











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 pancreas, thyroid, pituitary	 digestive system mouth, esophagus, stomach, small intestine, large intestine, rectum, anus
 reproductive system ovaries, uterus, fallopian tubes, testis, vas deferens	 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	Circulatory System	Excretory System	Reproductive System	Endocrine System	Immune System	Digestive System
Brain							
Heart		X					
Lungs	X						
Stomach							X
Small Intestine							X
Large Intestine							X
Rectum							X
Anus							X
Bladder			X				
Kidneys			X				
Uterus				X			
Vagina				X			
Ovaries				X			
Testis							
Vas Deferens							
Penis							
Prostate Gland							
Spleen						X	
Thymus					X		
Tonsils						X	
Lymph Nodes						X	
Adipose Tissue							

Integumentary System

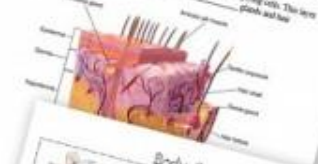
The integumentary system is an organ system that includes the skin, hair, nails, and sweat glands.

The skin is the largest organ of the body. It covers the surface of the body and helps regulate body temperature.

The outer layer of the skin is called the epidermis. It contains cells called keratinocytes that produce keratin, a protein that makes the skin tough and waterproof.

The inner layer of the skin is called the dermis. It contains hair follicles, sweat glands, and blood vessels.

The integumentary system also contains specialized cells called melanocytes that produce melanin, a pigment that gives the skin its color.



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. brain, spinal cord
- c. heart, blood vessels (arteries, veins, capillaries), lungs
- d. kidneys, bladder
- e. bones, joints
- f. trachea, bronchi, lungs
- g. mouth, esophagus, stomach, small intestine, large intestine, rectum, anus
- h. white blood cells, antibodies, spleen, thymus, tonsils, lymph nodes
- i. ovaries, uterus, fallopian tubes, testis, vas deferens
- j. muscles and tendons

Body Systems and Organs

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ORGANS

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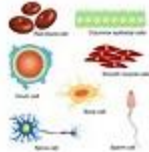
Body Systems

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 (bone), semisolid (fat), or even liquid (blood).

There are four basic types of tissues:

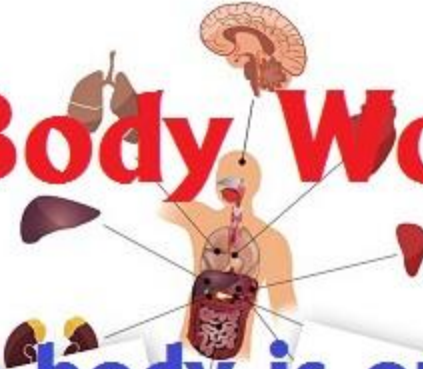
1. _____ tissue - covers body surfaces and lines internal passageways and chambers (organs, body cavities, and ducts). It also forms glands and produces glandular secretions.
2. _____ tissue - protects and supports the body and its organs. These _____ bind organs together, store energy as fat, and help 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:

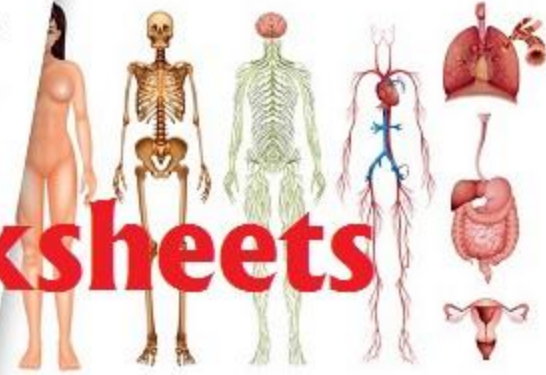
A group of tissues working together forms an _____ structure that are composed of two or more different types of tissues. They have specific functions and usually have recognizable shapes. Organs are _____ as many as you can.



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).

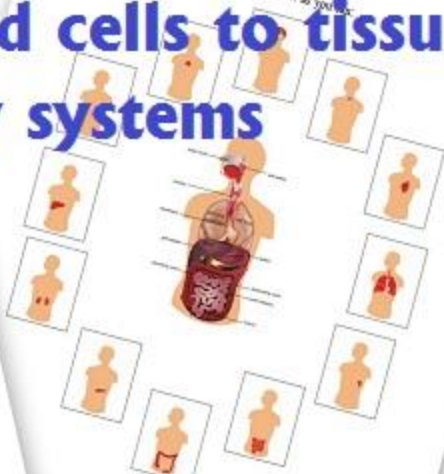
There are four basic types of tissues:

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.

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



ANSWERS



Human Body System Worksheets

Body Systems

skelatal system

urinary system

muscular system

endocrine system

digestive system

reproductive system











respiratory system

nervous system

circulatory system

immune system

Body Systems and Organs

 skeletal system bones	 urinary system 2 kidneys, bladder	 muscular system muscles are a tissue	 endocrine system hypothalamus, pituitary gland, thyroid, parathyroid, adrenal glands, pineal body, reproductive glands (which include the ovaries and testes), pancreas	 digestive system stomach, intestines, pancreas, liver, gallbladder
 reproductive system ovaries, uterus, fallopian tubes, testes, prostate	 respiratory system nose, pharynx, larynx, trachea, bronchi, lungs	 nervous system brain, spinal cord	 circulatory system heart, blood vessels, lungs	 immune system white blood cells, lymph nodes, lymph vessels, spleen, thymus, tonsils, liver, skin

Organs and their Systems

Organ	Digestive System	Respiratory System	Urinary System	Circulatory System	Endocrine System	Nervous System	Immune System
Brain							
Heart				X			
Stomach	X						
Intestines	X						
Lungs		X					
Trachea		X					
Diaphragm		X					
Bladder			X				
Kidneys			X				
Uterus	X						
Vagina	X						
Testes							X
Prostate	X						
Thyroid					X		
Pituitary					X		
Hypothalamus					X		
Adrenal Glands					X		
Pancreas	X						
Spleen							X
Tonsils							X
Liver							X
Spleen							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 covers 20 square feet and weighs 10 pounds.

The outer layer of the skin is called the epidermis. It is made of dead skin cells that are constantly being replaced by new cells that move up from the base of the epidermis.

The inner layer of the skin is called the dermis. It contains living cells, including hair follicles, sweat glands, and sebaceous glands.

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ORGANS

- a. hypothalamus, pituitary gland, thyroid, parathyroid, adrenal glands, pineal body, reproductive glands (which include the ovaries and testes), pancreas
- 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

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

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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.

