











Human Body Systems - Packet

Human Body System Worksheets

Human Body Systems

Body Systems and Organs

 skeletal system bones	 urinary system kidneys, bladder	 muscular system muscles and tendons	 endocrine system thyroid, pituitary, adrenal glands, pancreas, ovaries, testes	 digestive system mouth, esophagus, stomach, small intestine, large intestine, rectum, anus
 reproductive system ovaries, uterus, fallopian tubes, vagina, penis, testis, prostate	 respiratory system nose, pharynx, larynx, trachea, bronchi, lungs	 nervous system brain, spinal cord	 circulatory system heart, blood vessels, lungs	 immune system leukocytes, antibodies, spleen, thymus, tonsils, lymph nodes

Organs and their Systems

Organ	Respiratory System	Excretory System	Circulatory System	Reproductive System	Immune System	Digestive System
Brain						
Heart			X			
Liver						X
Stomach						X
Small Intestine						X
Large Intestine						X
Rectum						X
Anus						X
Bladder		X				
Kidney		X				
Uterus				X		
Vagina				X		
Ovary				X		
Testis					X	
Prostate					X	
Spleen					X	
Thymus					X	
Tonsil					X	
Lymph Node					X	
Adipose Tissue					X	
Macrophage					X	
Neutrophil					X	
Platelet					X	
Red Blood Cell					X	
White Blood Cell					X	

Integumentary System

The integumentary system is an organ system that includes the skin, hair, nails, and mucous membranes.

The skin is the largest organ of the body. It serves as a barrier and helps regulate body temperature.

The outer layer of the skin is called the epidermis. It contains all the cells that produce skin cells.

The inner layer of the skin is called the dermis. It contains all the structures that support the epidermis.

The integumentary system also includes the hair, nails, and mucous membranes.

Body Systems and Organs

SYSTEM

1. endocrine system
2. nervous system
3. circulatory system
4. urinary system
5. skeletal system
6. respiratory system
7. digestive system
8. immune system
9. reproductive system
10. muscular system

ORGANS

- a. thyroid, pineal gland, hypothalamus, pituitary gland, adrenal glands, parathyroid glands
- b. heart, blood vessels (arteries, veins, capillaries), lungs
- c. 2 kidneys, bladder
- d. brain, spinal cord
- e. hyaline cartilage, fibrocartilage, elastic cartilage, intervertebral discs, menisci, ligaments, tendons, bones, joints
- f. Female: vagina, uterus, ovaries Male: penis, testis, prostate
- g. muscle are a tissue
- h. bones
- i. stomach, intestines, pancreas, liver, gallbladder
- j. nose, pharynx, larynx, trachea, bronchi, lungs

Body Systems and Organs

SYSTEM

1. endocrine system
2. nervous system
3. circulatory system
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ORGANS

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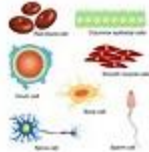
Body Systems

Body Systems

Human Body

Cells:

The body of an average human adult has nearly _____ cells. There are about _____ different cell types. Cells vary in size and shape. Cells can be round, oval, flat, cube-shaped, column shaped, elongated, star-shaped, cylindrical or disc shaped.



Tissues:

A tissue is a group of cells that function together to carry out specialized activities. Tissues may be hard (_____), semisolid (_____), or even liquid (_____).

There are four basic types of tissues:

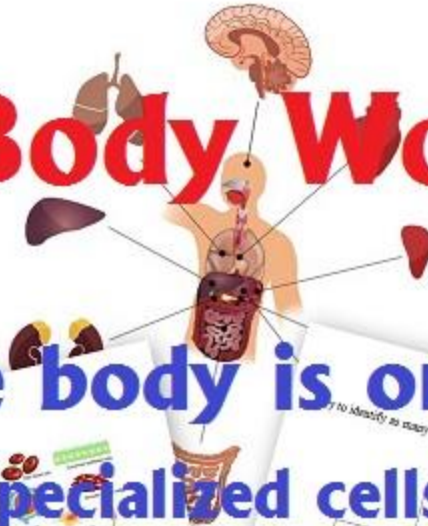
1. _____ tissue - covers body surfaces and lines internal passageways and chambers (organs, body cavities, and ducts). It also forms glands and produces glandular secretions.
2. _____ tissue - protects and supports the body and its organs. These _____ bind organs together, store energy as fat, and help provide immunity to disease-causing organisms.
3. _____ tissue - generates the physical force needed to make body structures move and generates body heat.
4. _____ tissue - detects changes in a variety of conditions inside and outside the body. It responds by generating action (nerve impulses) that activate muscular contractions. It conducts electrical impulses and carries information.

Below is an illustration of intestinal wall showing several different types of tissue:



Organs:

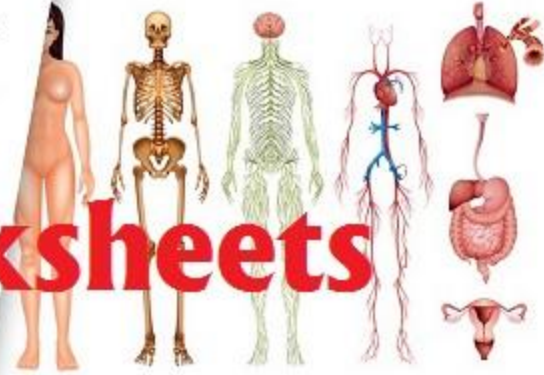
A group of tissues working together forms an _____ structure that are composed of two or more different types of tissues. They have specific functions and usually have recognizable shapes. _____ Organs are structures that are composed of two or more different types of tissues. They have specific functions and usually have recognizable shapes. Look at the diagram below. What are some of the organs that you recognize? Try to identify as many as you can:



Systems:

A group of organs working together with a common function is called a _____ system. Systems work together to maintain health, provide protection from disease, and allow for reproduction of the human species.

_____ of systems are illustrated below:



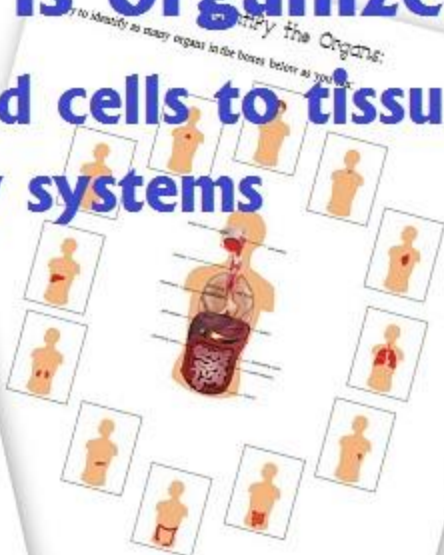
How the body is organized: from specialized cells to tissues... organs to body systems

ANSWERS

Cells Answer:
The body of an average human adult has nearly 100 trillion cells. There are about 200 different cell types. Cells vary in size and shape. Cells can be round, oval, flat, cube-shaped, column shaped, elongated, star-shaped, cylindrical or disc shaped.

Tissues:











- A tissue is a group of cells that function together to carry out specialized activities. Tissues may be hard (bone), semisolid (fat), or even liquid (blood).
- There are four basic types of tissues:
1. **Epithelial tissue** - covers body surfaces and lines internal passageways and chambers (organs, body cavities, and ducts). It also forms glands and produces glandular secretions.
 2. **Connective tissue** - protects and supports the body and its organs. These can hold organs together, store energy reserves as fat, and help provide immunity to disease-causing organisms.
 3. **Muscular tissue** - generates the physical force needed to make body structures move and generates body heat.
 4. **Nervous tissue** - detects changes in a variety of conditions inside and outside the body. It responds by generating action (nerve impulses) that activate muscular contractions. It conducts electrical impulses and carries information.



Human Body System Worksheets

Body Systems

Body Systems and Organs

 skeletal system bones	 urinary system 2 kidneys, bladder	 muscular system muscles are a tissue	 endocrine system glands that secrete hormones	 digestive system stomach, intestines, pancreas, liver, gallbladder
 reproductive system ovaries, testes, uterus, penis, prostate, vagina	 respiratory system lungs, trachea, bronchi, diaphragm	 nervous system brain, spinal cord	 circulatory system heart, blood vessels, lungs	 immune system white blood cells, lymph nodes, spleen, thymus, bone marrow

Organs and their Systems

Organ	Respiratory System	Urinary System	Circulatory System	Digestive System	Reproductive System	Immune System
Heart			X			
Lungs	X					
Stomach				X		
Intestines				X		
Pancreas				X		
Liver				X		
Gallbladder				X		
Bladder		X				
Kidneys		X				
Uterus					X	
Vagina					X	
Penis					X	
Prostate					X	
Spleen			X			X
Thymus			X			X
Bone Marrow			X			X
White Blood Cells			X			X

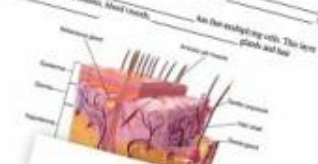
Integumentary System

The integumentary system is an organ system that includes the skin, hair, nails, and sweat glands.

The skin is the largest organ of the body. It covers 20 square feet and is made up of two layers: the epidermis and the dermis.

The outer layer of the skin is called the epidermis. It is made up of several layers of cells. The inner layer is called the dermis. It contains blood vessels, nerves, and sweat glands.

The skin also helps to regulate body temperature and protect the body from infection.




Body Systems and Organs

SYSTEM

1. excretory system
2. nervous system
3. circulatory system
4. urinary system
5. skeletal system
6. respiratory system
7. digestive system
8. immune system
9. reproductive system
10. muscular system

ORGANS

- a. Hyaline, bone marrow, spleen, lymph node, lymph, vessels, spleen, adenoids, liver, tonsils
- b. heart, blood vessels (arteries, veins, capillaries), lungs
- c. 2 kidneys, bladder
- d. brain, spinal cord
- e. hypothalamus, pituitary gland, thyroid, parathyroid, adrenal glands, pineal body, reproductive glands (which include the ovaries and testes), pancreas
- f. Female: vagina, uterus, ovaries Male: penis, testicles, prostate
- g. muscles are a tissue
- h. bones
- i. stomach, intestines, pancreas, liver, gallbladder
- j. nose, pharynx, larynx, trachea, bronchi, lungs

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Body Systems

Body Systems

Body Systems

skeletal system

excretory system

muscular system

endocrine system

digestive system

respiratory system

nervous system

circulatory system

immune system

Body Systems Answers

skeletal system

excretory system

muscular system

endocrine system

digestive system

respiratory system

nervous system

circulatory system

immune system

Body Systems

Circulatory System

Nervous System

Lapbook - Notebook Pieces

On the following pages are lapbook templates for the human body systems. Cut the pieces out on the solid line and fold along the dotted line.

The images can go either on the outside - with the students writing the body system on the inside to check to make sure they know the terminology. Of course, they can be folded the opposite way with the images on the inside if that suits your purposes better.

These are then glued into a file folder (for lapbooks) or onto plain pages for the students to add to their science notebooks.

