

# Body System Project

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Miss Schmidt

# Today I will be able to...

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1. Complete my Body System Project Notes Graphic Organizer.
2. Complete my Group Member Evaluations.
3. Complete and turn in the group members' responsibilities contract.
4. Review the body systems and their purposes, functions, and relationships to other body systems.

# Cardiovascular System

## 1 | Major Organs/ Structures and their Functions

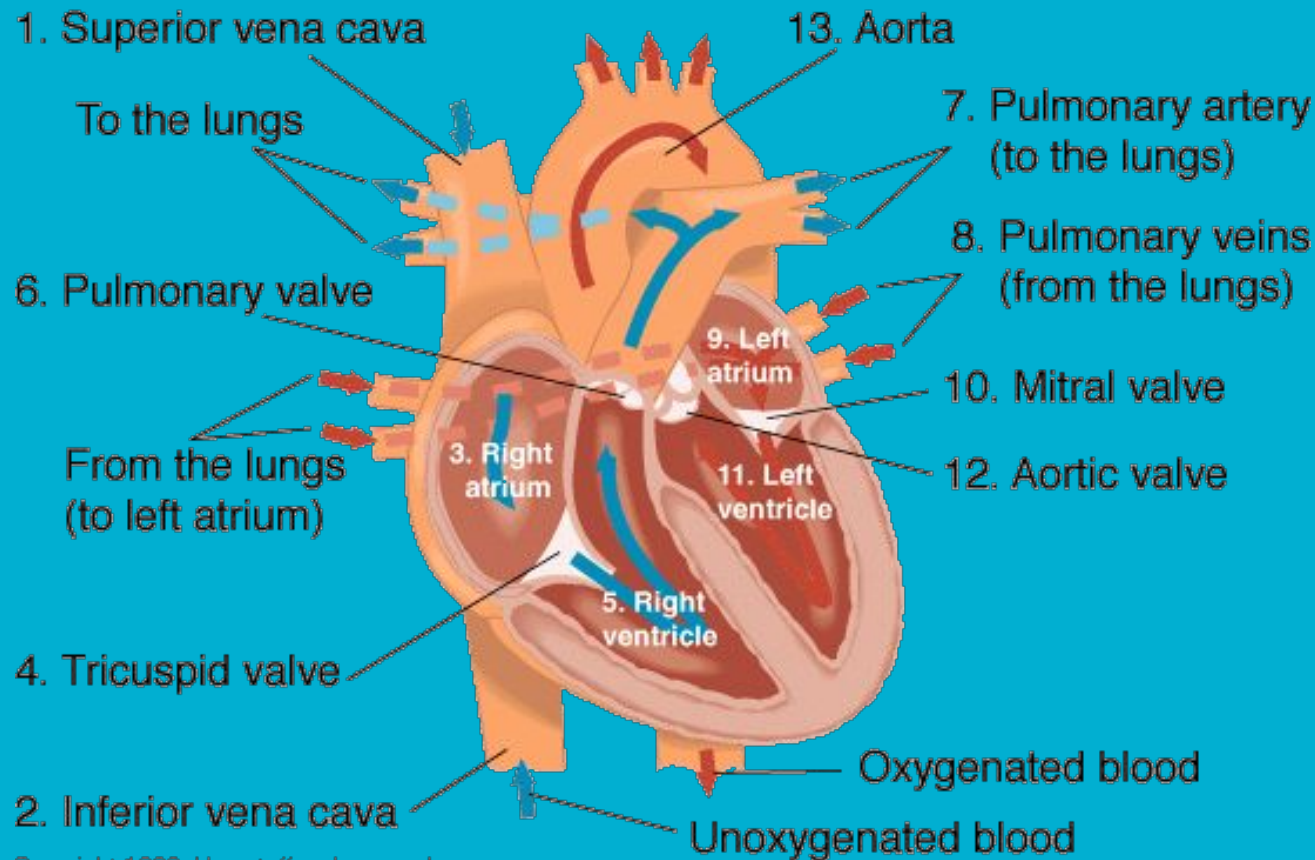
- The heart pumps blood to the body.
- Arteries carry blood away from the heart.
- Veins return blood to the heart
- Capillaries are the smallest blood vessels.

## 2 | Purpose of the Body System

- To transport oxygen, nutrients, and hormones throughout the body and to remove metabolic waste

## 3 | Relationships to Other Body Systems

- Carries oxygen provided by the respiratory system
- Contains RBCs produced in the skeletal system
- Transports WBCs which are part of the lymphatic system



# Digestive System

## 1 | Major Organs/ Structures and their Functions

- The mouth is where chemical digestion begins.
- The stomach aids in digestion, storage, and transportation of food.
- The esophagus is the passageway for food from the mouth to the stomach.
- The liver produces bile, a digestive juice important in the breakdown and absorption of fats

## 2 | Purpose of the Body System

- To break down food, absorb nutrients, and eliminate waste.

## 3 | Relationships to Other Body Systems

- After food is broken down, the nutrients are absorbed into the cardiovascular system.
- Hormones from the endocrine system control the speed of digestion.
- The feeling of hunger is partially controlled by the nervous system.

# Endocrine System

## 1 | Major Organs/ Structures and their Functions

- Hypothalamus
- Pineal Gland
- Pituitary Gland
- Adrenal Gland
- Thymus
- Adrenal Gland
- Pancreas
- Thyroid
- Parathyroid Glands
- Testes
- Ovaries

## 2 | Purpose of the Body System

- To produce and secrete hormones, chemical substances that help regulate many of your body's functions

## 3 | Relationships to Other Body Systems

- The hypothalamus and pineal gland are located in the brain, the major organ of the nervous system.
- The thyroid and parathyroid glands regulate calcium, which is stored in the bones of the skeletal system.
- The pancreas also functions in the digestive system.

# Integumentary System

## 1 | Major Organs/ Structures and their Functions

- The hair protects your skin from UV radiation and helps maintain body heat
- The skin is the body's largest organ.
- Nails help protect your fingers and your toes.

## 2 | Purpose of the Body System

- To protect you from pathogens, regulate body temperature, eliminate waste products, and feel sensations.

## 3 | Relationships to Other Body Systems

- The skin acts as the body's first line of defense, making it part of the immune system.
- The nervous system and your skin work together to provide your body with information about your environment.

# Urinary/Excretory System

## 1 | Major Organs/ Structures and their Functions

- The kidneys remove waste products from the blood and adjust the amount of salt, water, and other materials in the body.
- The ureters connect the kidneys to the bladder.
- The bladder stores urine.
- The urethra transports urine from the bladder to the outside of the body.

## 2 | Purpose of the Body System

- To filter waste and extra fluid from the blood
- Regulates the body's pH
- Regulates the body's water balance

## 3 | Relationships to Other Body Systems

- When the body becomes dehydrated, the pituitary gland releases ADH, a hormone produced by the endocrine system.
- The kidneys filter the blood transported by the cardiovascular system.



# Other Information

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- **Smooth Muscles:** involuntary muscles that act on the lining of the body's passageways and hollow internal organs
- **Skeletal Muscles:** voluntary muscles that are attached to bone that cause body movements
- **Cardiac Muscle:** striated muscle that forms the wall of the heart
- **Ligament:** a band of connective tissue that connects bone to bone
- **Tendon:** a fibrous cord that attaches muscle to the bone
- **Cerebrum:** the largest and most complex part of the brain
- **Cerebellum:** controls balance and coordination
- **Brain Stem:** connects spinal cord to the brain
- **Diaphragm:** a dome-shaped muscle that contracts and relaxes, causing the chest cavity to expand and contract

# Work Cited

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1. <https://www.cliffsnotes.com/study-guides/anatomy-and-physiology/the-cardiovascular-system/functions-of-the-cardiovascular-system>
2. <http://static.howstuffworks.com/gif/heart3a.gif>
3. <https://www.uofmhealth.org/health-library/aa155258>
4. [http://www.biology4kids.com/files/systems\\_digestive.html](http://www.biology4kids.com/files/systems_digestive.html)
5. <http://sciencenetlinks.com/student-teacher-sheets/integumentary-system/>
6. <http://sciencenetlinks.com/student-teacher-sheets/integumentary-system/>
7. <https://www.stanfordchildrens.org/en/topic/default?id=anatomy-of-the-urinary-system-85-P01468>
8. Glencoe Health Textbook

# I need group evaluations from:

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- Alex
- Bradley
- Malia
- Joshua
- Charles
- Isaiah
- Millissa
- Tallea

# I need group evaluations from:

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- Nathaniel H.
- Nathan A.

# I need group evaluations from:

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- Micah
- Ashlyn
- Hunter
- Kayla
- Sam
- Amy P.
- Emma
- Amy W.

# I need group evaluations from:

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- Kino
- Riehlee

**What questions do you have for me?**

Let's Review!