Organ Systems at Work

Integumentary system

Function

- Protects the body from the outside world and keeps moisture inside.
- * Helps regulate body temperature.
- * Contains sense receptors for temperature, pain, and touch.

- ☐ Skin
- Sweat glands
- ☐ Hair
- Fingernails



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Organ Systems at Work

Muscular system

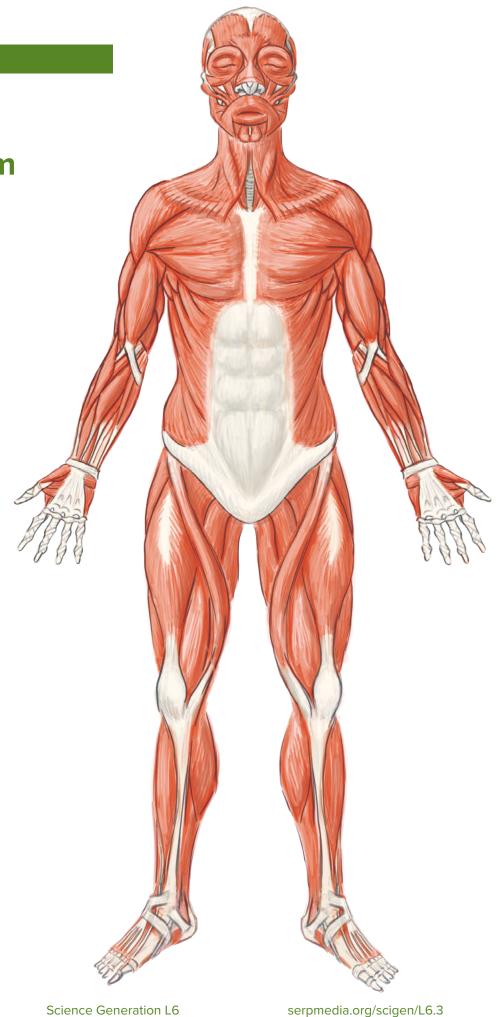
Function

- * Moves the body.
- * Moves materials within the body.
- * Generates heat.

Parts

☐ Skeletal muscles, which are attached to bones and move the body around.

Note: Smooth muscle tissue and cardiac muscle tissue are included in other systems.



Organ Systems at Work

Skeletal system

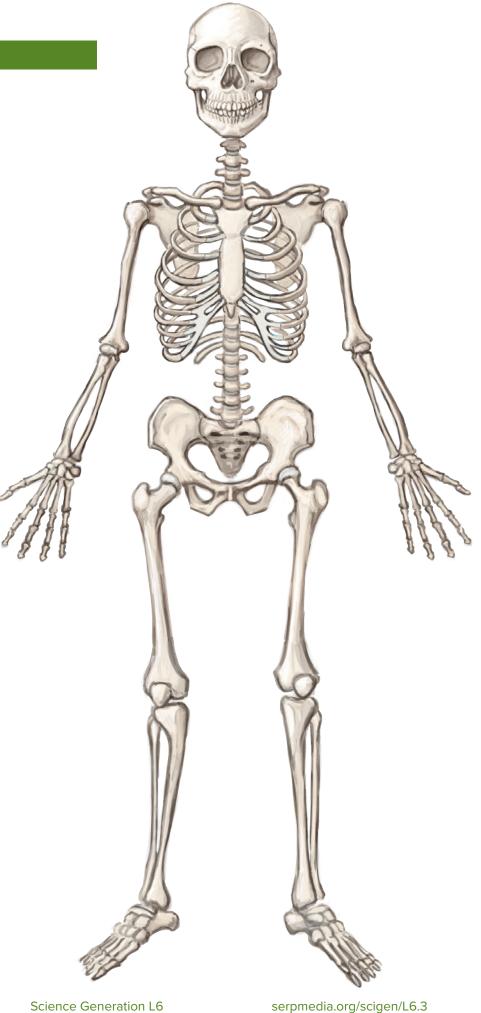
Function

- * Provides shape, support, and protection to the body, while allowing it to move.
- * Blood cells are also produced in the marrow of bones.

Parts

- Bones
- Cartilage
- Joints (ligaments and tendons)

Fibroblasts are the main cells in dense connective tissue that makes up ligaments and tendons. Fibroblasts secrete collagen and elastic fibers.



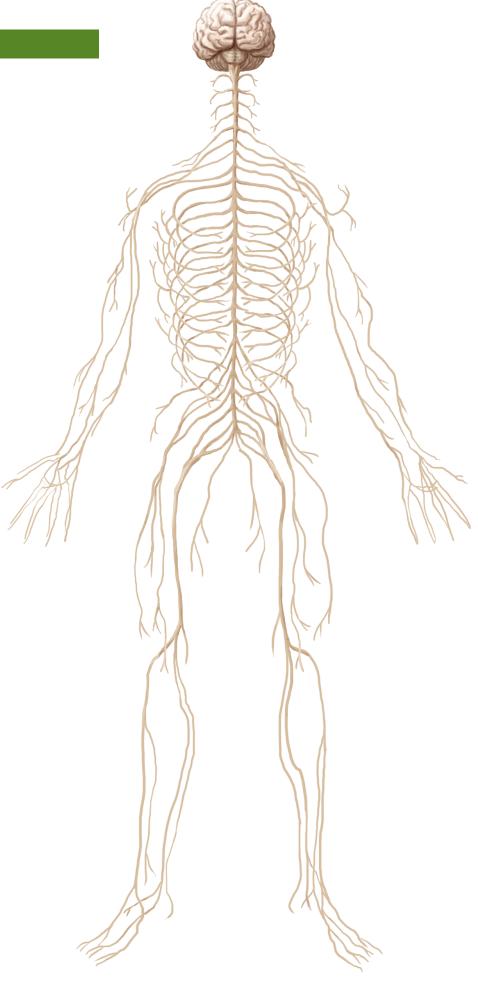
Organ Systems at Work

Nervous system

Function

- * Controls and coordinates body functions.
- * Receives signals.
- * Processes information.
- Transmits responses to organs.

- □ Brain
- Spinal cord
- □ Nerves

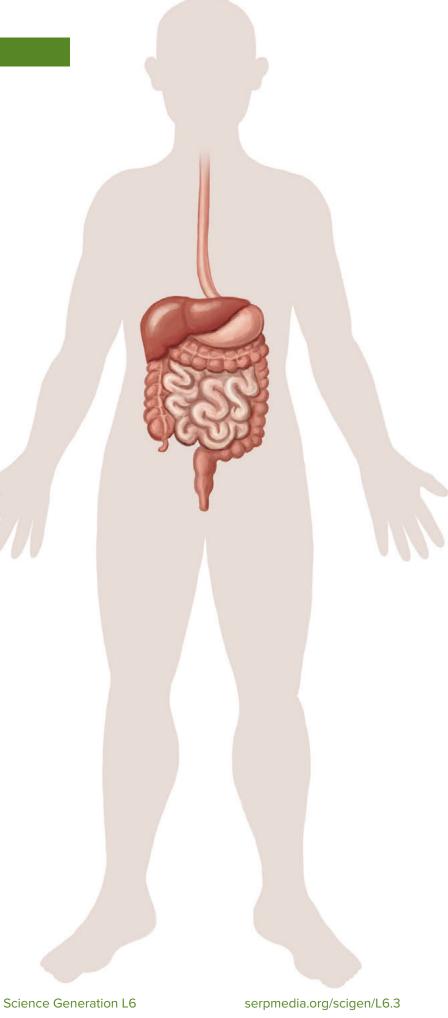


Digestive system

Function

- * Breaks down food.
- * Absorbs food's useful substances nutrients—to be used by cells throughout the body for energy and building materials.
- * Gets rid of food waste.

- Esophagus
- ☐ Stomach
- ☐ Liver
- Small intestine
- ☐ Large intestine
- ☐ Rectum
- Anus

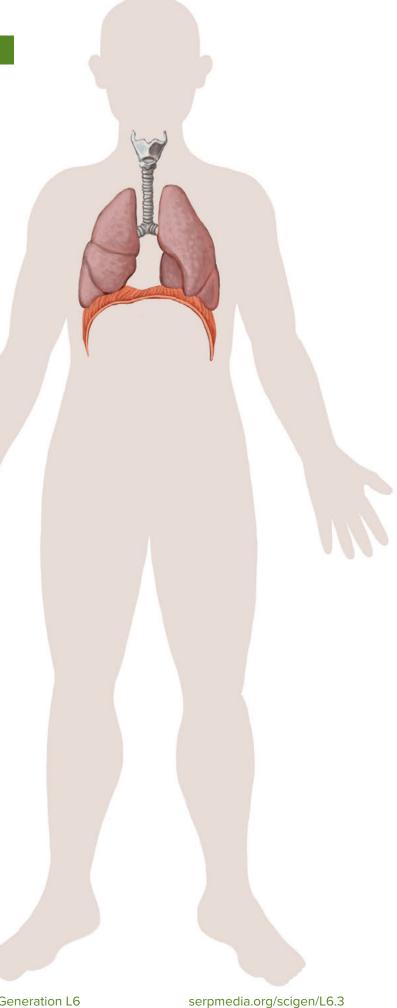


Respiratory system

Function

- Inhales oxygen and allows it to be dissolved into the bloodstream.
- * Removes carbon dioxide from the bloodstream and exhales it.

- ☐ Nose
- ☐ Larynx
- □ Trachea
- ☐ Bronchi
- Lungs
- ☐ Diaphragm (the muscle that works the lungs)



Organ Systems at Work

Cardiovascular system

Function

- Delivers oxygen and nutrients to cells throughout the body.
- Carries waste materials away from all the cells.
- * The main distribution system for all sorts of chemical signals, and for white blood cells that travel around the body fighting infectious diseases.
- Helps regulate body temperature by controlling how much blood flows near the body's surface at different times.

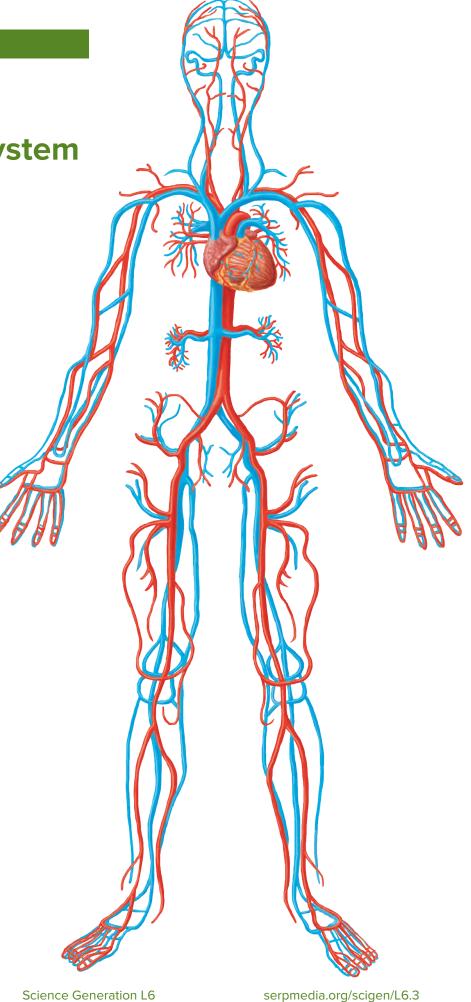
Parts

☐ Heart

□ Blood vessels

□ Blood

Weird fact: blood is considered a connective tissue, even though most tissues are solid.



Organ Systems at Work

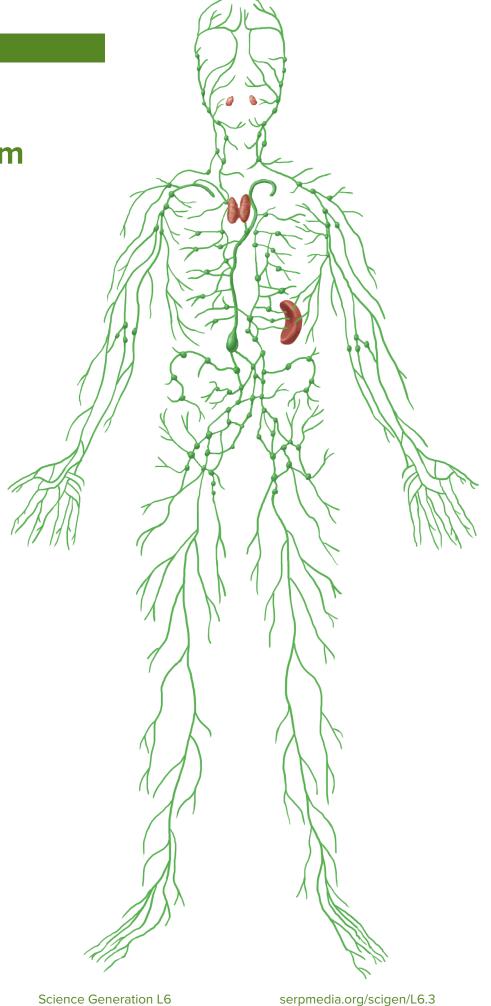
Lymphatic system

Function

- * Takes fluid that has leaked out of blood vessels and returns it to the cardiovascular system.
- * As this lymph fluid filters through the system, white blood cells also check it for signs of infection, and manage the body's immune response to disease.

Note: Sometimes scientists identify the immune system as a separate system.

- Lymph vessels
- Lymph nodes
- ☐ Tonsils
- Thymus
- □ Spleen



Urinary system

Function

Removes excess fluid and many dissolved waste products from the body.

- ☐ Kidneys
- ☐ Ureters
- □ Bladder
- Urethra

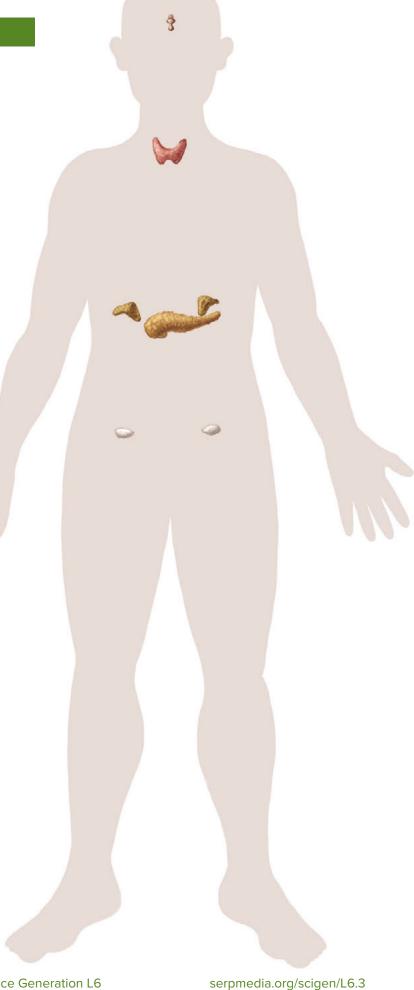
Endocrine system

female

Function

* Regulates and controls growth, development, and various body functions by releasing chemical signals called hormones into the bloodstream.

- Various glands throughout the body, including
 - Pituitary glands
 - Adrenal glands
 - ☐ Thyroid glands
- Ovaries



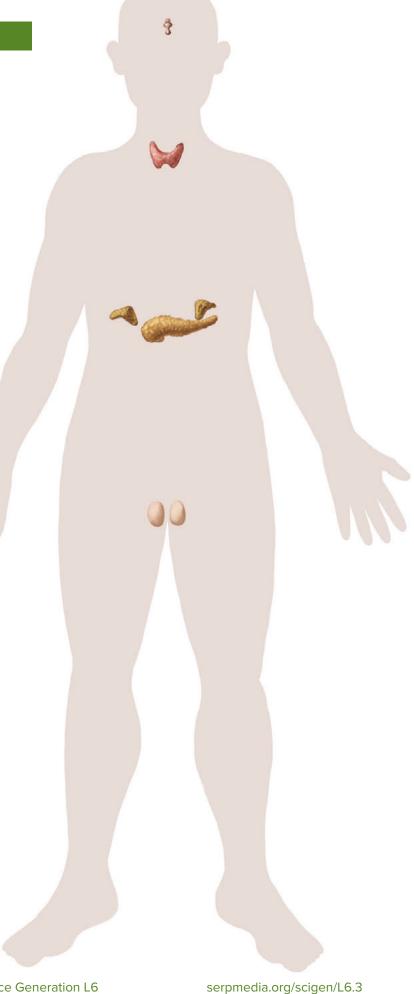
Endocrine system

male

Function

* Regulates and controls growth, development, and various body functions by releasing chemical signals called hormones into the bloodstream.

- Various glands throughout the body, including
 - Pituitary glands
 - Adrenal glands
 - ☐ Thyroid glands
- Testes



Reproductive system

Function

* Produces children through sexual reproduction.

- ☐ Vagina
- Uterus
- Ovaries

Reproductive system

male

Function

* Produces children through sexual reproduction.

- Penis
- ☐ Testes

