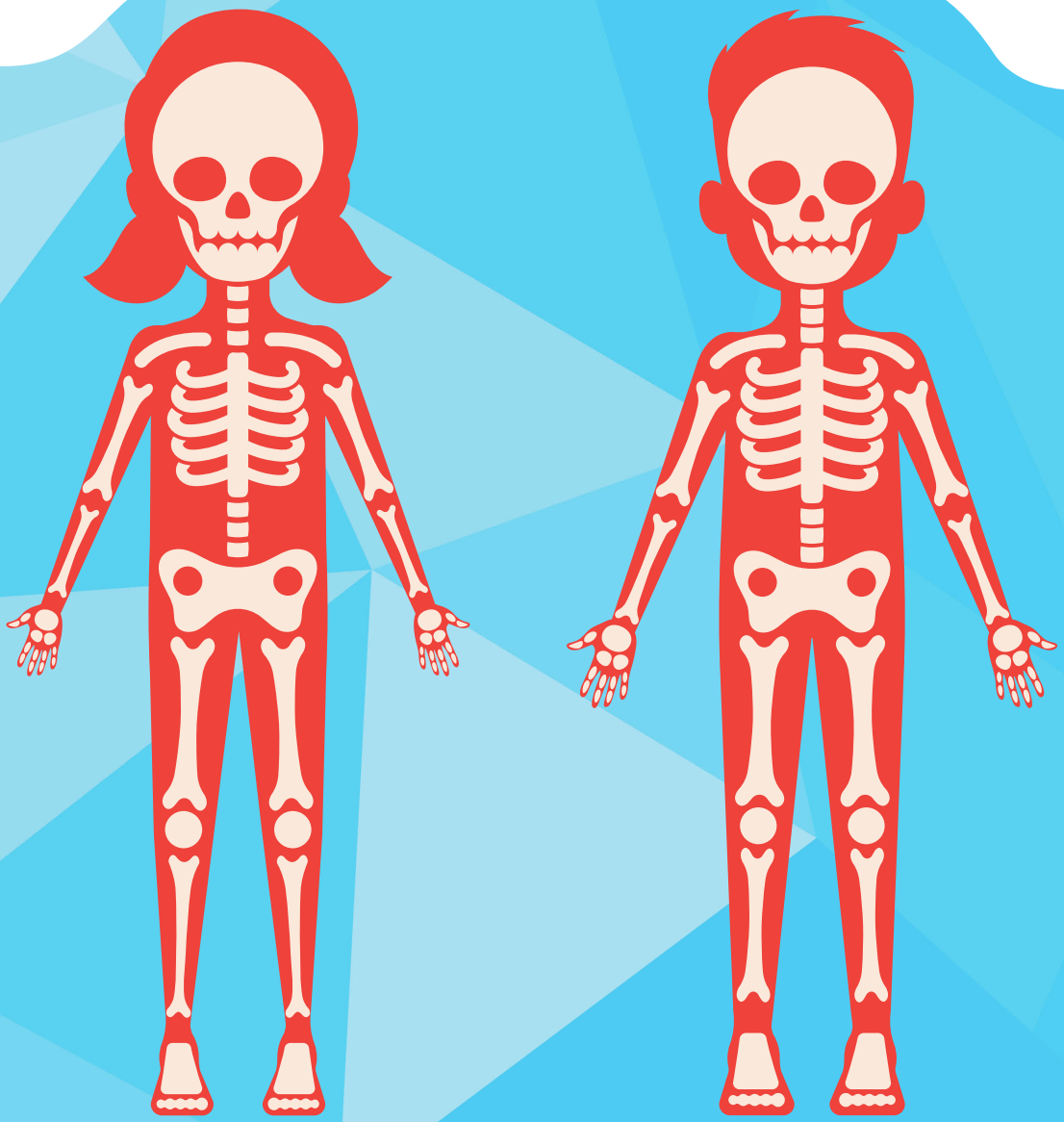
Human Body Anatomy

Packet



HOW TO USE THESE PRINTABLES

The information pages and projects can be printed out and used to help teach the human body systems. The pages can be handed out separately or made into a workbook.

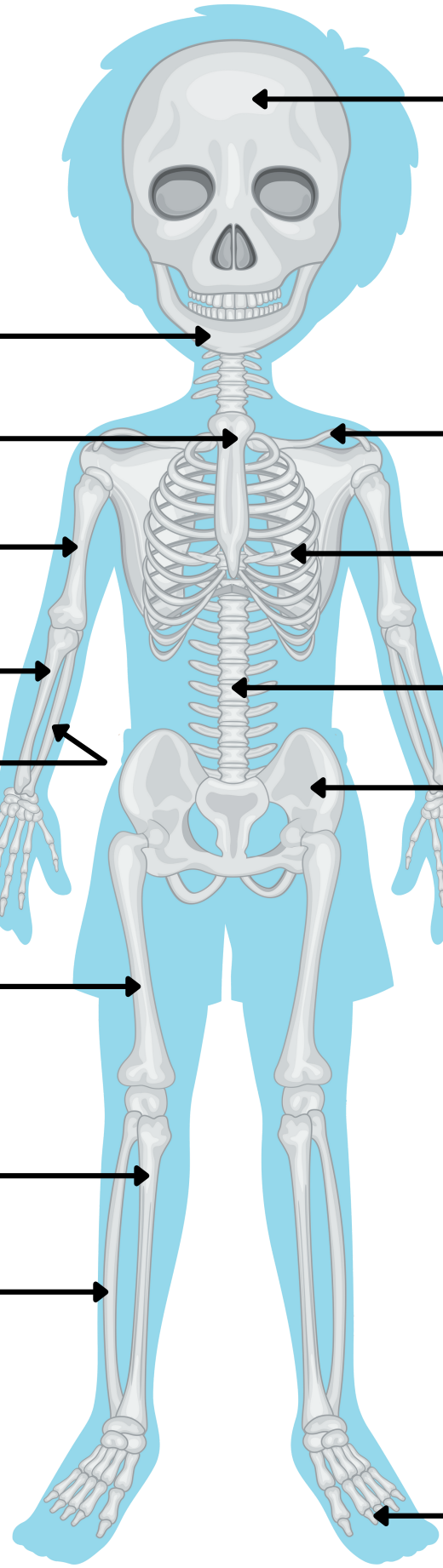
SYSTEMS INCLUDED

- Skeletal System
- Nervous System
- Circulatory System
- Digestive System
- Respiratory System
- Urinary System
- Integumentary System

Skeletal System Facts

- The skeletal system is the collection of bones that supports and protects the human body.
- Humans have endoskeletons, which means the bones are inside the body.
- The human skeletal system contains about 206 bones.
- Our strong spine allows us to stand and walk in an upright position.
- The skeletal system also includes tendons, ligaments, and cartilage. Tendons attach bones to muscles, which allows us to move. Ligaments attach bones to other bones. Cartilage is a rubbery material that protects the bones from rubbing together. Your ears and nose are also mostly made of cartilage.
- Our bones fit together at joints. Elbows and Knees are examples of joints.
- A softer substance called marrow is in the center of bones.
- The red marrow in bones produces red and white blood cells.
- The smallest bone in the body is called the stapes bone. It is located in the ear.
- The largest bone in the body is the femur or thigh bone.

Skeletal Systems



Crainium

Mandible

Sternum

Clavicle

Humerus

Ribs

Radius

Vertebrae

Ulna

Pelvis

Phalanges (Fingers)

Femur

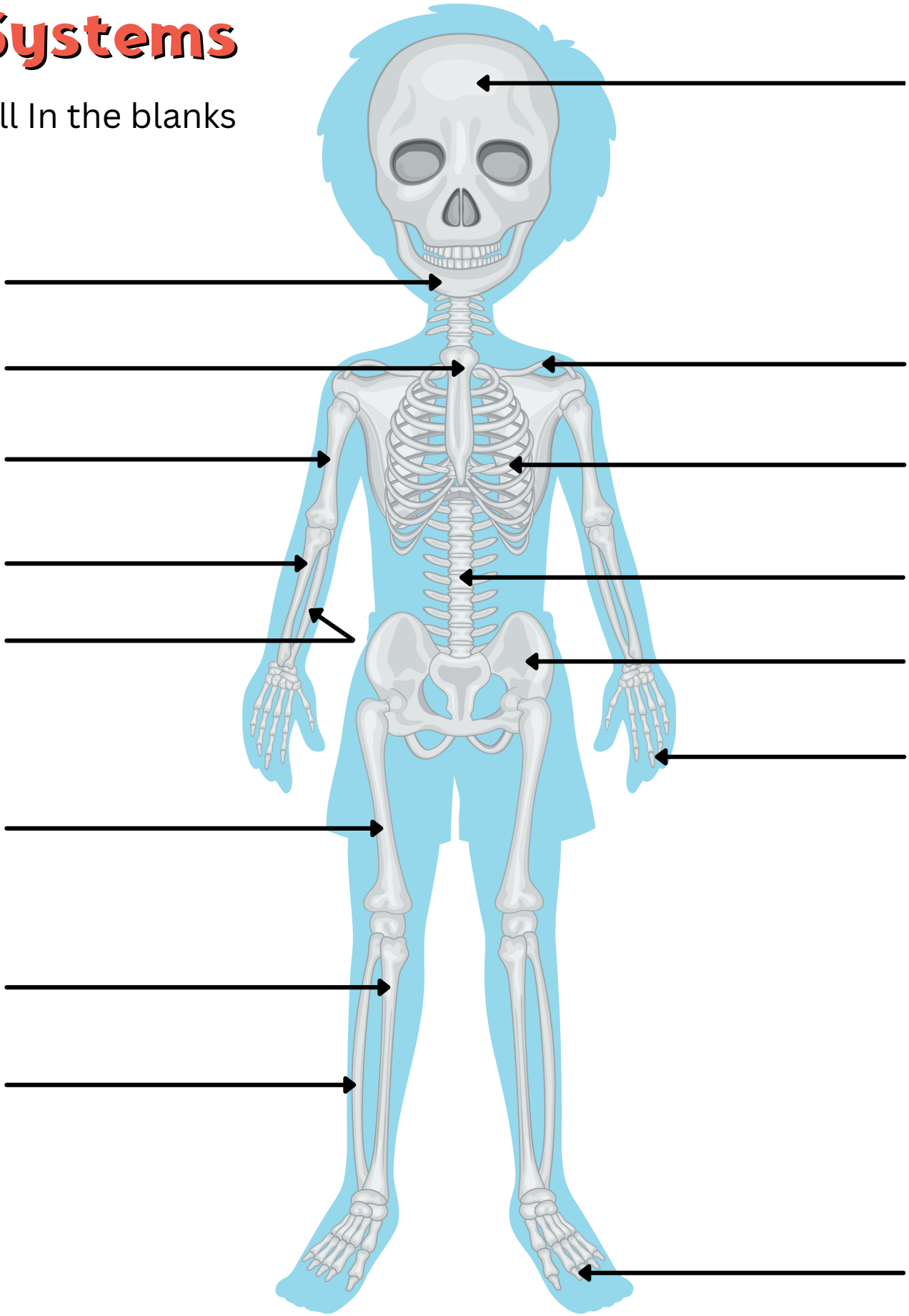
Tibia

Fibula

Phalanges (Toes)

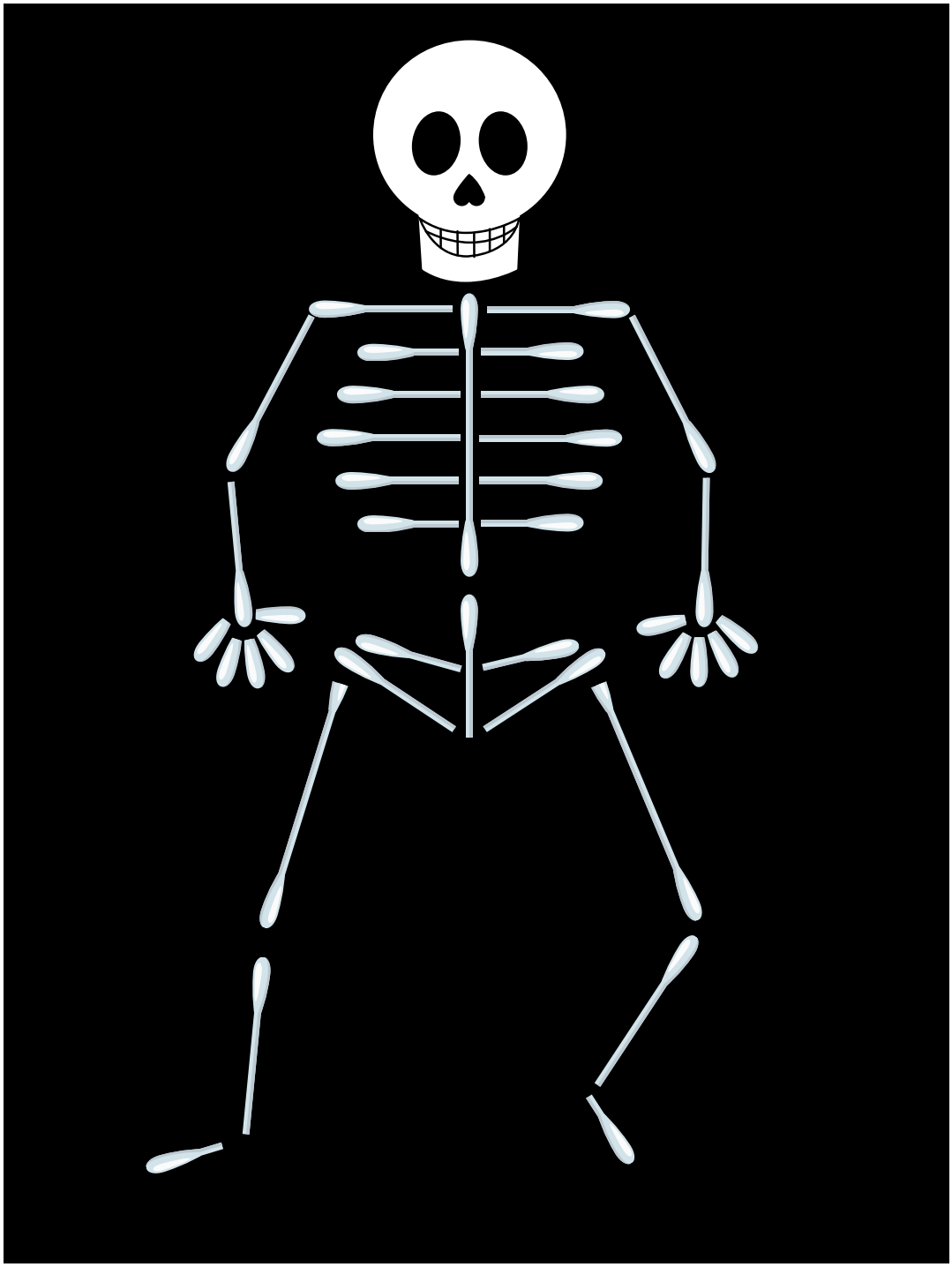
Skeletal Systems

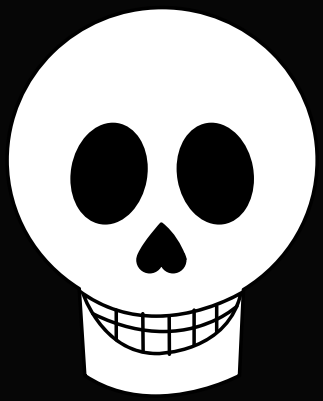
Fill In the blanks



Q-tip Skeleton

Use Q-tips to make a simple skeleton. Cut each q-tip to size with scissors, and glue your assembled skeleton to paper. You can use the black template with the skull provided, or use construction paper and draw your own skull.

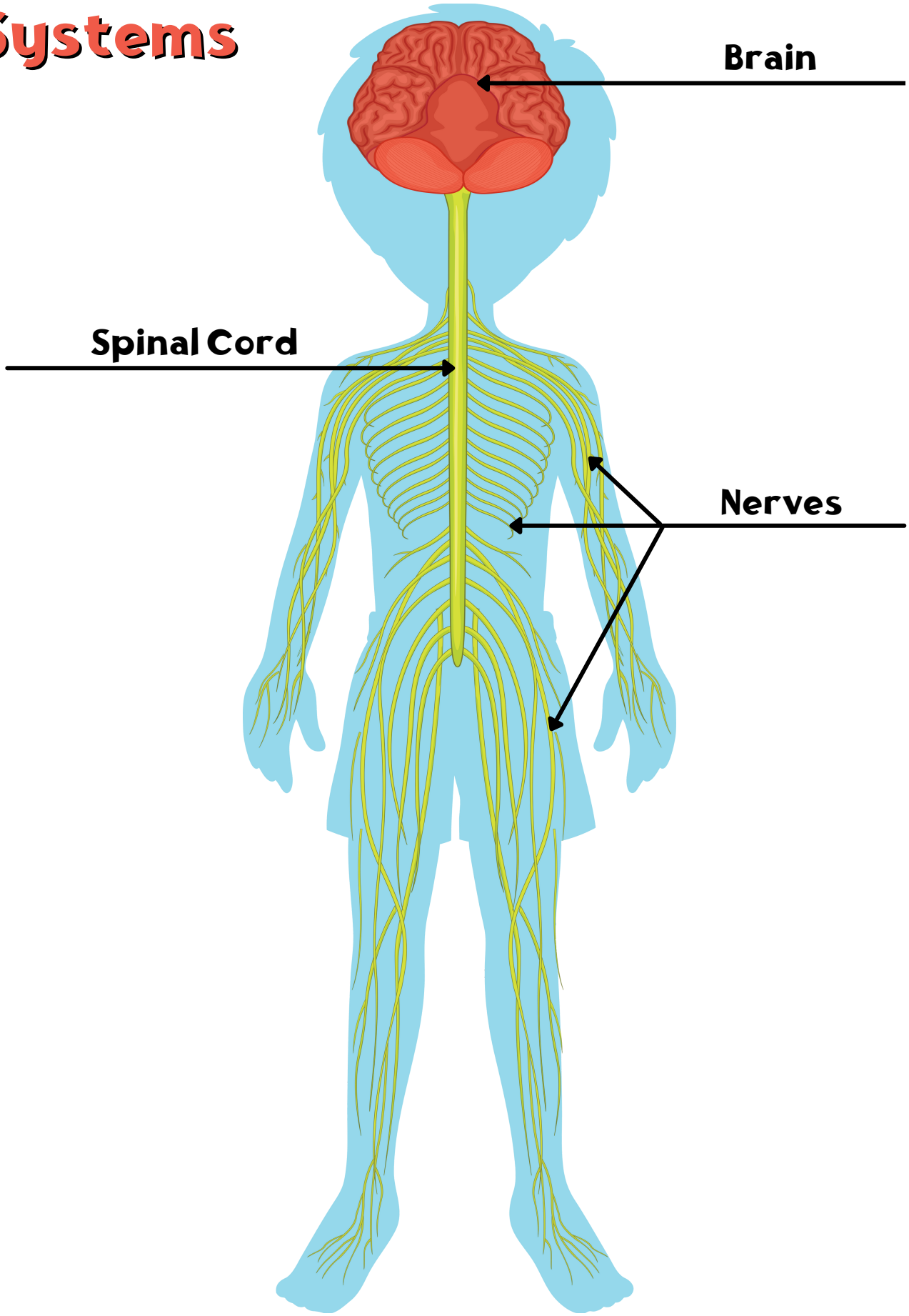




Nervous System Facts

- Your nervous system is in charge of communications in your body. It allows you to use your senses to understand your surroundings by sending signals throughout your body
- It also controls all the movements you make with your body.
- Your brain and spinal cord are part of the central nervous system.
- All the nerves that stretch throughout your body are called the peripheral nervous system.
- The peripheral nervous system is responsible for your sense of touch. It sends your brain messages when things feel a certain way (like when something feels hot).
- Nerve cells called neurons send messages through the spinal cord to the brain.
- Your body can send messages to your brain at the speed of 200 miles per hour.
- The brain is like a supercomputer that processes the messages sent and tells the rest of your body what to do.

Nervous Systems



Nervous Systems

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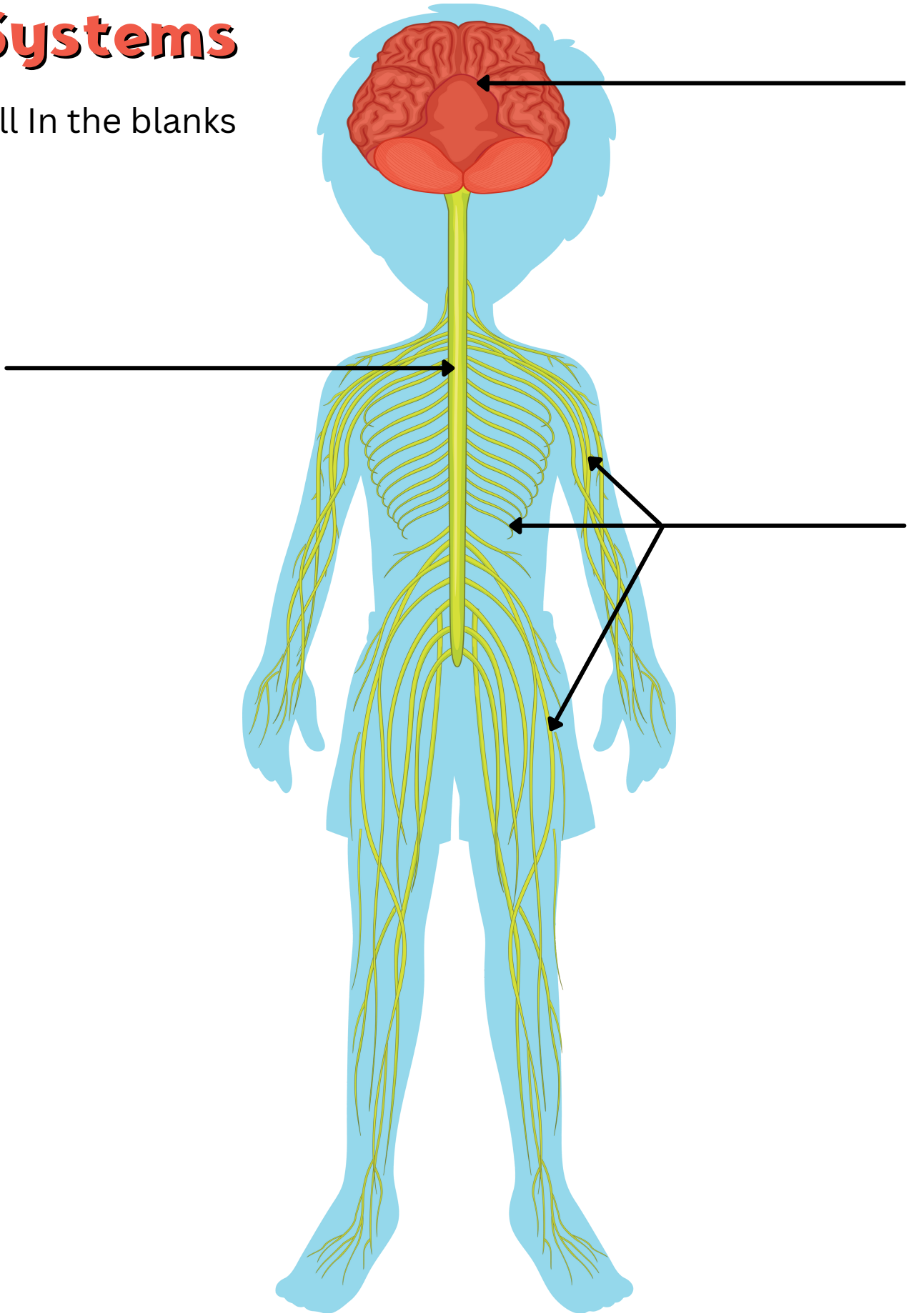


Take Home Senses Scavanger Hunt

Use your senses to fill out the chart.

Sight
Find Something...

Red	
Round	
Big	
Small	
With a Pattern	

Touch
Find Something...

Hard	
Soft	
Textured	
Smooth	
Wet	

Hearing
Find Something...

Loud	
Soft Sounding	
Crunchy Sound	
That Pops	
High Pitched	

Smell
Find Something...

Stinky	
Good Smelling	

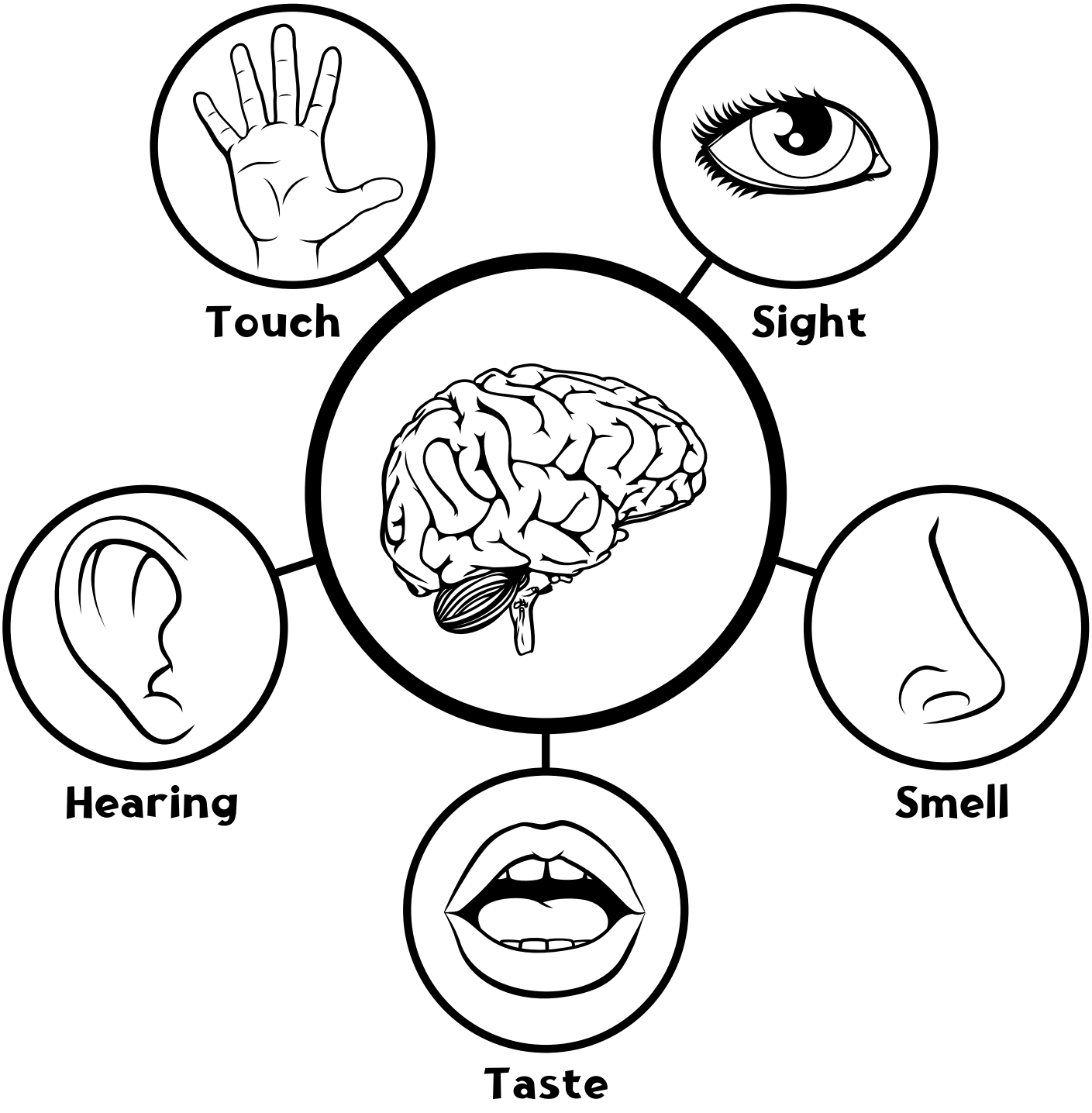
Taste
Find Something...

Good Tasting	
Bad Tasting	

5 Senses and The Brain

Coloring

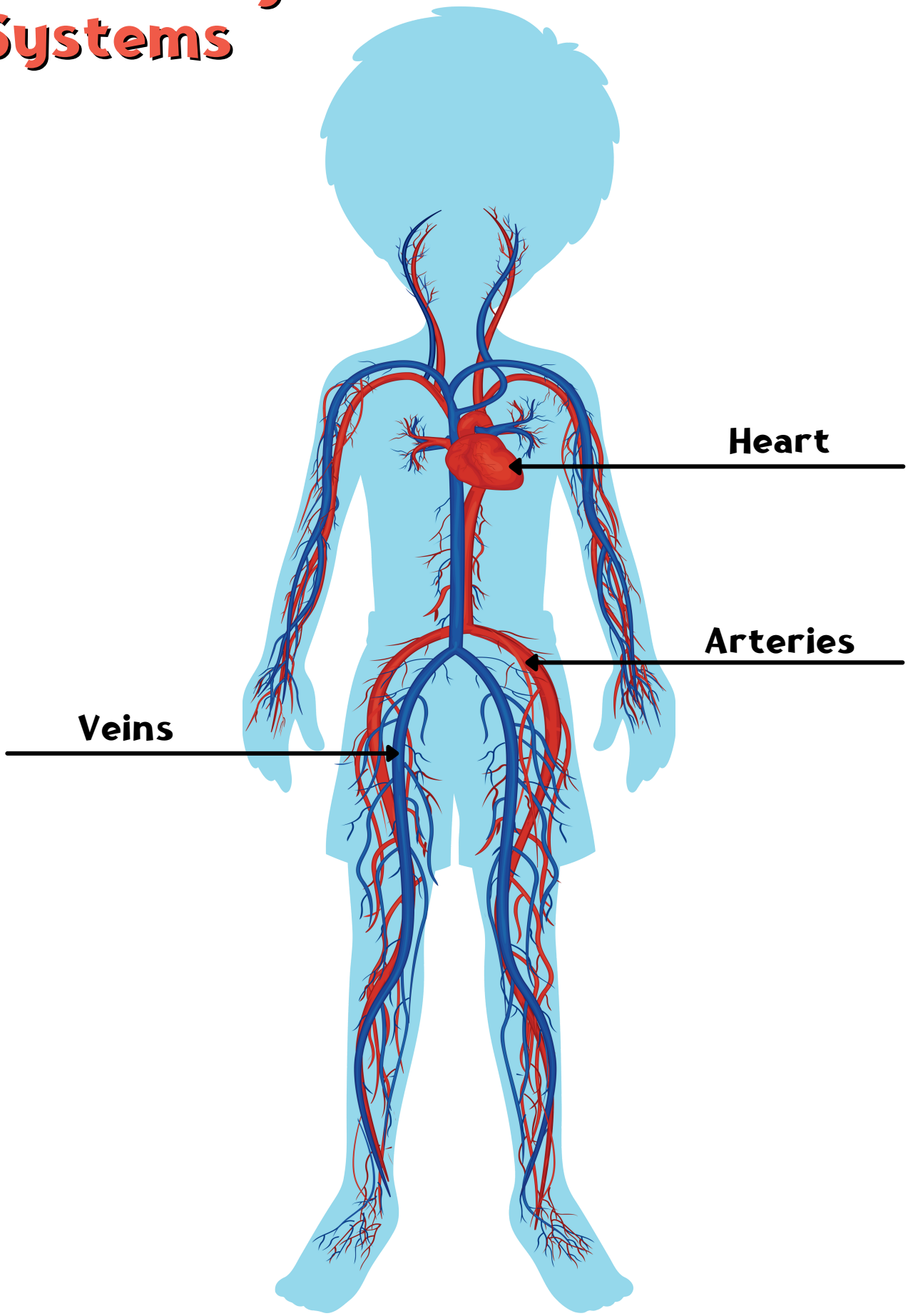
Our brains understand and interpret our senses. Because of our brains, we know what's going on around us. Our 5 senses are sight, hearing, taste, smell, and touch.



Circulatory System Facts

- Your heart is a muscle that pumps blood around your body.
- Your heart provides your body's tissue with the oxygen and nutrients it needs and carries away waste.
- The right side of your heart receives blood from the body. It also pumps blood to the lungs.
- The left side of the heart receives blood from the lungs and pumps it to the body.
- Arteries carry oxygenated (with oxygen) blood from the heart to other parts of the body.
- Veins carry deoxygenated (without oxygen) blood back to the heart.
- If you could lay out all the body's blood vessels in a straight line, they would stretch to about 60,000 miles in length!

Circulatory Systems



Circulatory Systems

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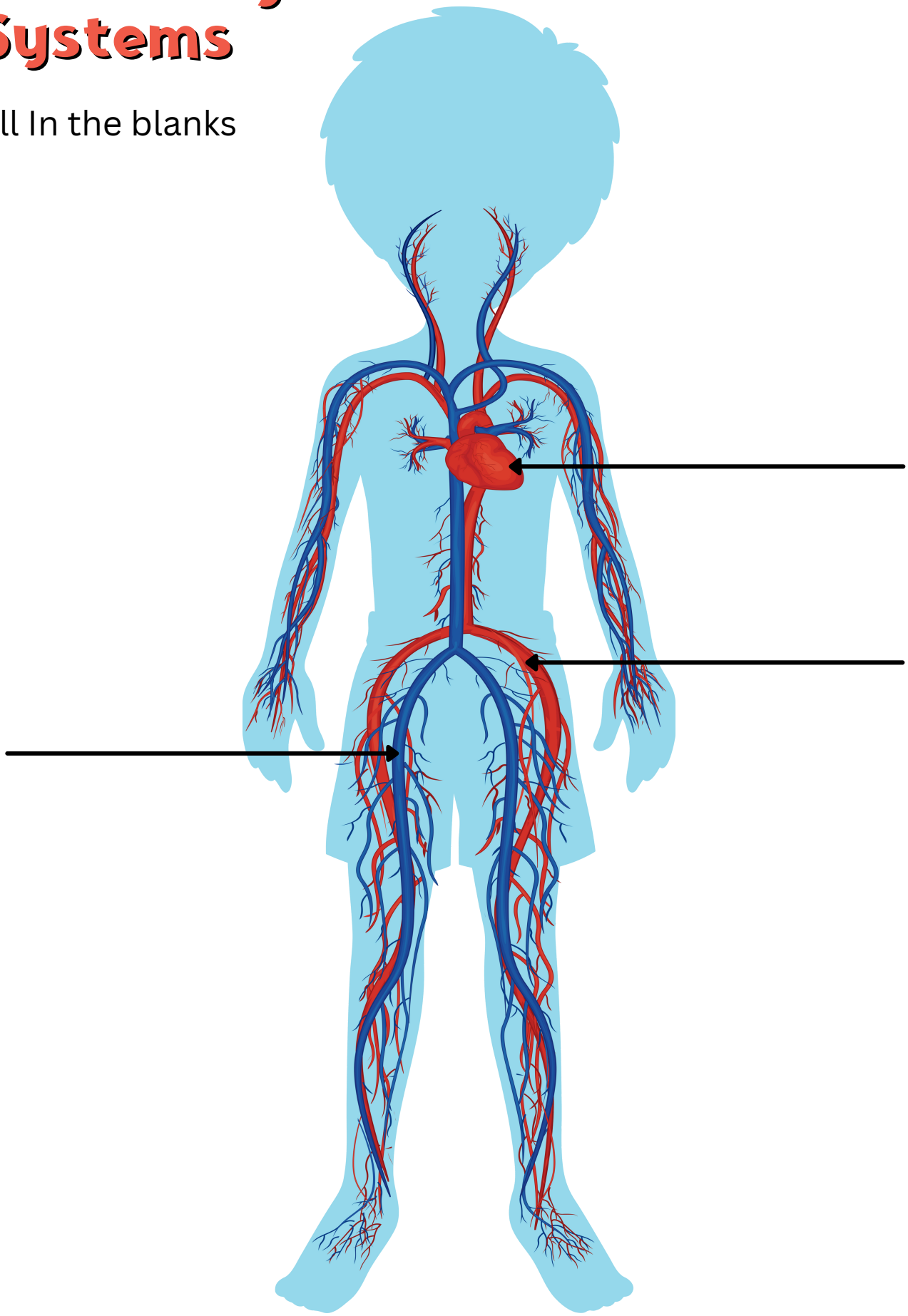
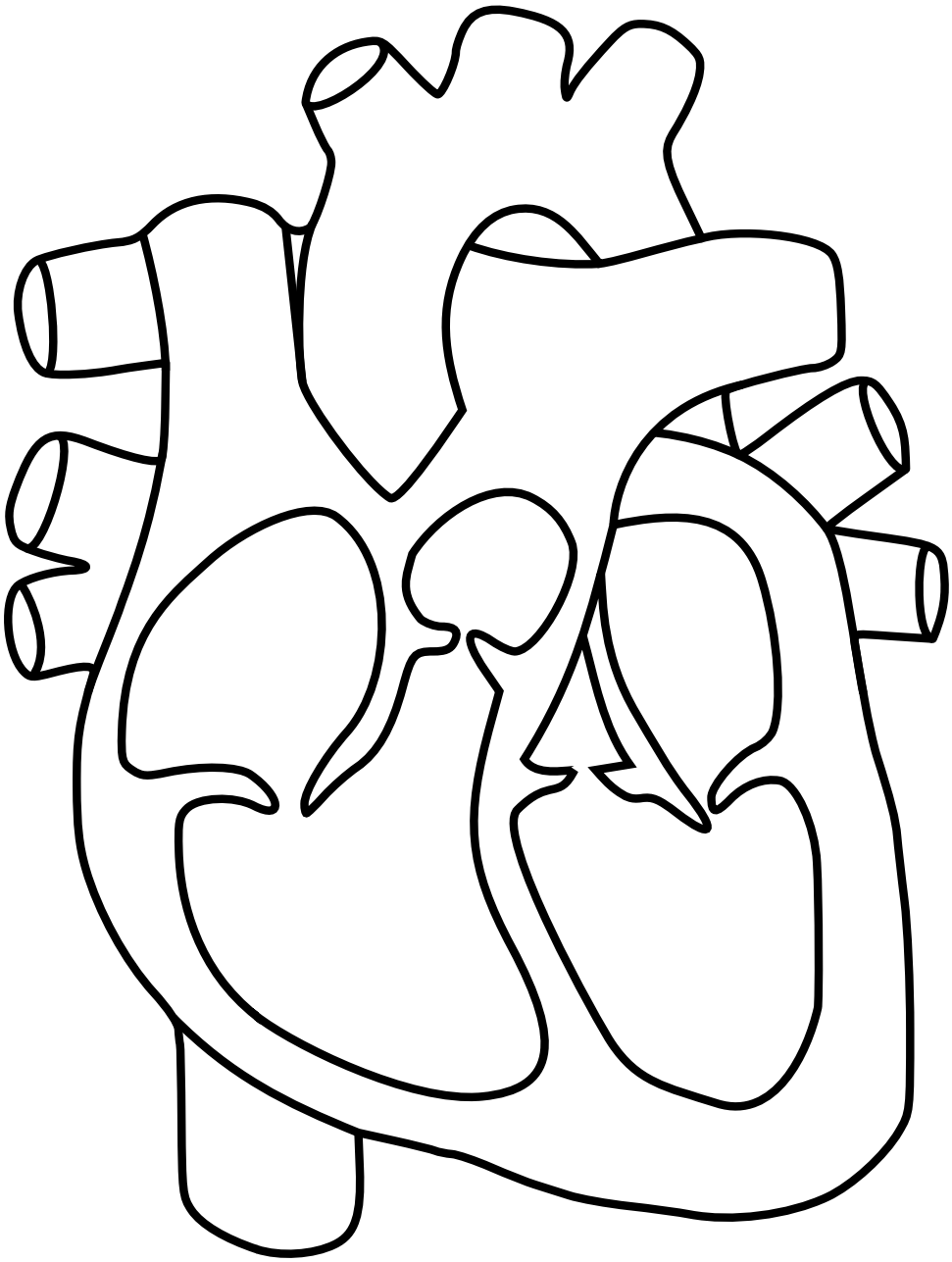


Our Heart

Coloring

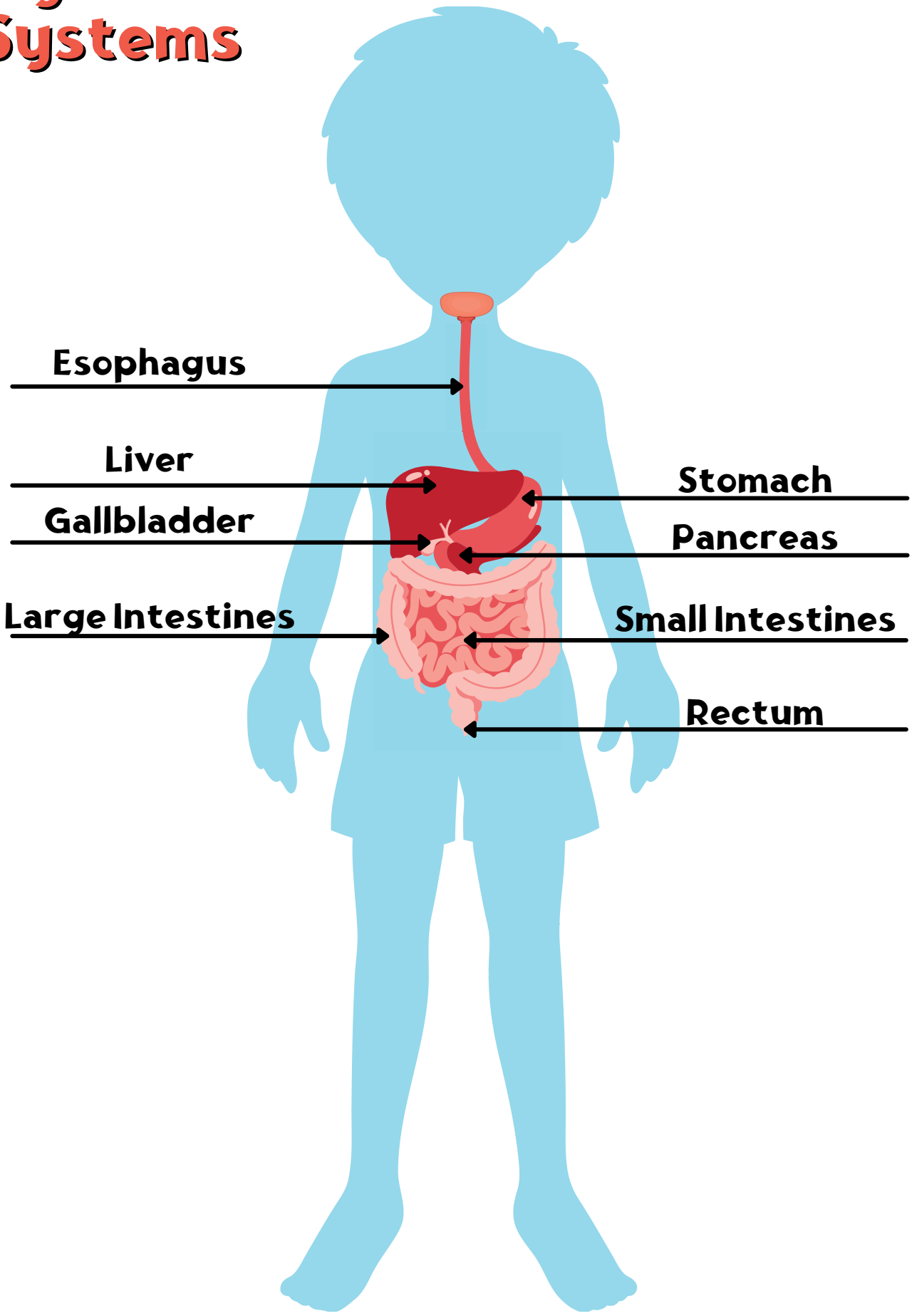
Your heart constantly pumps blood all around your body. It can pump about 1.5 gallons of blood every minute!



Digestive System Facts

- The digestive system manages the food we eat so we get the energy, vitamins, and minerals we need.
- Food is digested in several stages. It starts with chewing. Chewing our food into small pieces makes it easy to swallow and digest. Enzymes in your Saliva or spit break down food.
- The second step is swallowing. Your tongue pushes food down a special tube that connects your throat to your stomach called the esophagus. Muscles push the food down the esophagus into your stomach.
- After you swallow food, it ends up in your stomach. While in the stomach, enzymes start breaking down the food into things our bodies can use like protein.
- From your stomach, the food enters the small intestine. The small intestine works with the liver and pancreas to break down our food.
- The liver provides bile that helps break up fat, and the pancreas makes enzymes to digest food.
- After your food breaks down, It gets absorbed into your body, and blood passes it to your liver. All the nutrients are processed in your liver.
- The large intestine takes food that the body doesn't need and pushes it through the body as waste.
- Waste usually takes between 12 hours and two days to reach the rectum.

Digestive Systems



Digestive Systems

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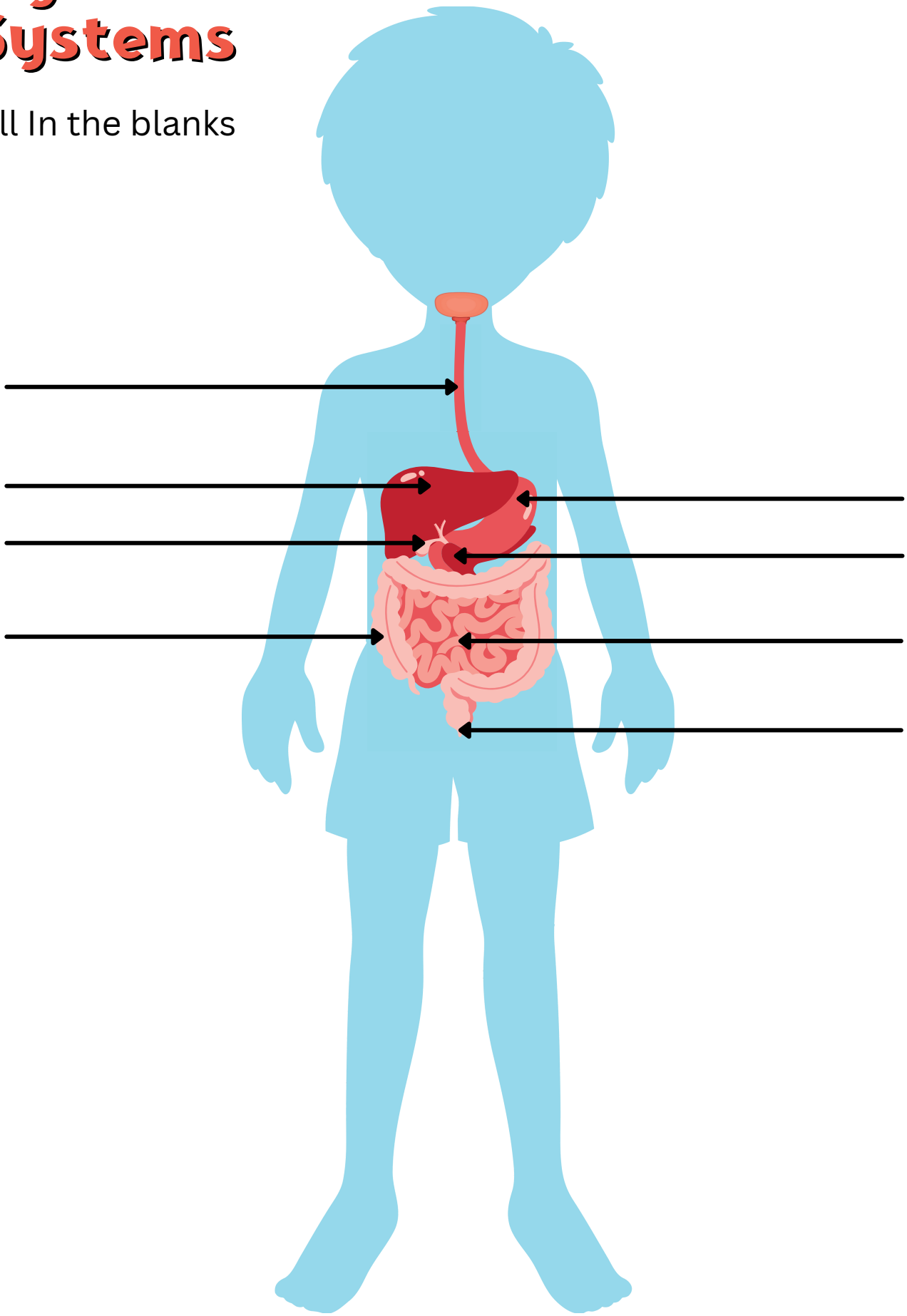


Digestive System

Color The Organs

Esophagus - Yellow

Liver - Red

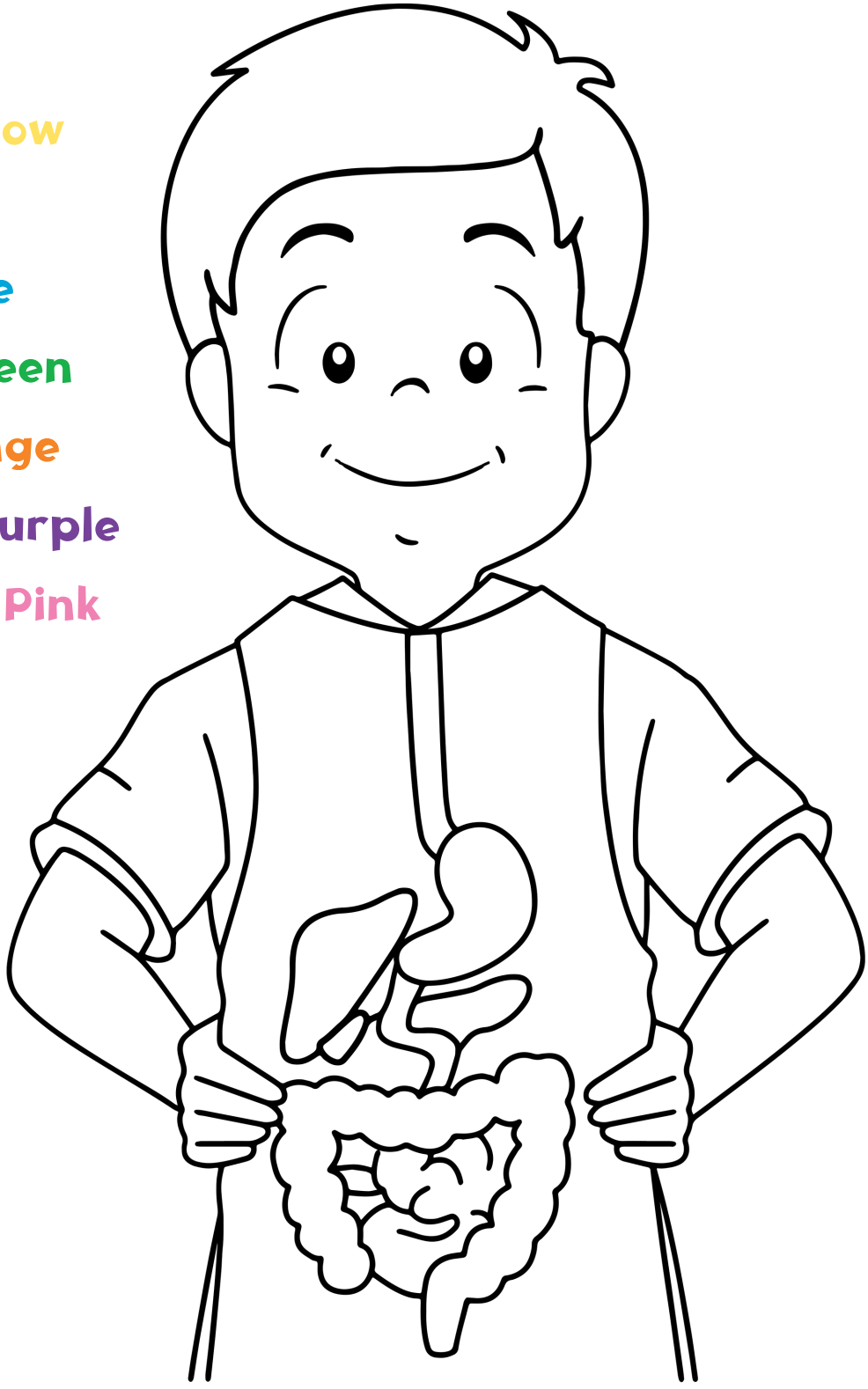
Stomach - Blue

Gallbladder - Green

Pancreas - Orange

Small Intestines- Purple

Large Intestines - Pink



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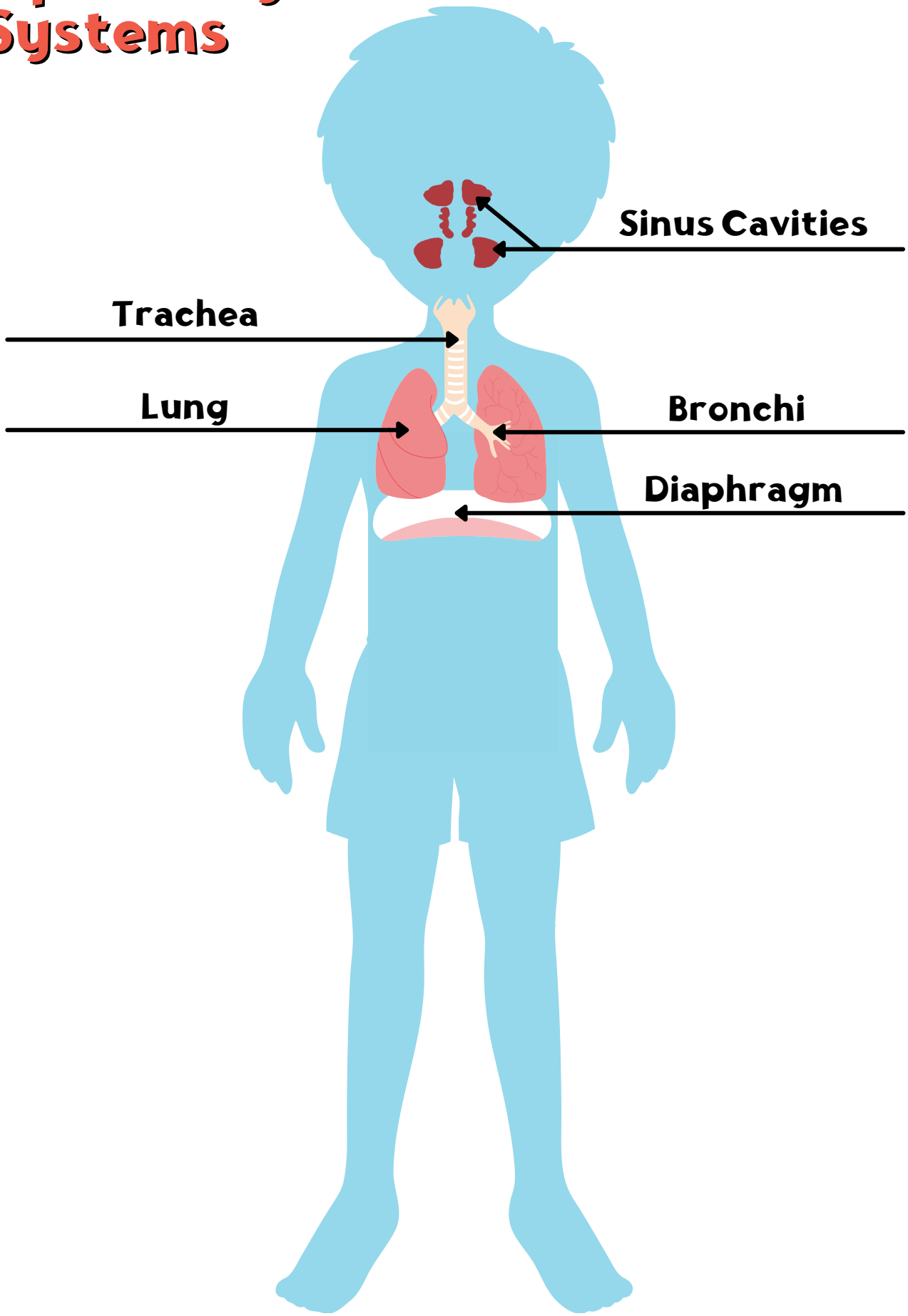
Respiratory System Facts

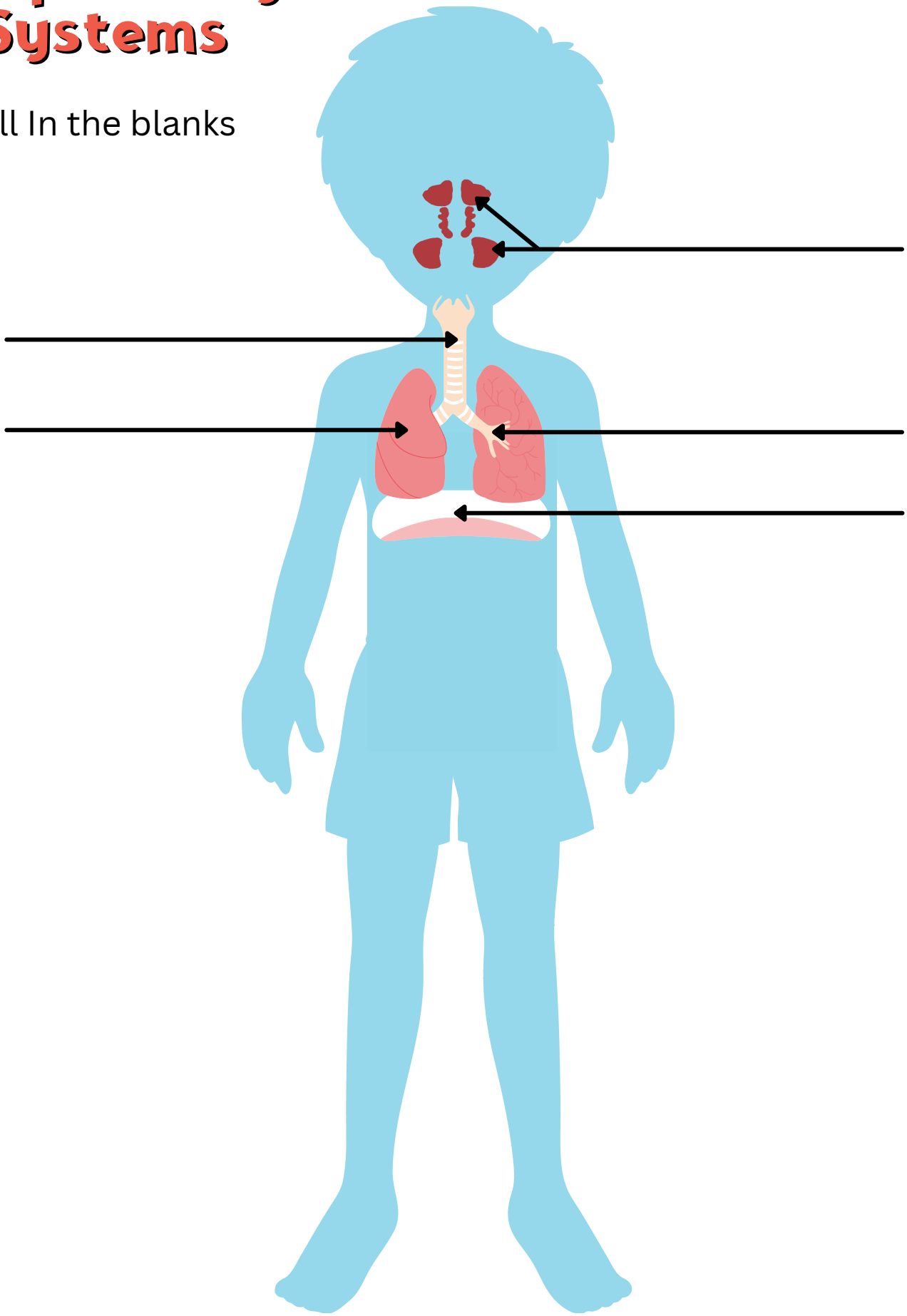
- For us to live, our bodies need oxygen. By breathing, we get oxygen to our cells through the respiratory system.
- When breathing, air comes into your nose or mouth.
- A muscle called the diaphragm helps us breathe by contracting and flattening when we inhale, pulling air into our lungs.
- The diaphragm relaxes when you exhale and pushes air out of your lungs
- Air travels through our trachea to the bronchi tubes in our lungs. Bronchi tubes branch out like a tree, getting smaller as they go. The smaller tubes are called bronchioles.
- Alveoli are small air sacs at the end of each bronchi. They pass on oxygen to our red blood cells.
- You could fill more than 100 hot air balloons with the amount of air you exhale in your lifetime!

Respiratory Systems



Respiratory Systems

Fill In the blanks



The Lung Project

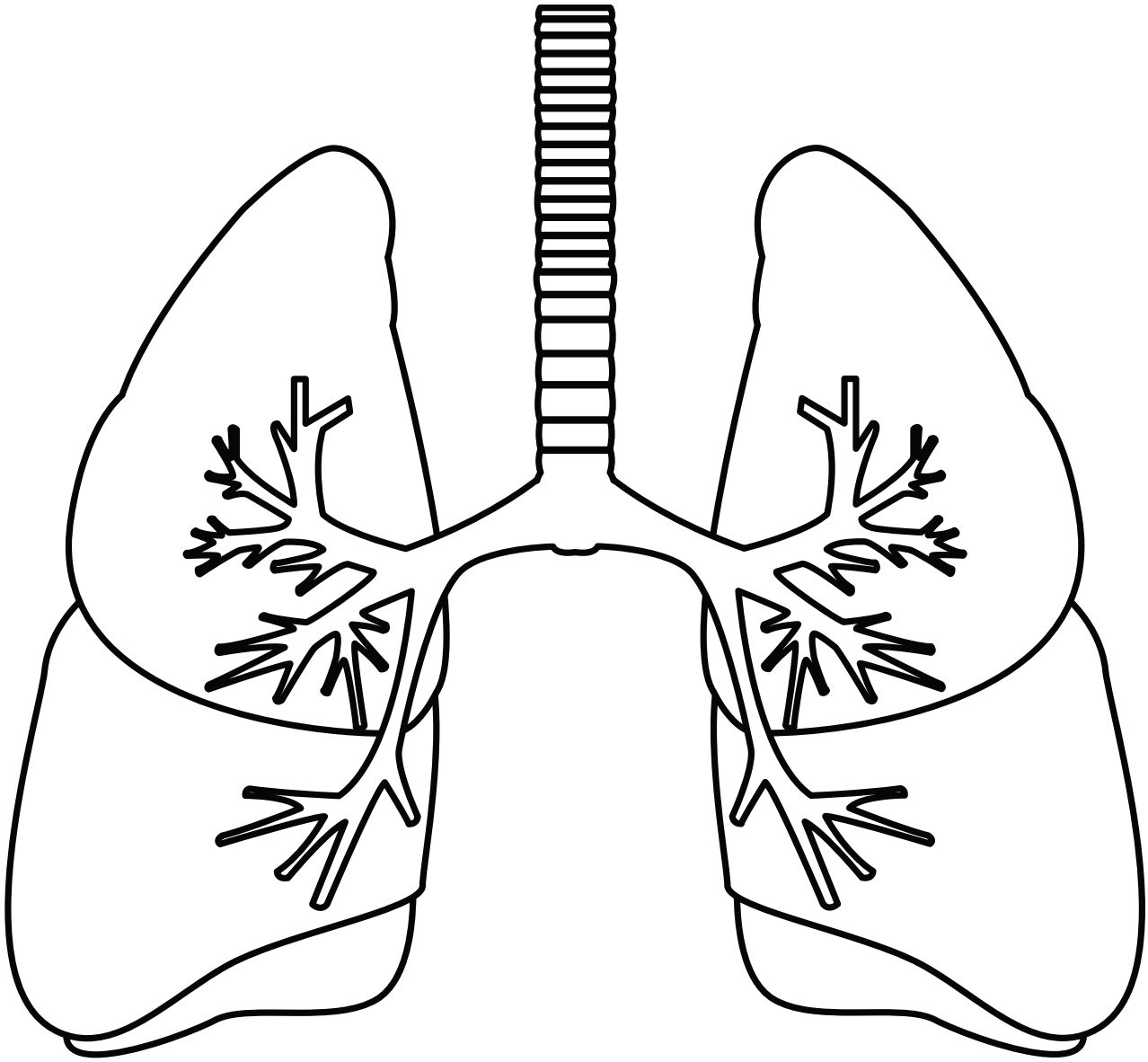
For this project, you'll need two paper lunch bags, tape, and two straws.

- Draw parts of the lungs (bronchi, bronchioles, and alveoli) on each of the paper bags. Add as much detail as you'd like.
- Insert a straw into each bag.
- squeeze close the open side of each bag around the straw and use tape to seal the bag shut. The straws will act as the trachea.
- Your students can then exhale and inhale into the straw to see how the bags expand and contract like lungs.

Our Lungs

Coloring

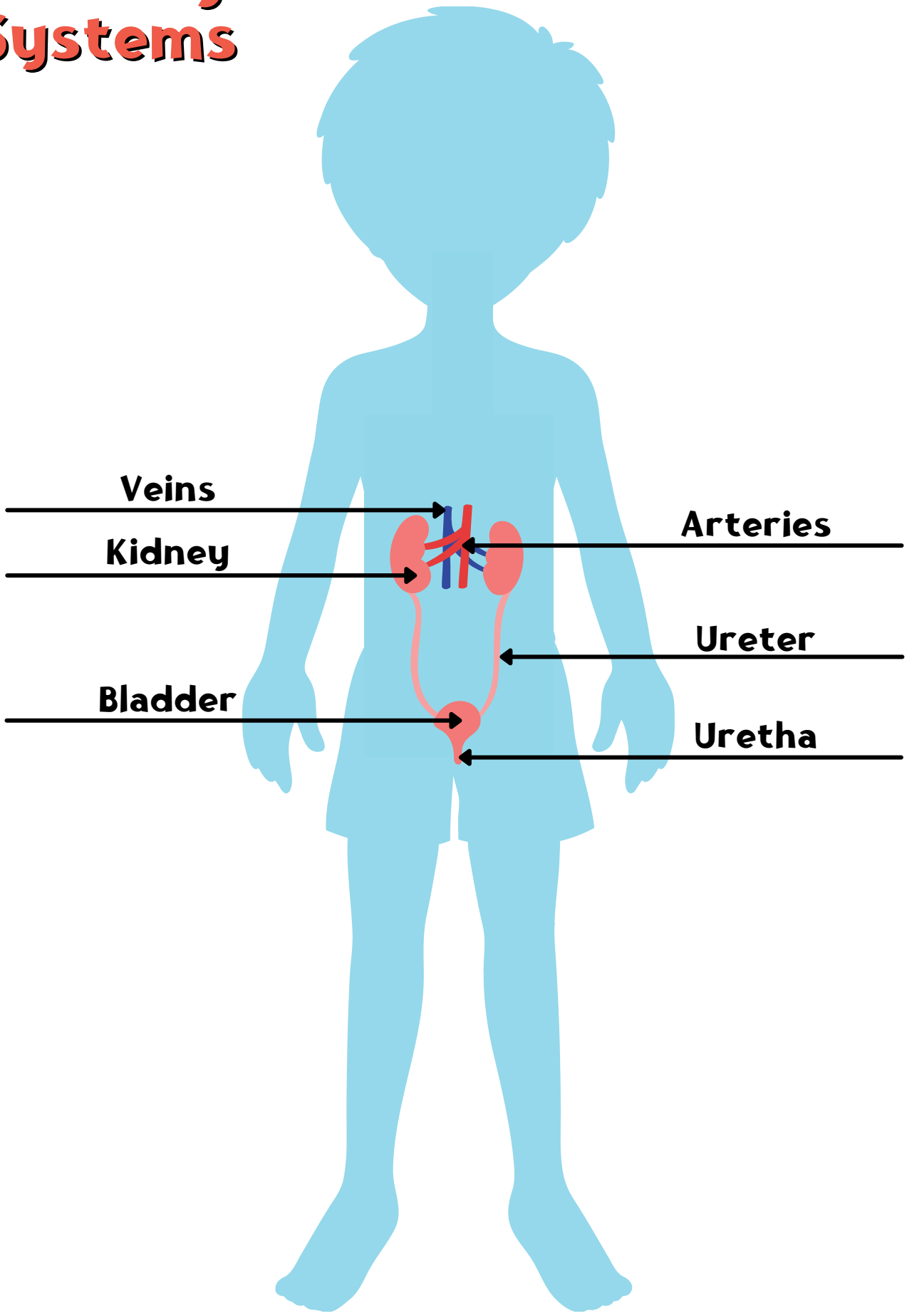
We all need oxygen to survive. Our lungs are very important because they allow us to take oxygen into the body.



Urinary System Facts

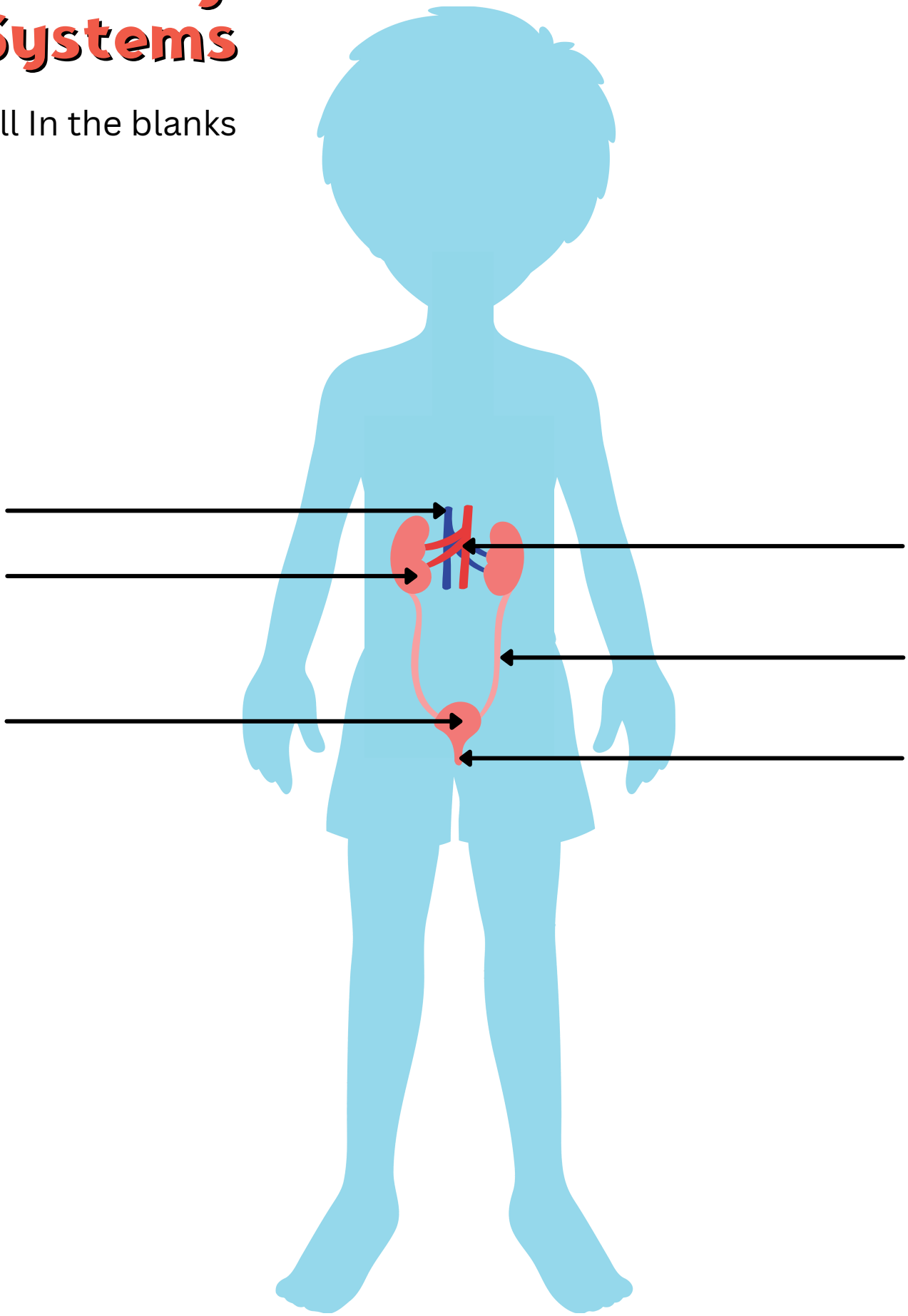
- The kidneys are bean-shaped organs that filter waste from the blood and produce urine. They filter out toxins so they don't build up in your body and make you sick.
- Ureters are two tubes that take urine from the kidneys to the bladder.
- Urine is stored in the bladder, an organ below the abdomen. It holds urine until it's full. When full, you have to go to the bathroom.
- Urine exits your body through a tube called the urethra. It carries urine from your bladder out of the body when you pee.

Urinary Systems



Urinary Systems

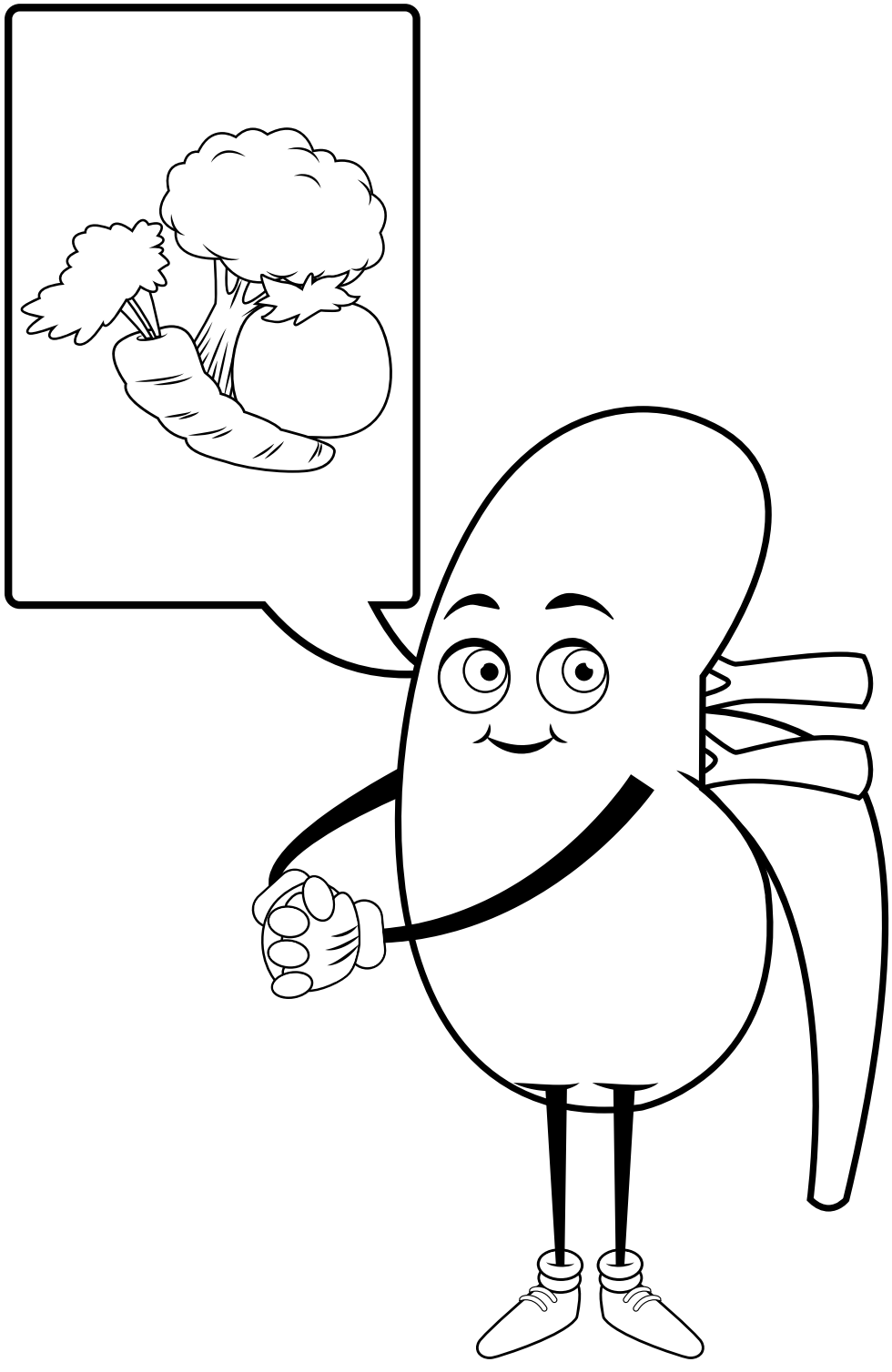
Fill In the blanks



Super Kidney

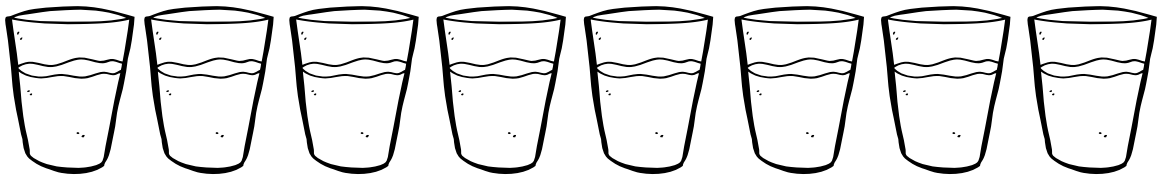
Coloring

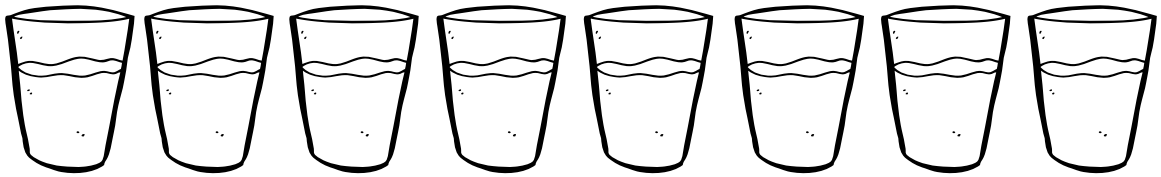
Eating good foods like fruits and vegetables will keep your kidneys healthy. Healthy kidneys get rid of waste and produce hormones to help your body function properly.

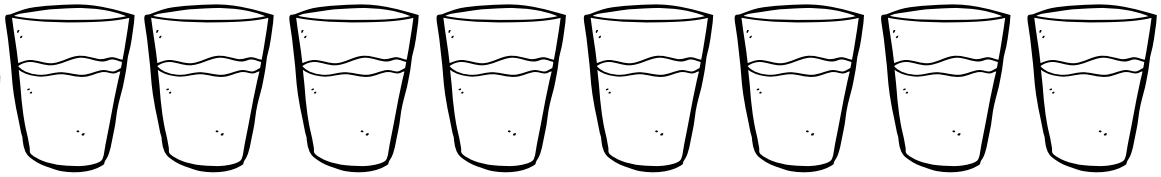


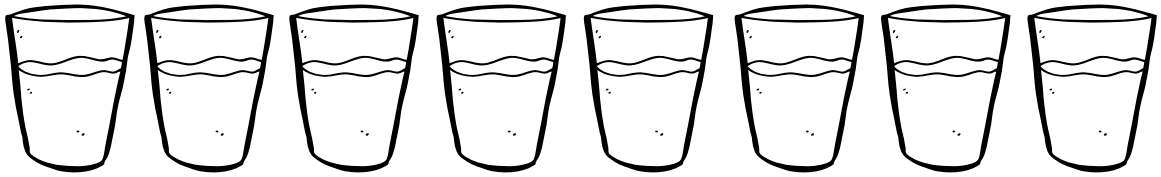
Water Tracker

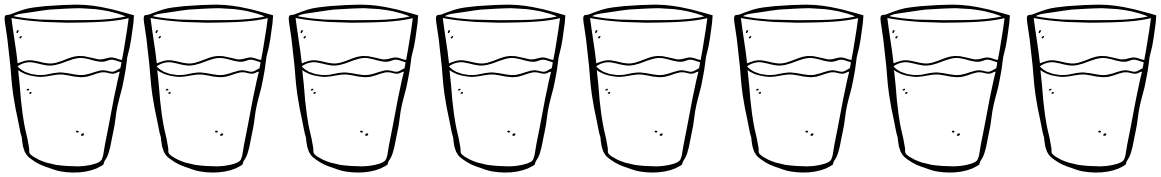
Drinking enough water is important for our bodies to stay healthy. Drinking 8 cups of water a day will help your muscles and the brain stay hydrated! Always space out your water drinking throughout the day and don't drink too much all at once.

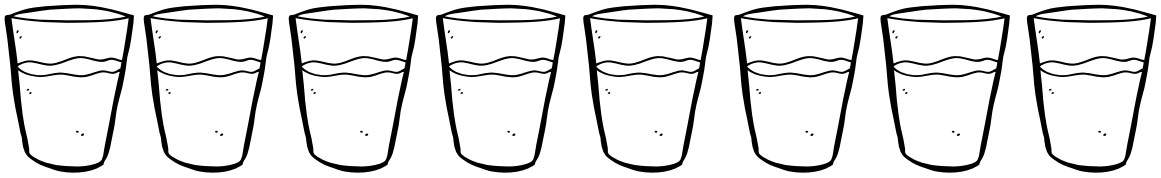
Monday 

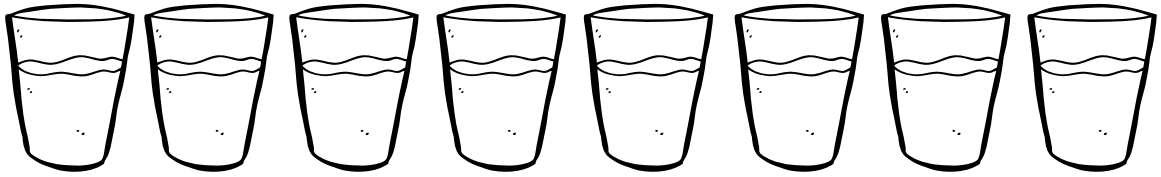
Tuesday 

Wednesday 

Thursday 

Friday 

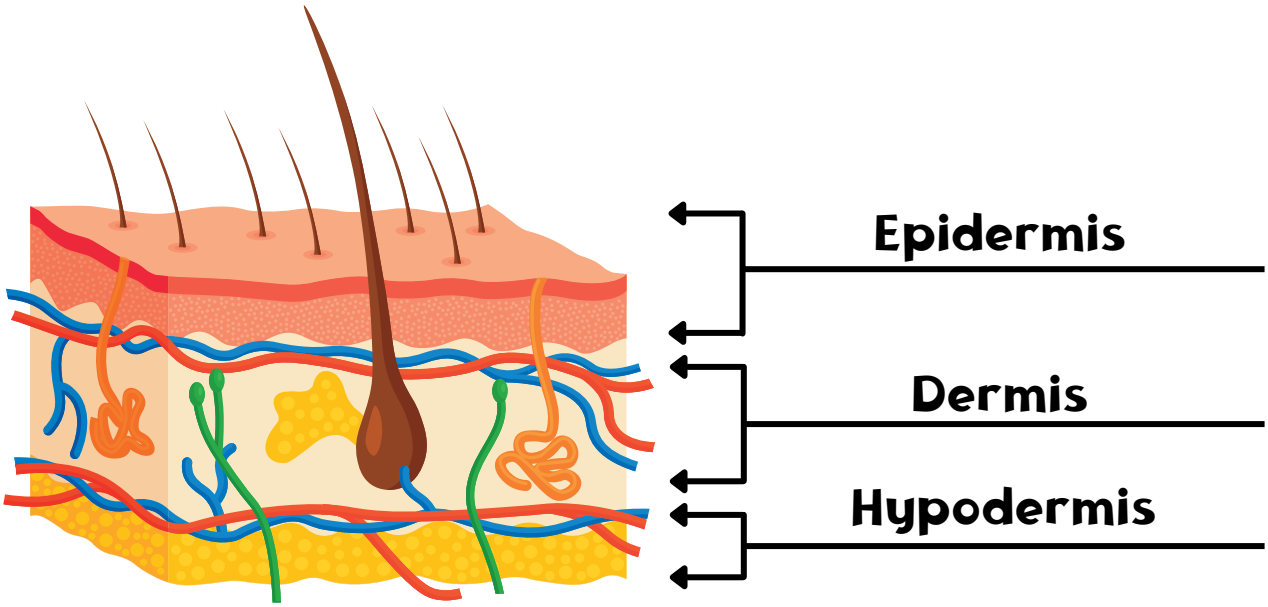
Saturday 

Sunday 

Integumentary System Facts

- The integumentary system is everything covering the outside of your body. This includes skin, hair, nails, and sweat glands.
- Skin is actually an organ, and is your largest organ.
- The integumentary system protects your body's internal organs. It also protects your body from bacteria, dehydration, and Sunburns.
- It also stores water, fat, and vitamin D
- There are three layers of skin, epidermis, dermis, and hypodermis.
- The epidermis is the top layer of the skin that you can see.
- Skin cells are always being shed, but new ones are constantly being made.
- The dermis is the second layer of skin. It's thicker than the epidermis.
- The dermis contains blood cells, hair follicles, and sweat glands. Blood cells in the dermis bring oxygen and nutrients to your skin.
- The hypodermis is the third and bottom layer of skin. It connects the skin to muscles and bones. It also stores fat and protects your body from harm.

Integumentary Systems



Integumentary Systems

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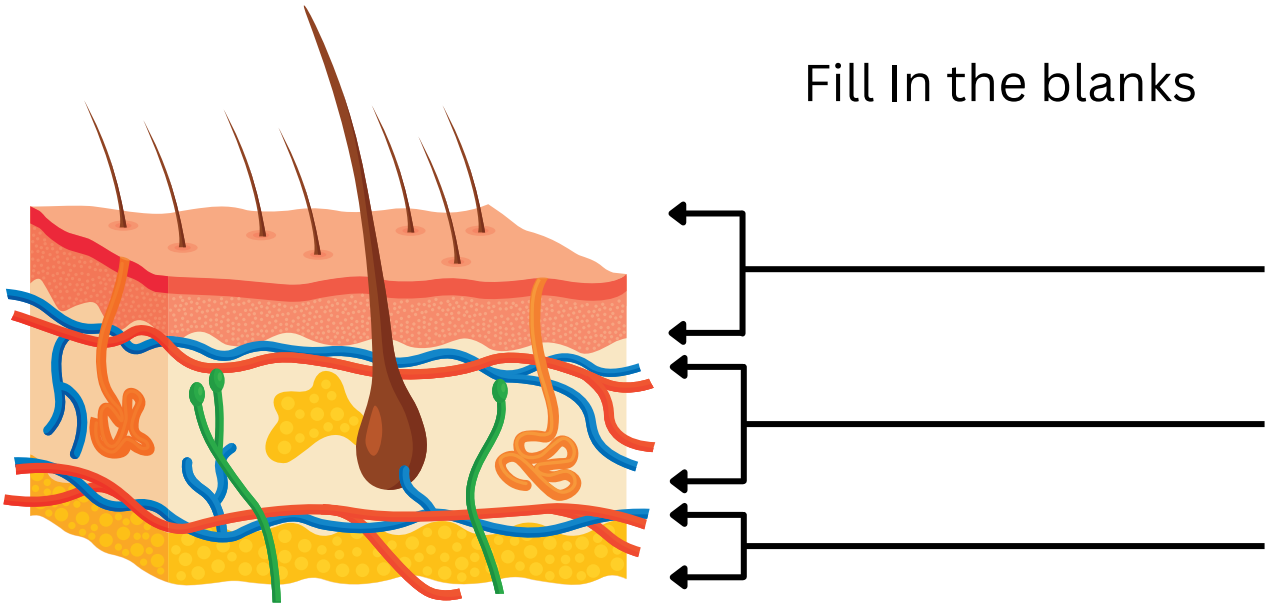


Fingerprint Record

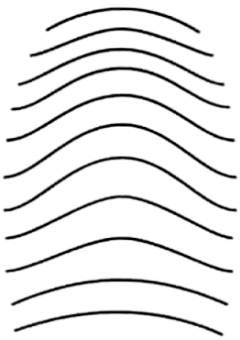
The fingerprints on our skin are very interesting. Everyone's fingerprints are completely unique. Use an ink pad to record your fingerprints and see what patterns they have.

Left Hand Prints

Right Hand Prints

Whorl

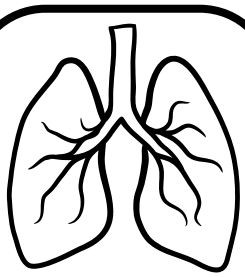
Loop



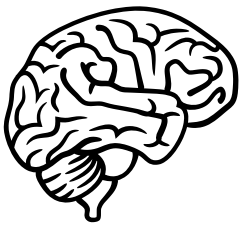
Arch

Anatomy Match Game

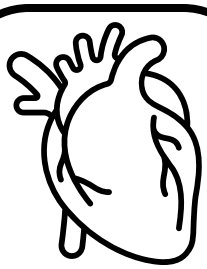
Draw a line to match the body part with it's system.



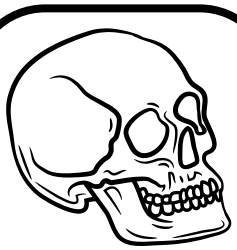
Lungs



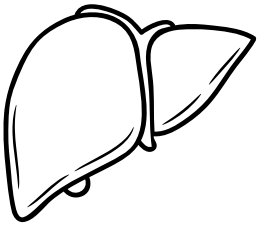
Brain



Heart



Skull



Liver

Skeletal System

Circulatory System

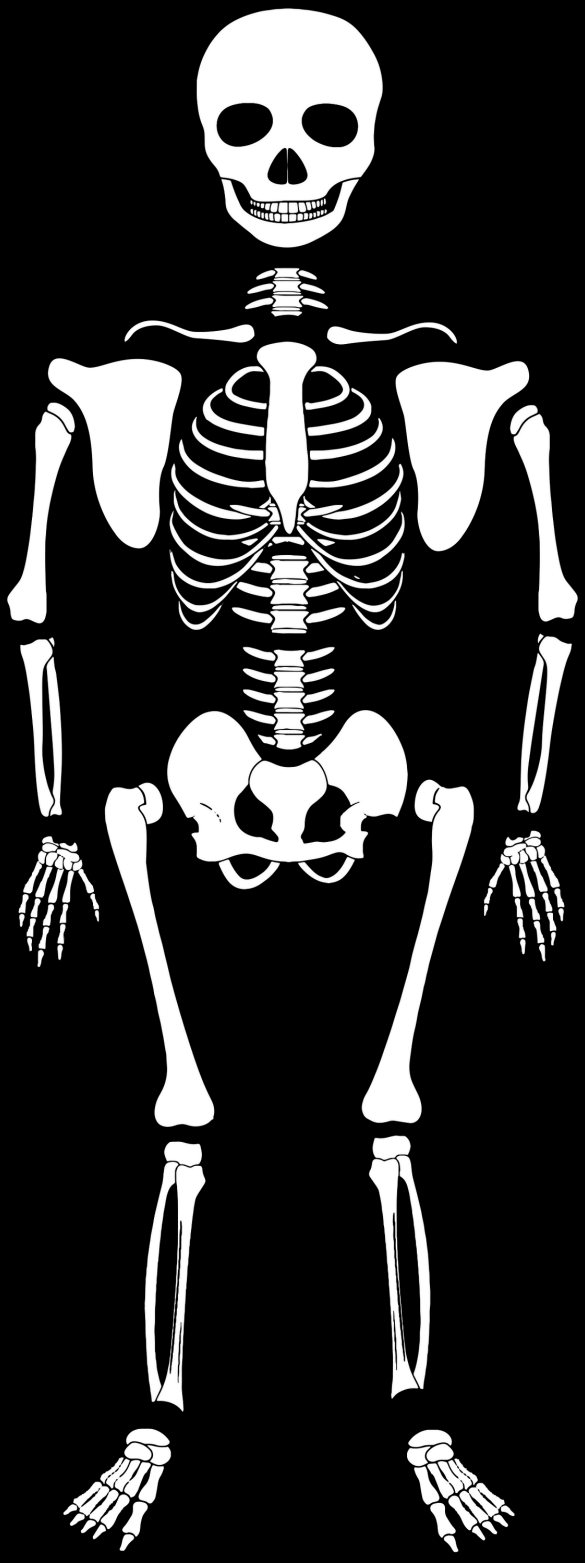
Nervous System

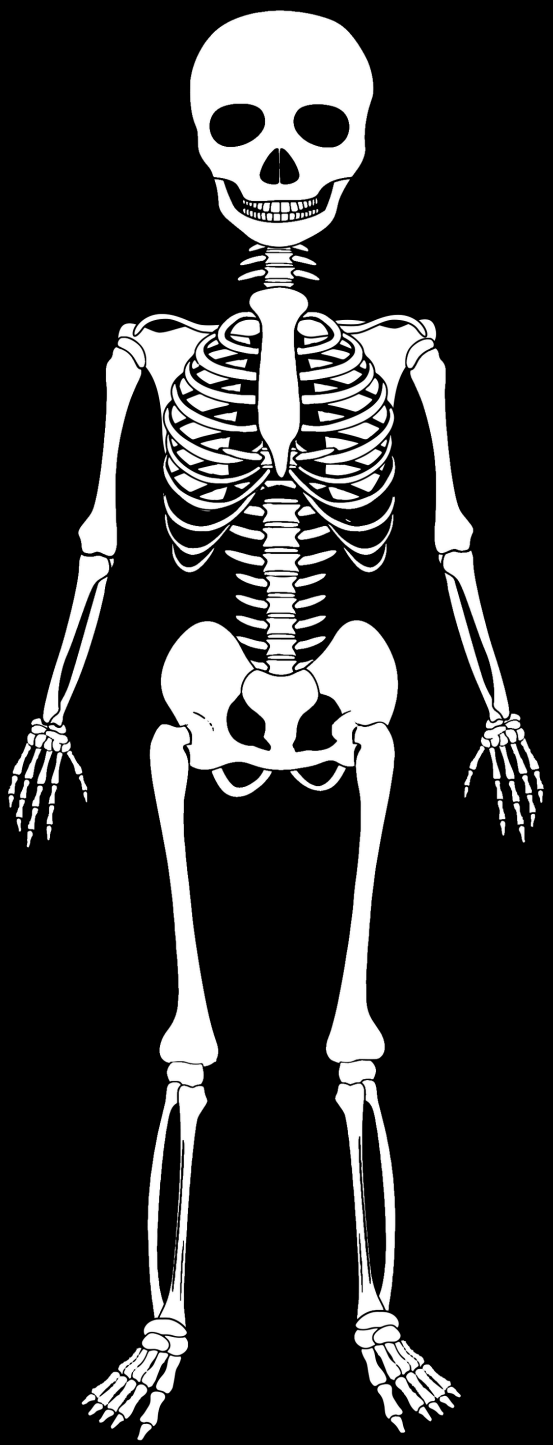
Respiratory System

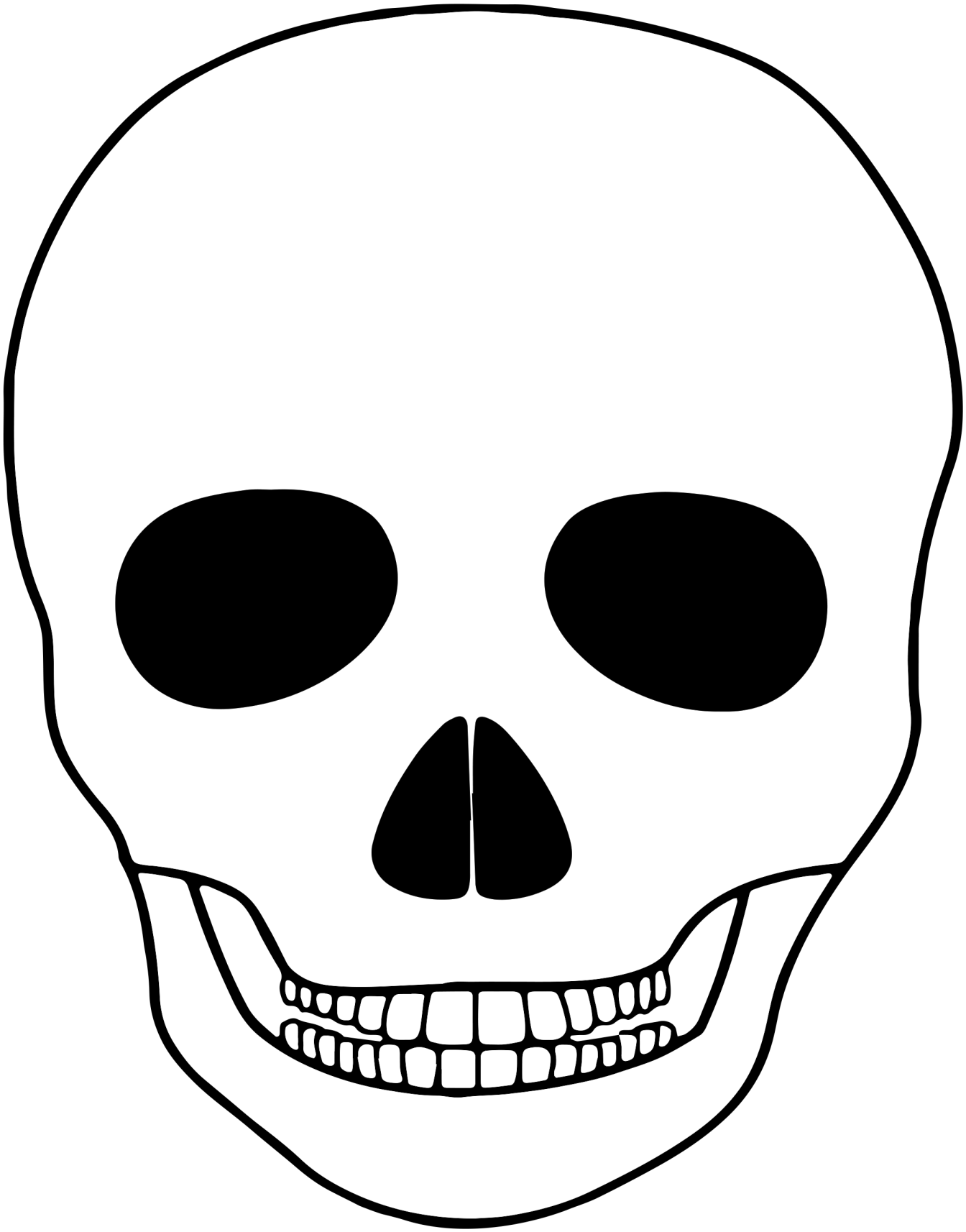
Digestive System

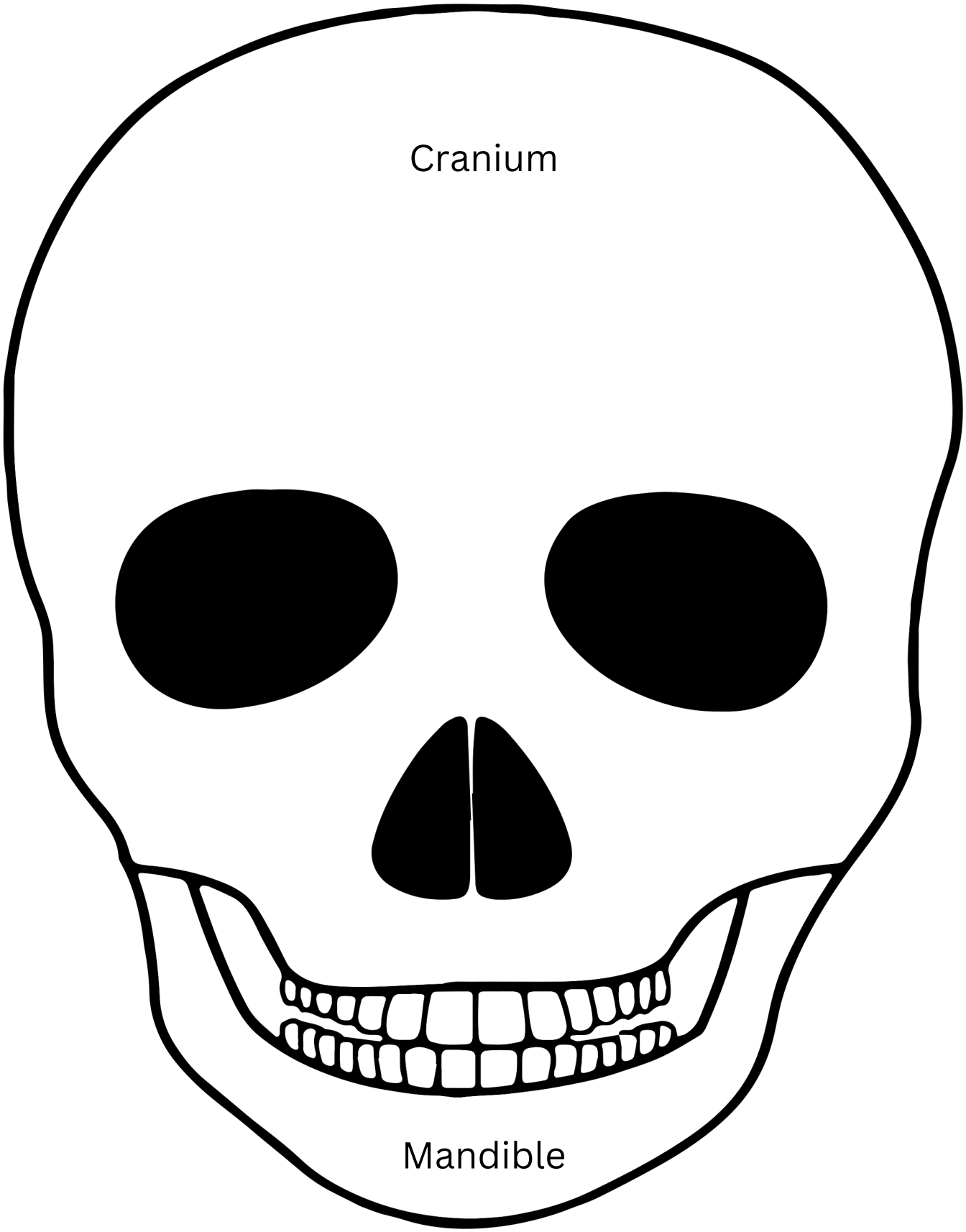
Full-Size Skeleton

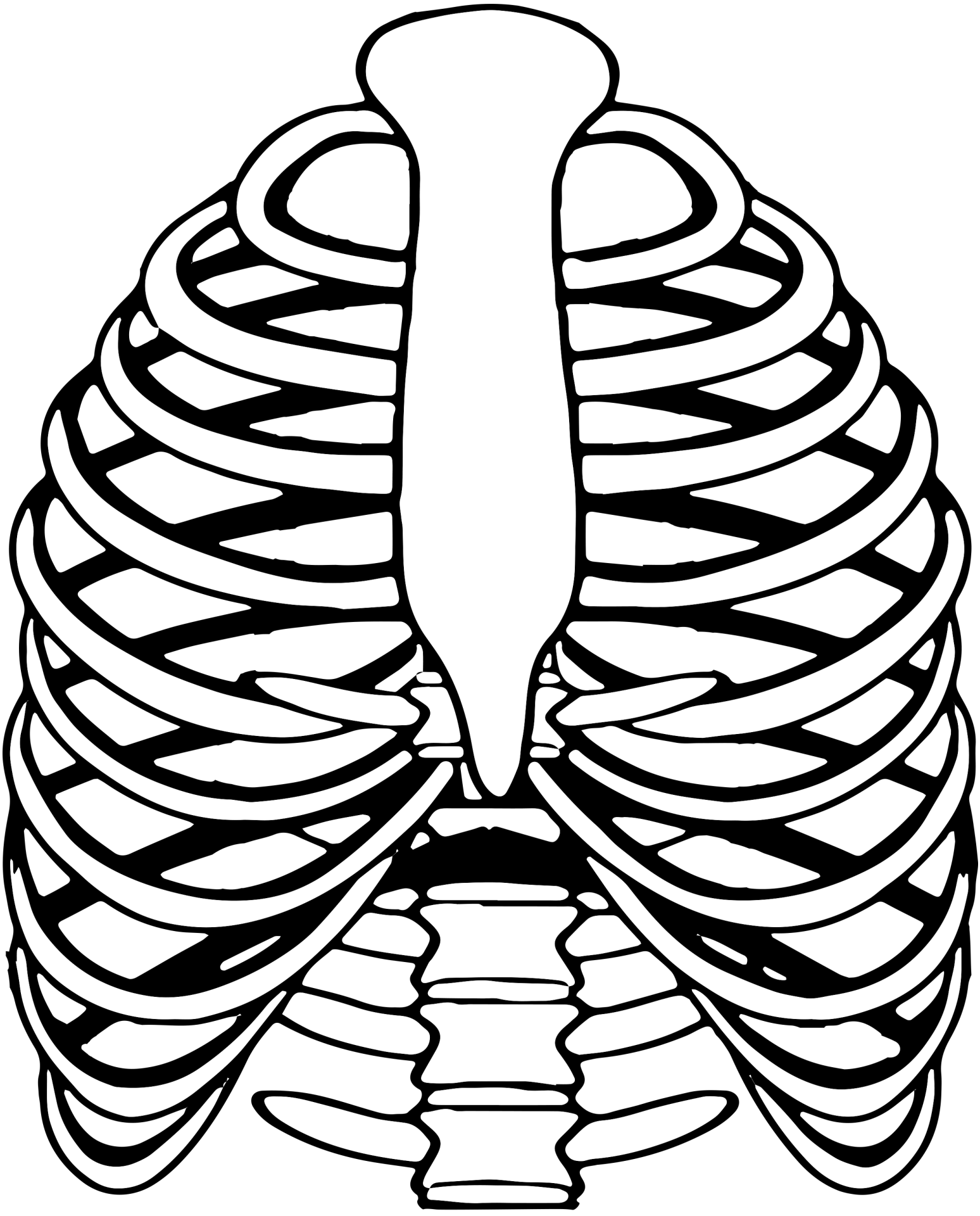
Cut out all the pieces of the skeleton model.The bones can be assembled as you study the skeletal system. There is a labeled and unlabeled version.

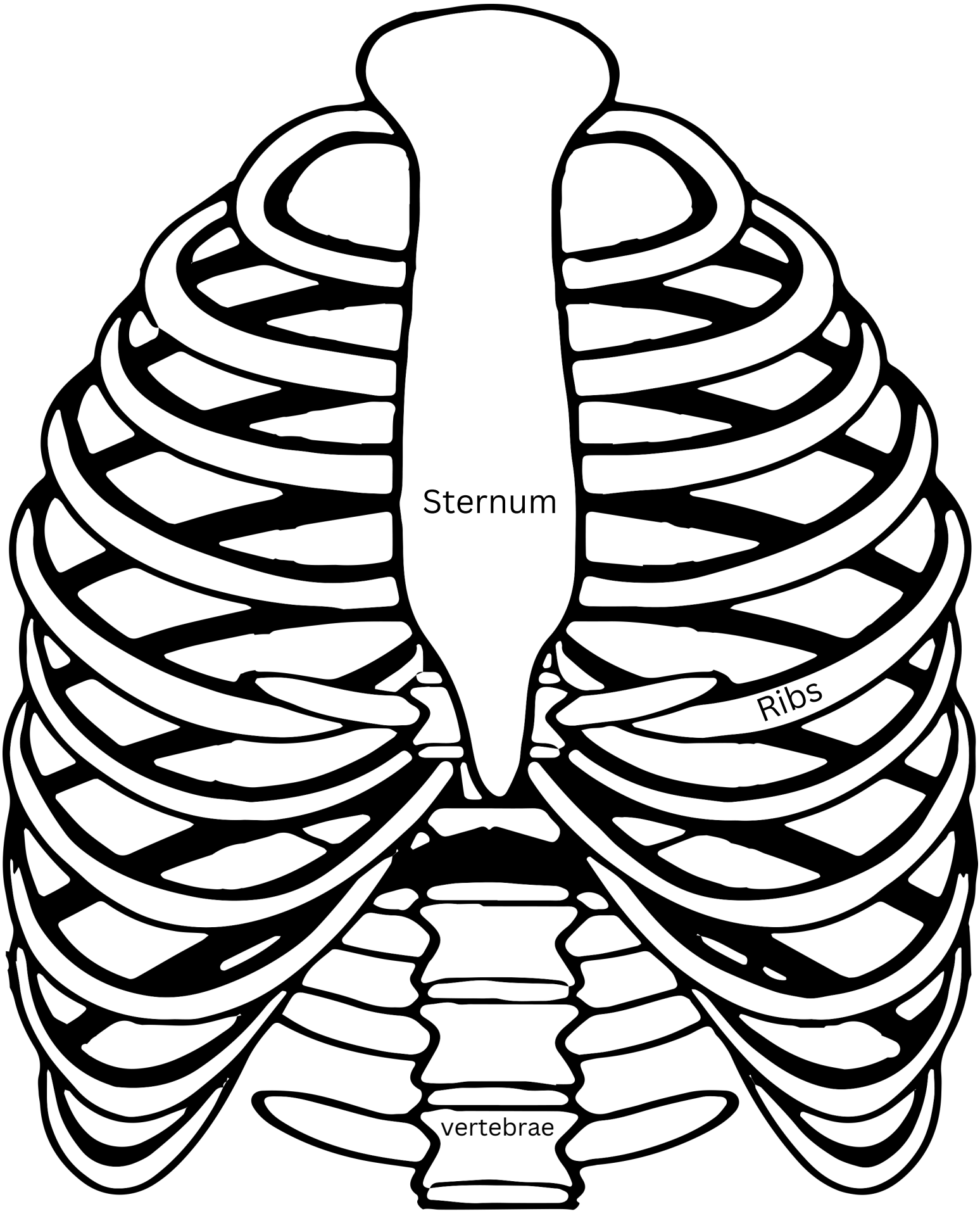


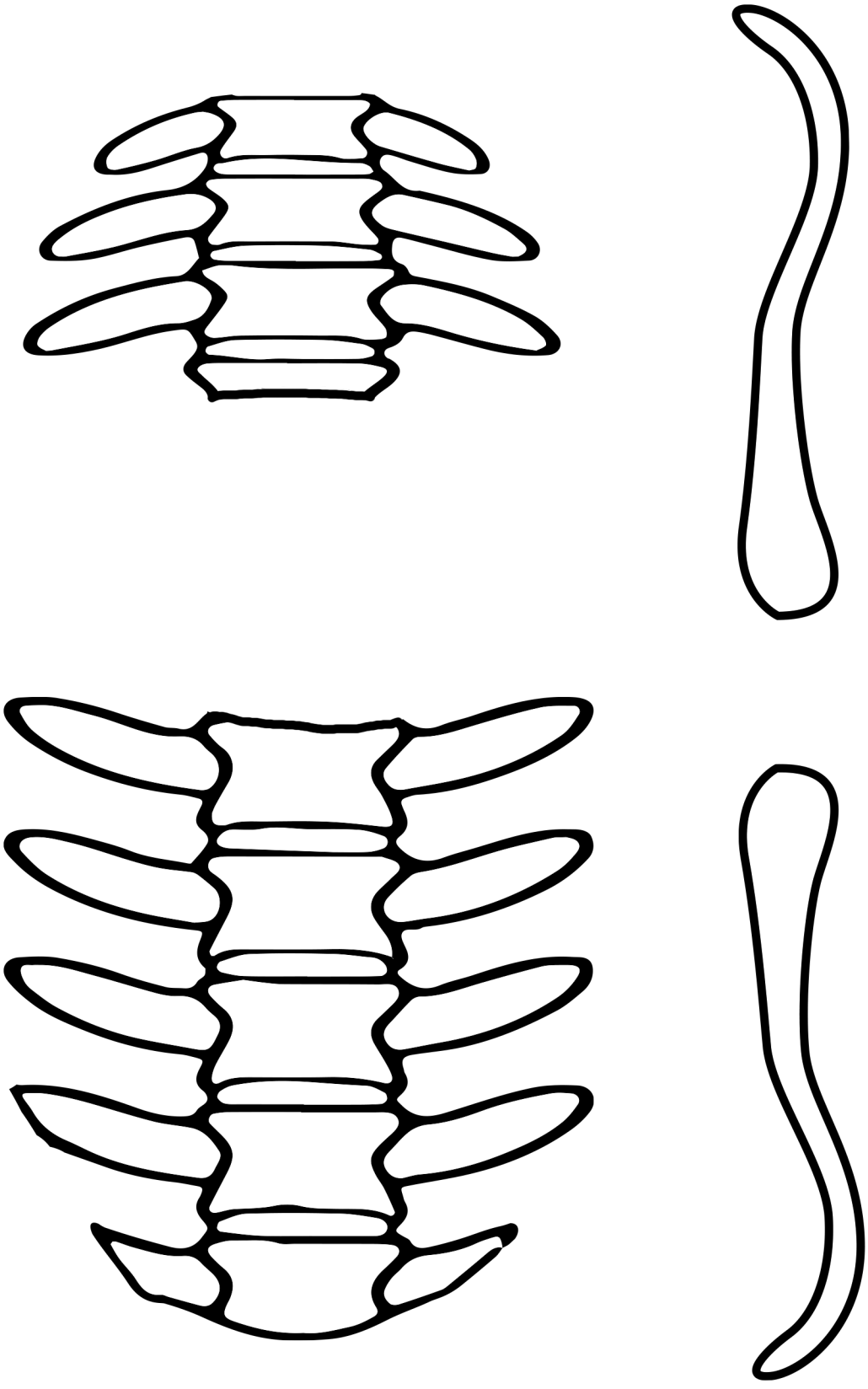





Cranium
Mandible




Sternum
Ribs
vertebrae

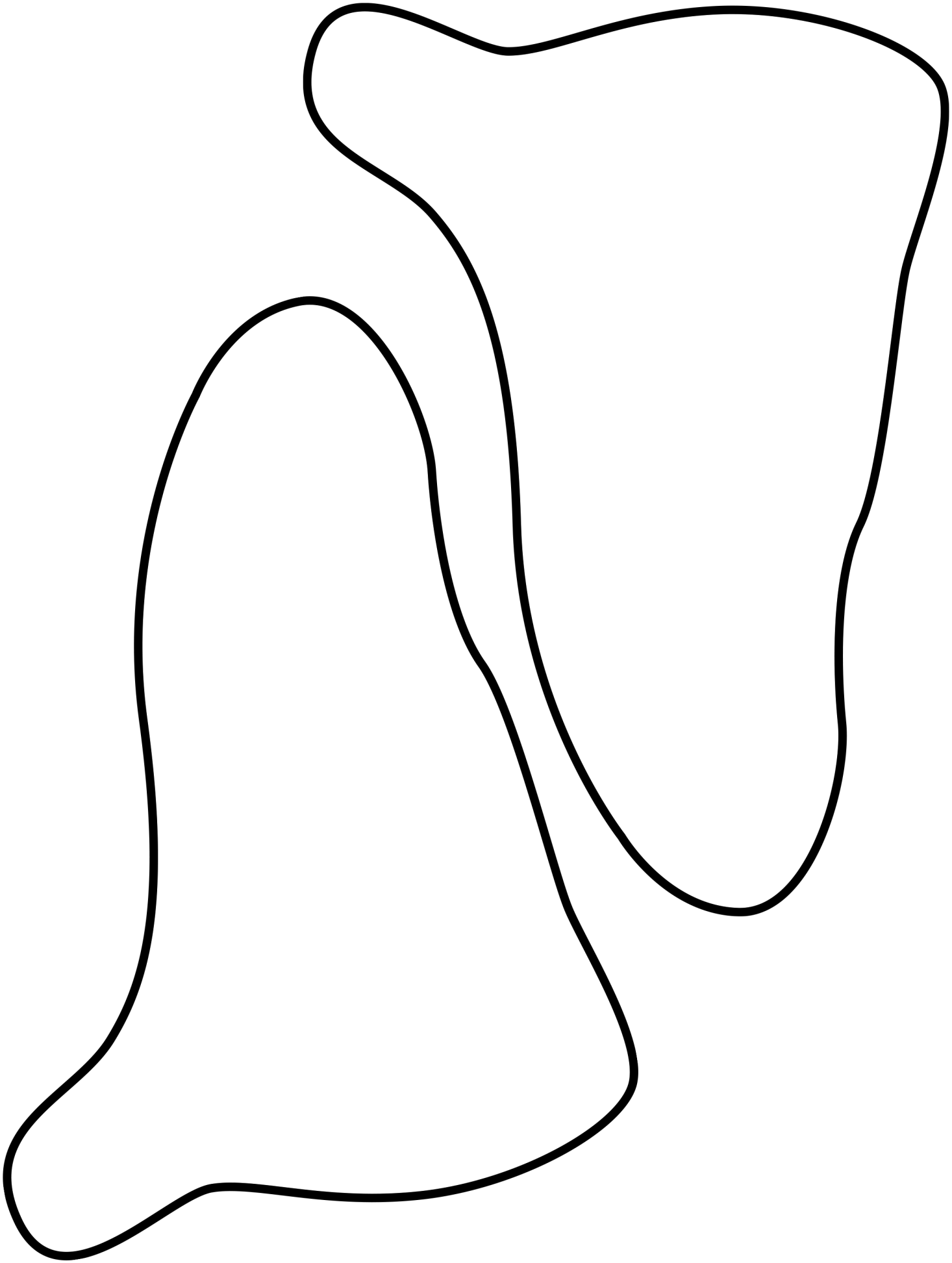


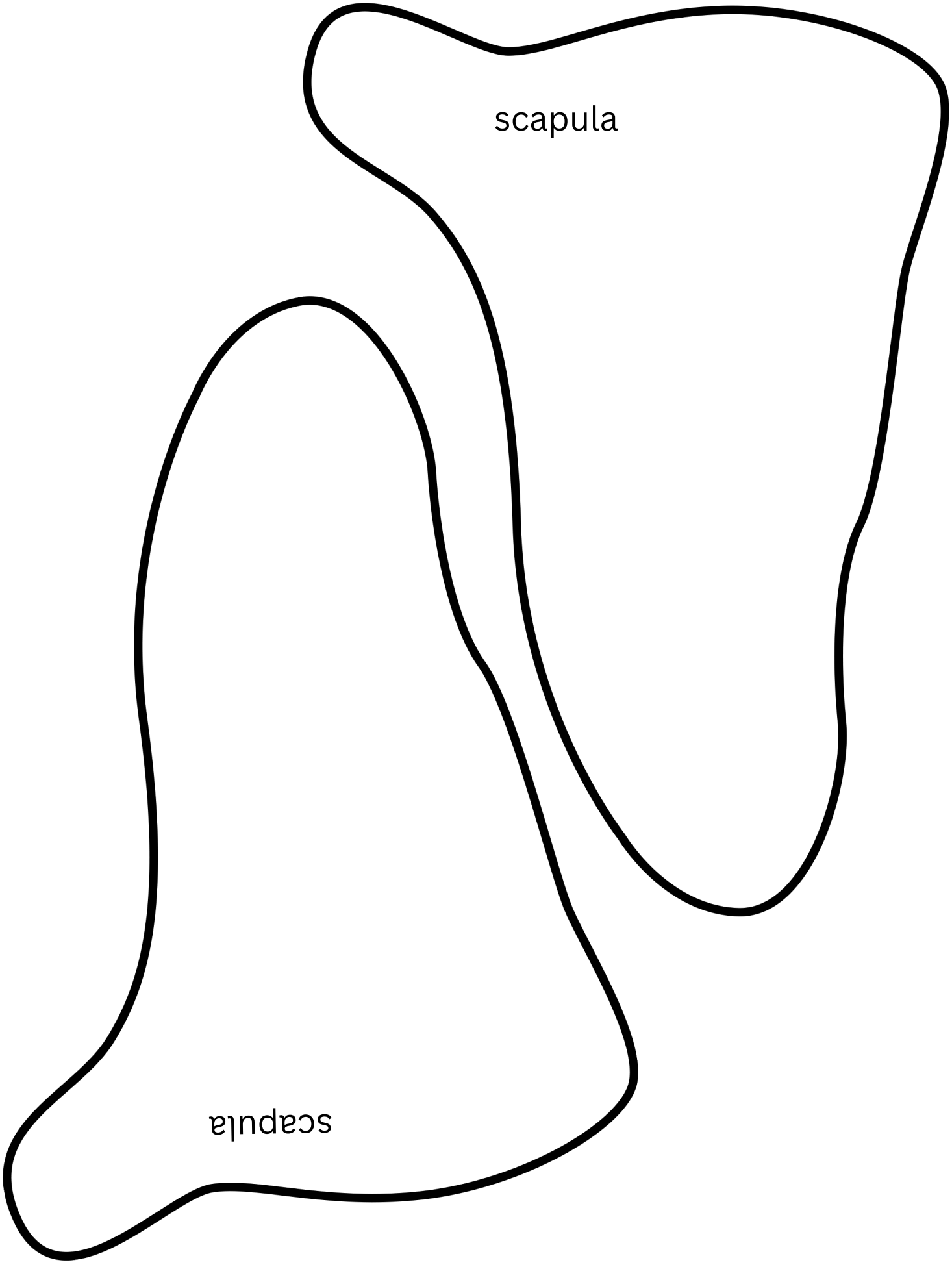
vertebrae

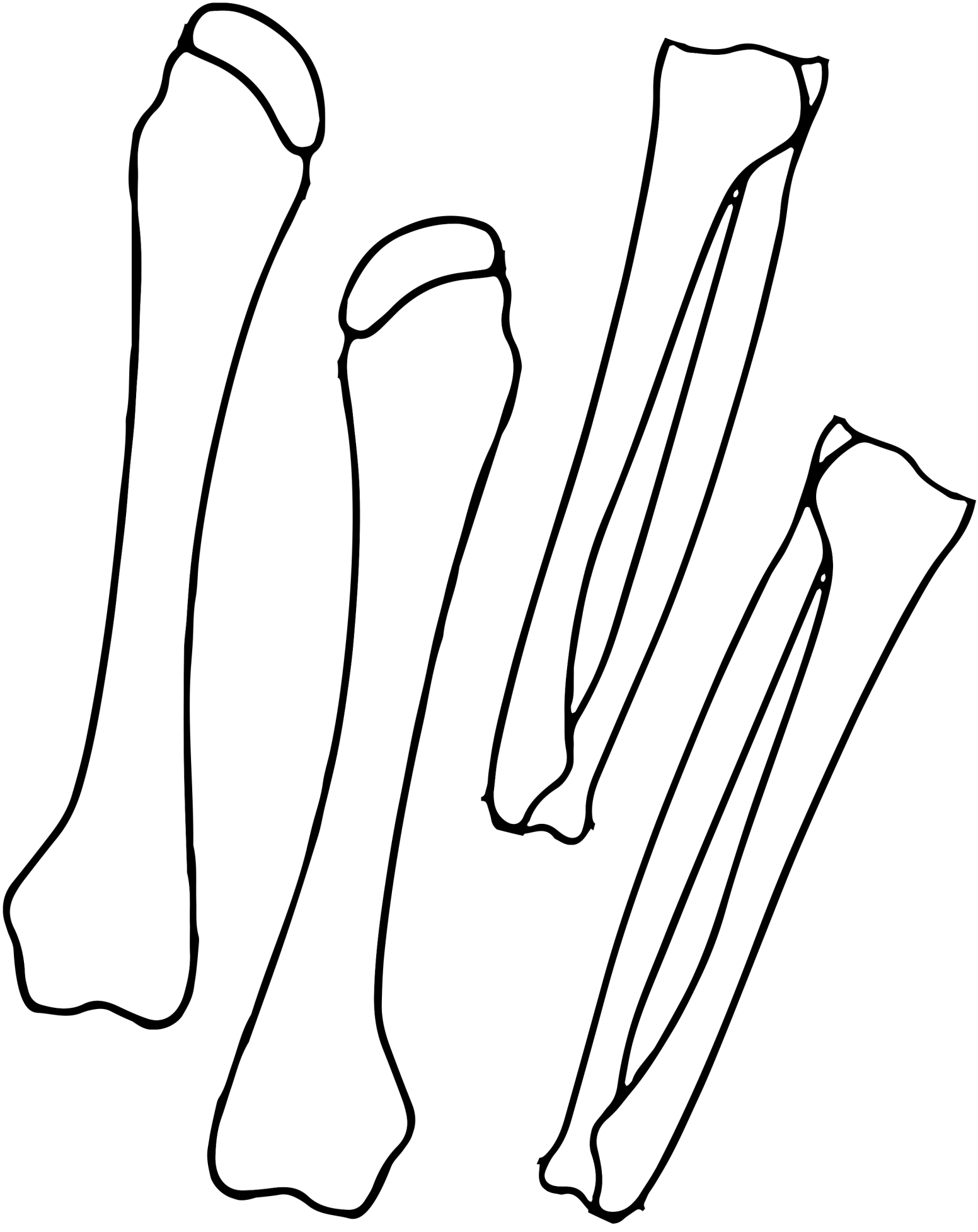
Clavicle

vertebrae

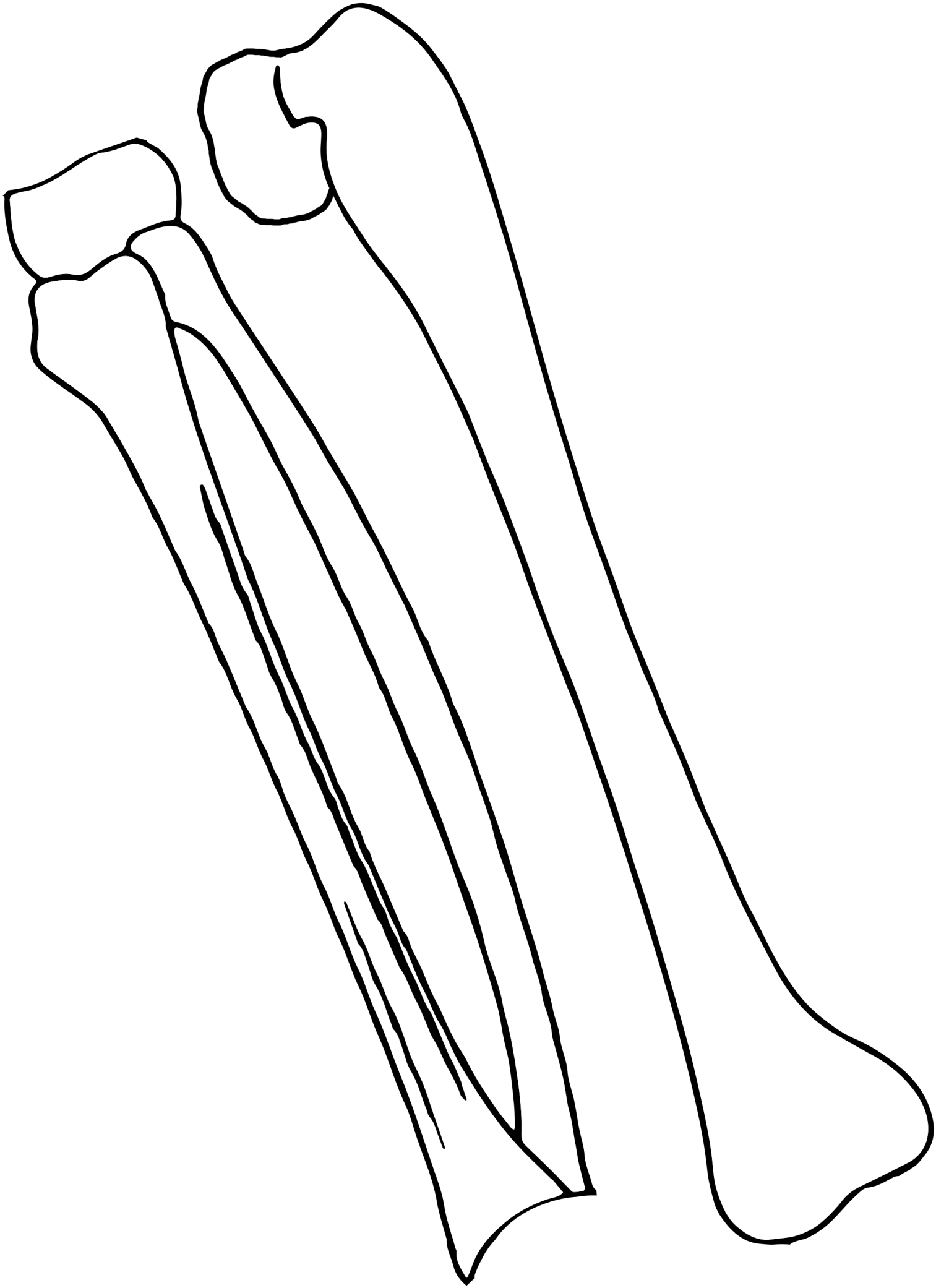
Clavicle

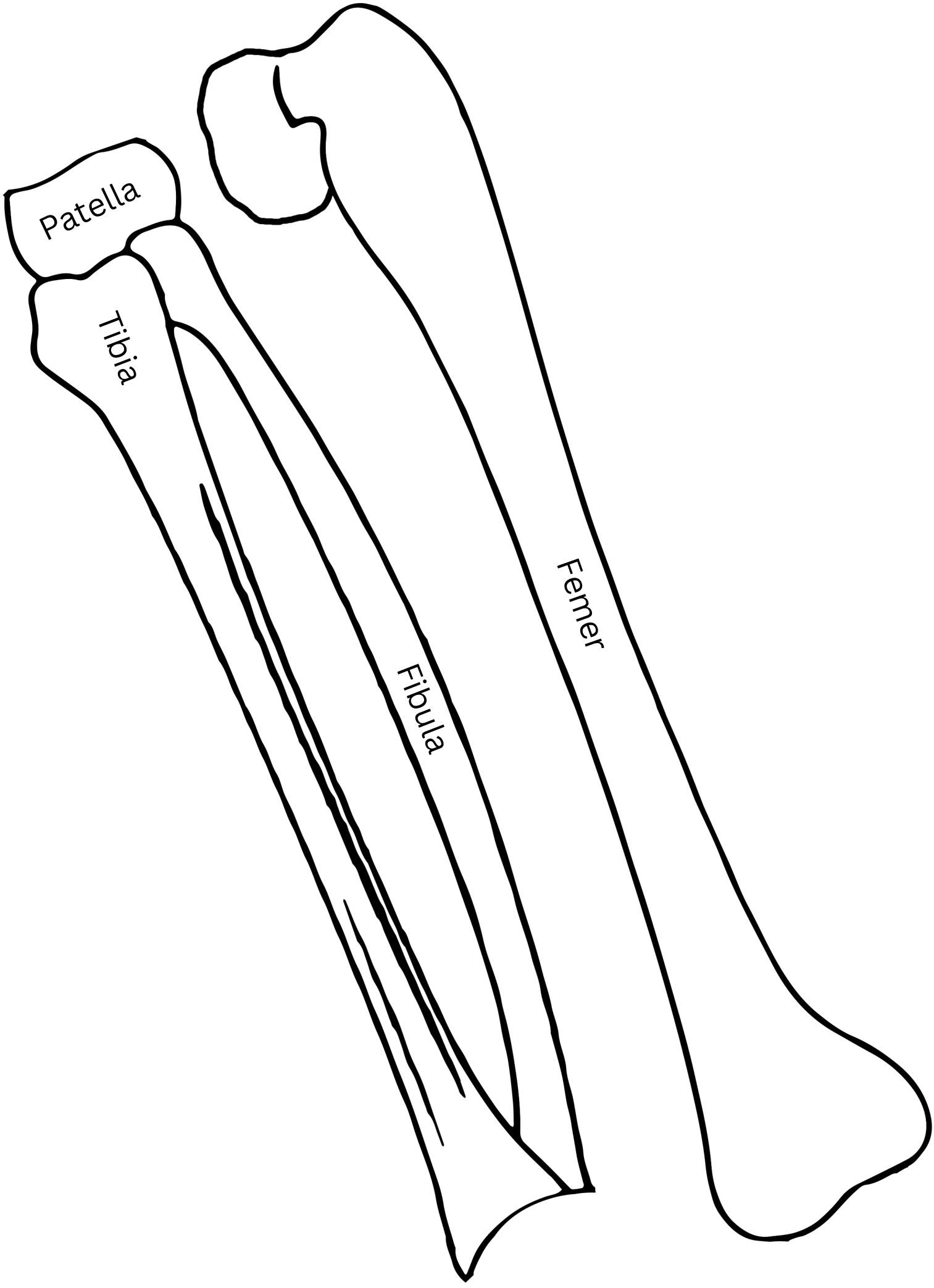


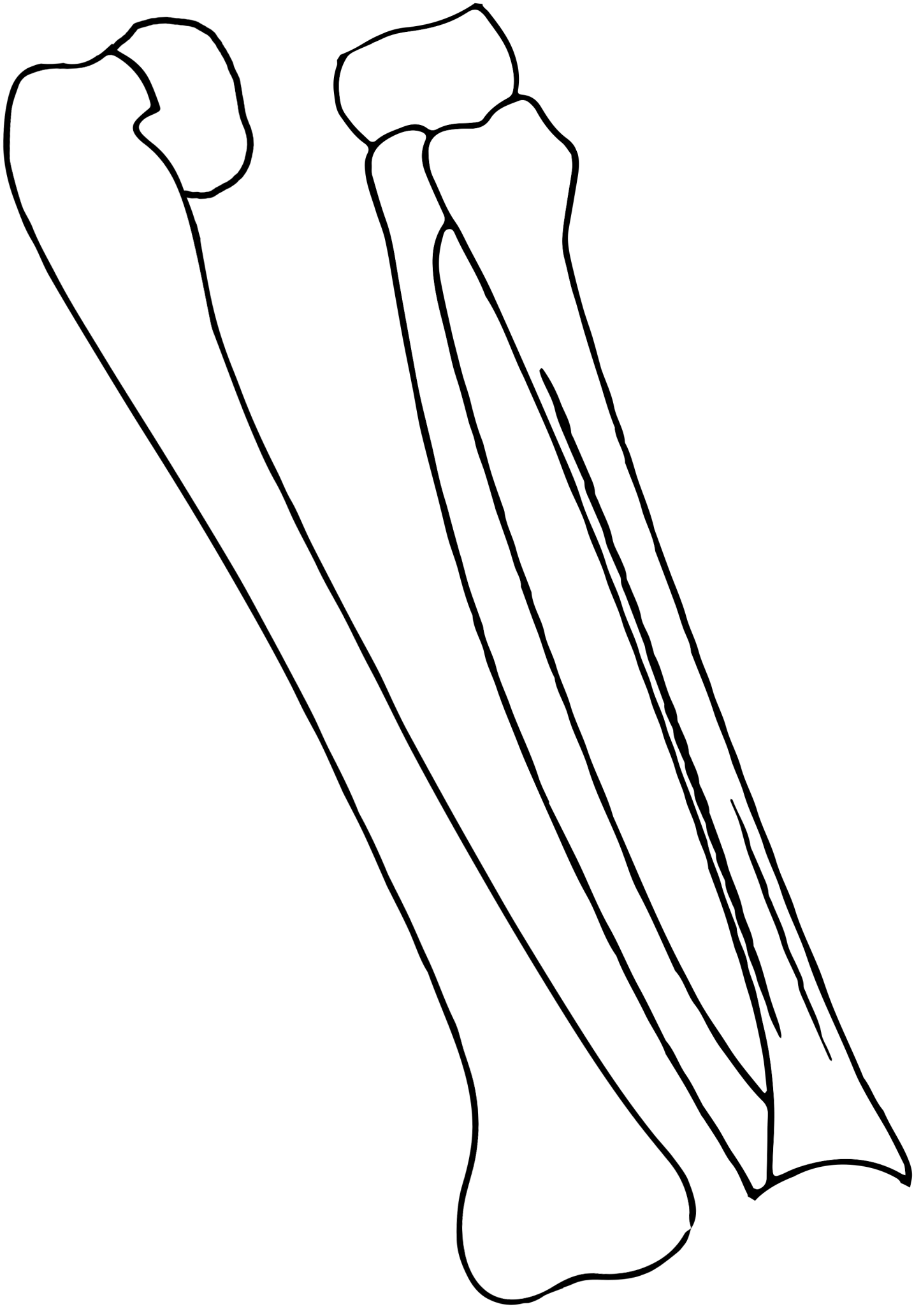

scapula
scapula

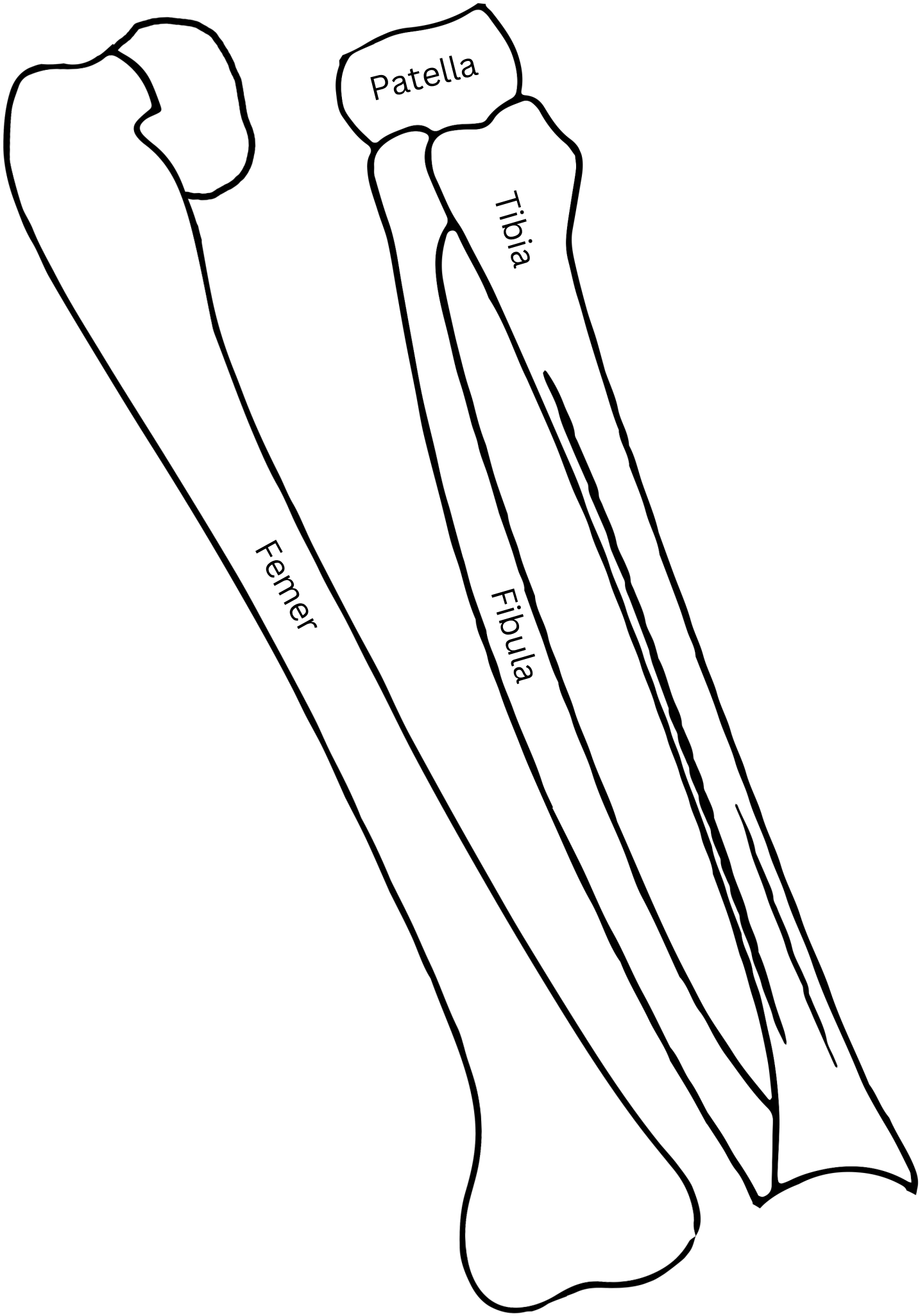


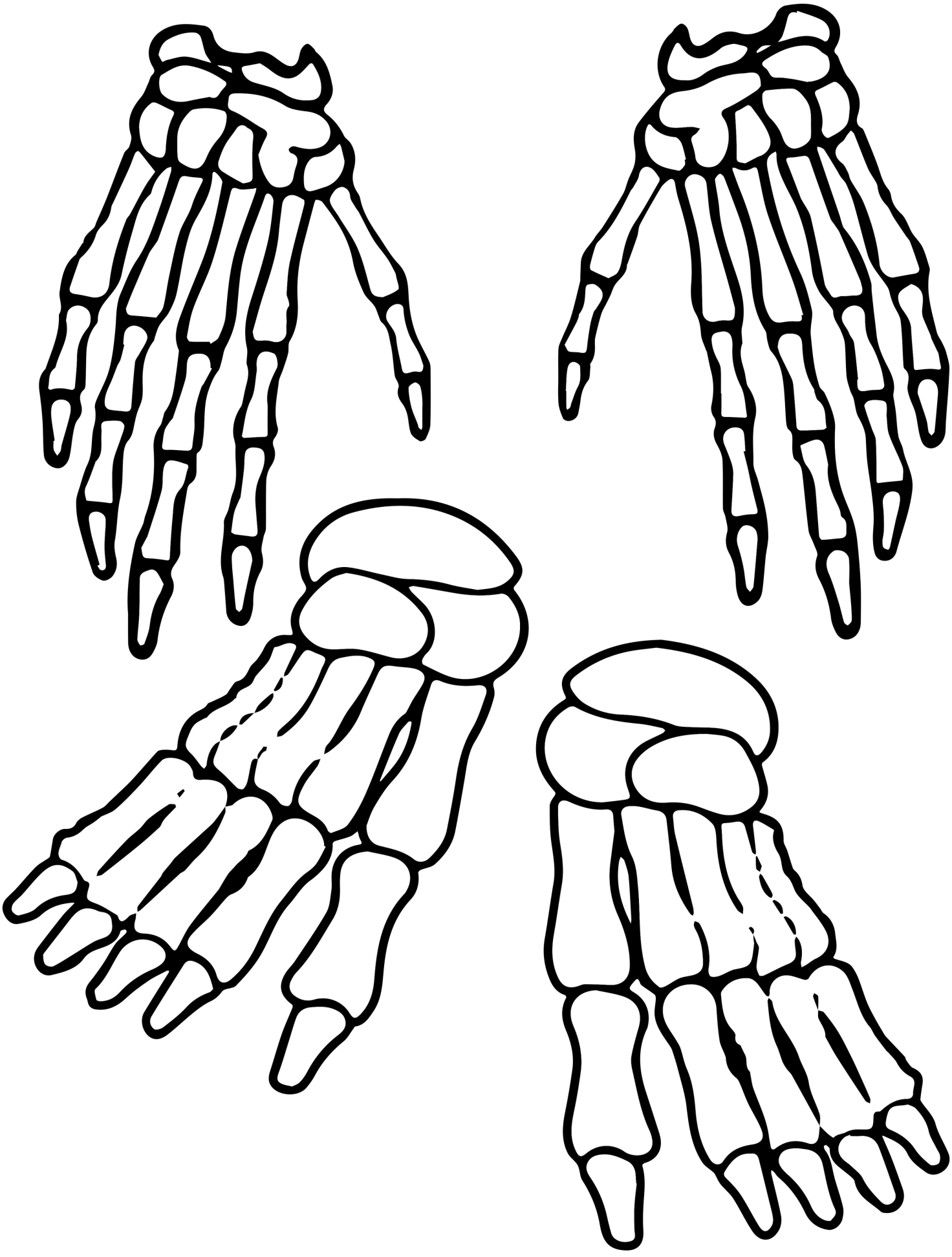
Humerus
Humerus
Radius
Ulna
Ulna
Radius

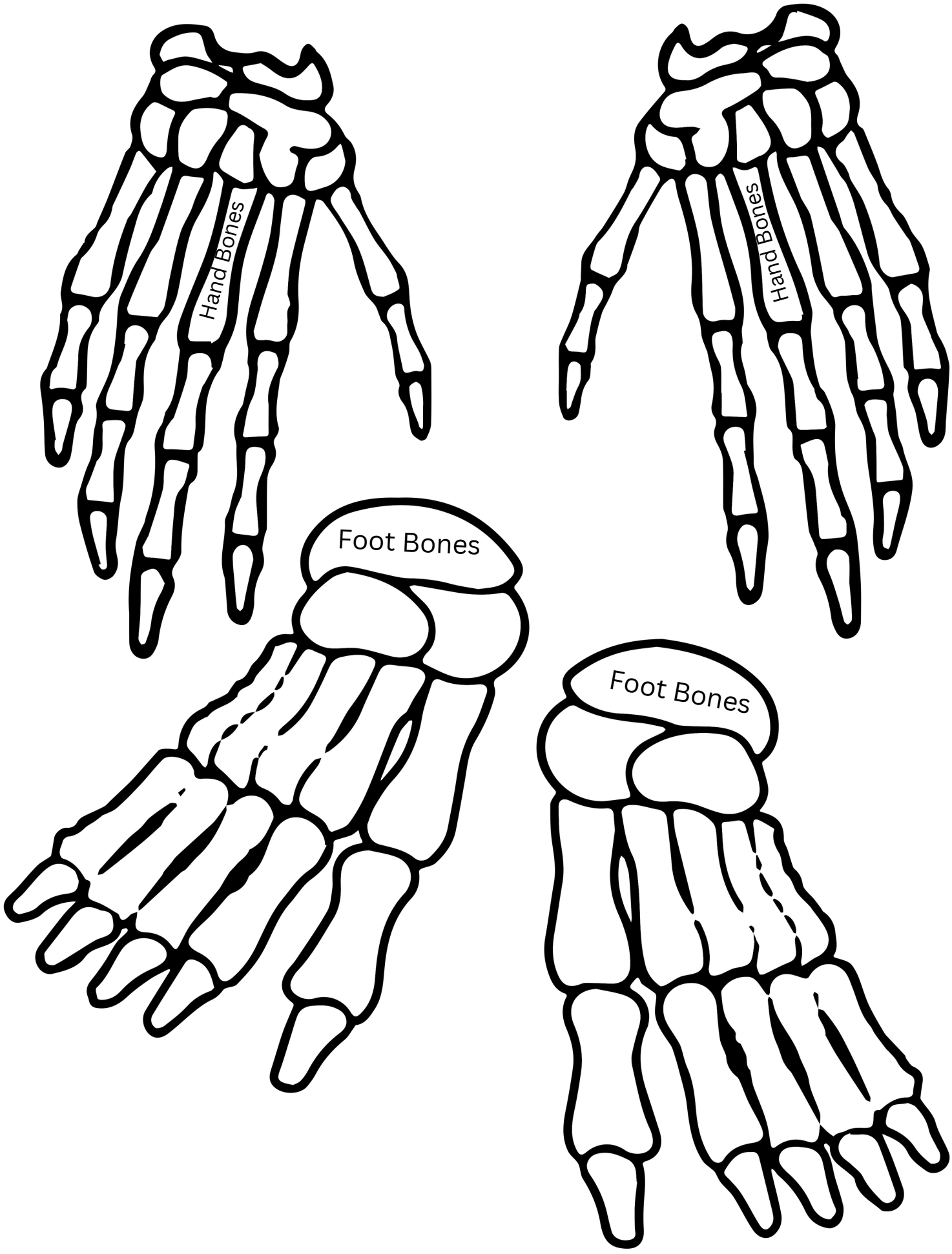



Patella
Tibia
Fibula
Femer




Patella
Tibia
Femer
Fibula




Hand Bones
Hand Bones
Foot Bones
Foot Bones