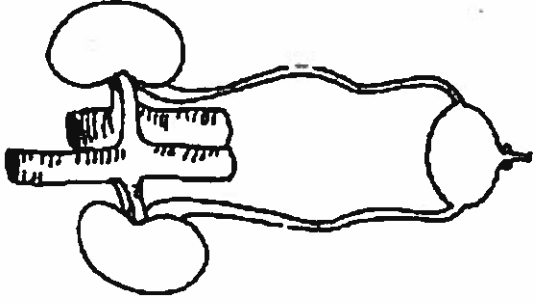
C. _____

D. _____



Please label the TWO main parts of the excretory system.

(Draw on the diagram please)



BONUS!

What role do muscles play in the digestion of food?

Why is your pulse rate different when you're sitting still versus when you are running a mile?

Name a type of infection that the kidneys can get.
