

# TOOLKIT 1

## MEET YOUR MIGHTY ORGANS

Teacher's Lesson Plan

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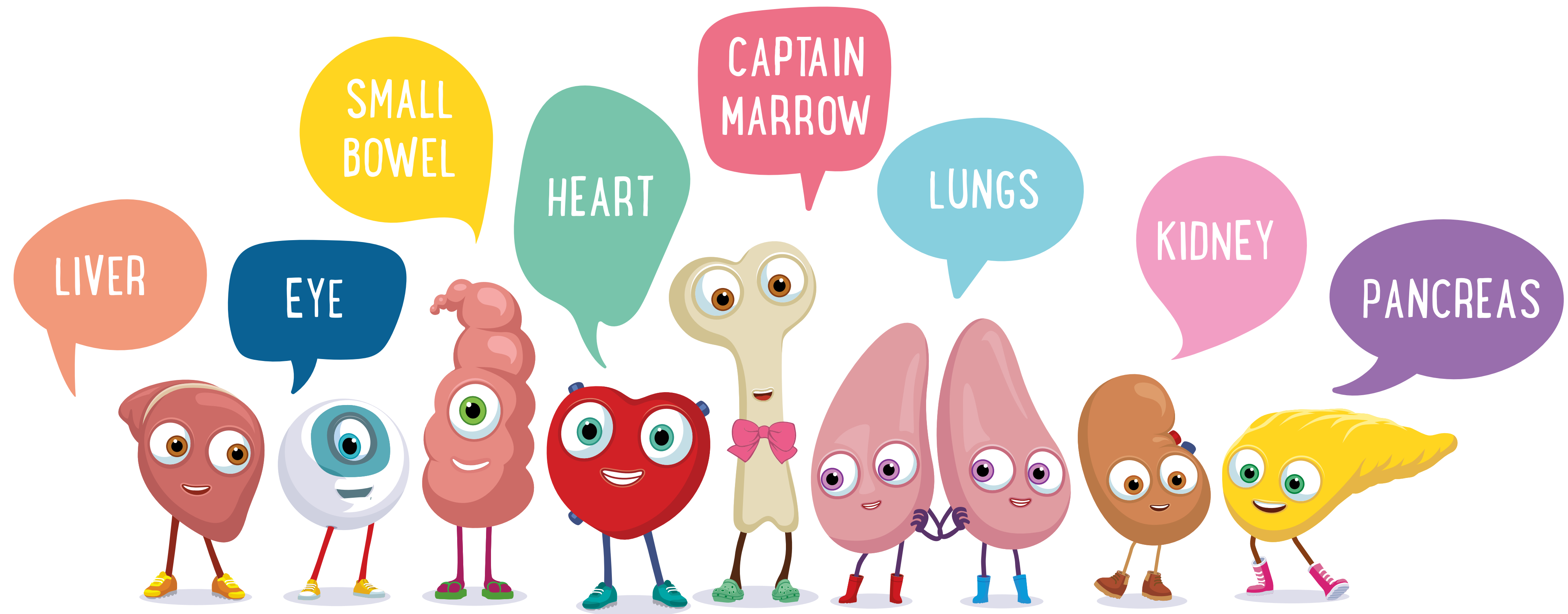
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# MEET YOUR MIGHTY ORGANS!



# WHAT ARE ORGANS?

**Organs are the different working parts inside us.** An organ is a group of tissues that work together to do a particular job. Every organ in our body has a special role and when they work properly they help us to stay happy and healthy.



# DID YOU KNOW?

- We have 78 different organs in our body.
- The largest organ is our skin!
- You can live without some of your organs!

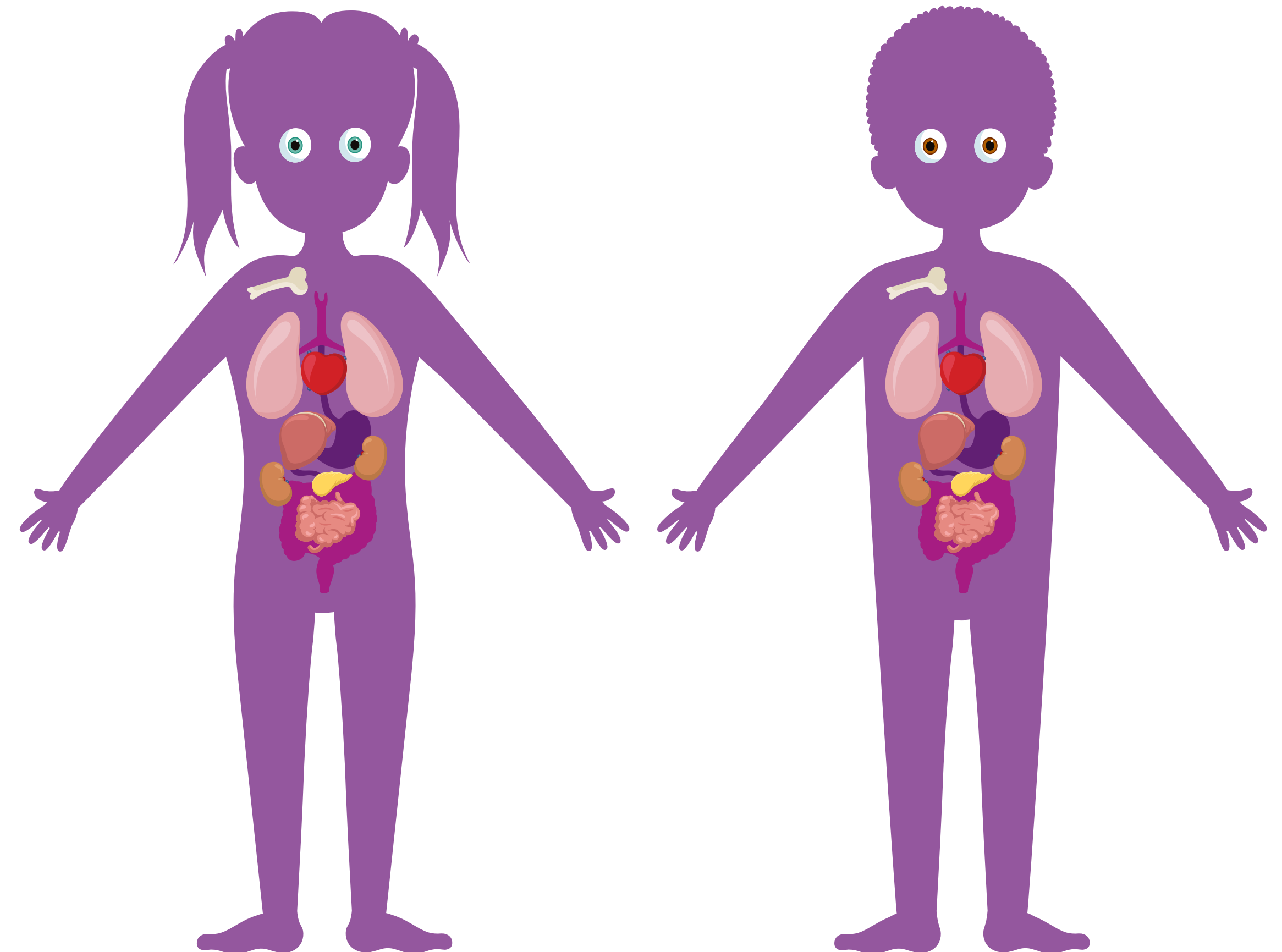


# THERE ARE FIVE ORGANS WE CANNOT LIVE WITHOUT

**They are called VITAL organs.**

**They are:**

1. The brain
2. The heart
3. The liver
4. At least one kidney
5. At least one lung

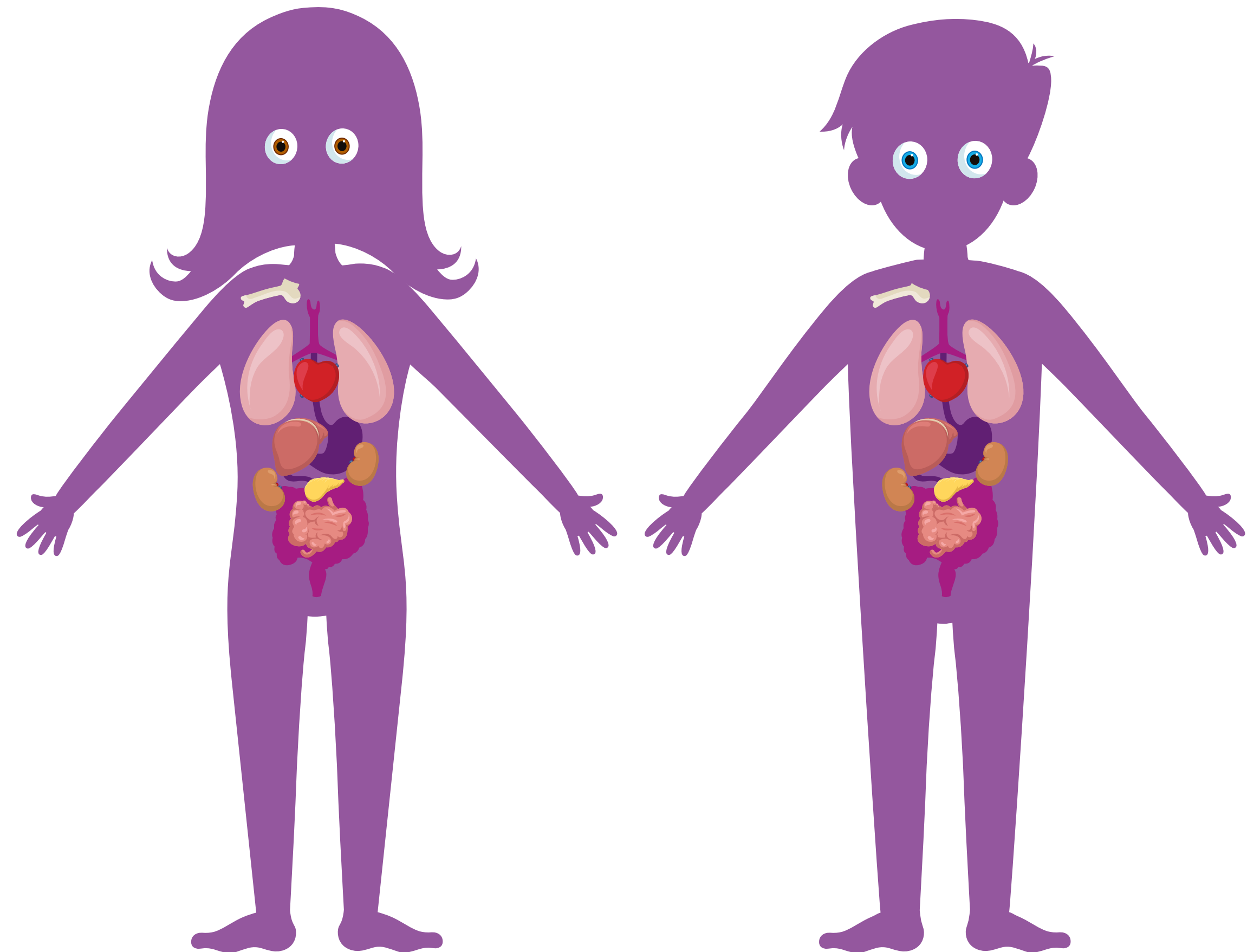


# MIGHTY ORGANS

This is a group of organs that are not only really important, but transplantable too.

This means that they can be removed from one person who doesn't need them and given to another person who does.

Can you spot which one of the vital organs is not a Mighty Organ?

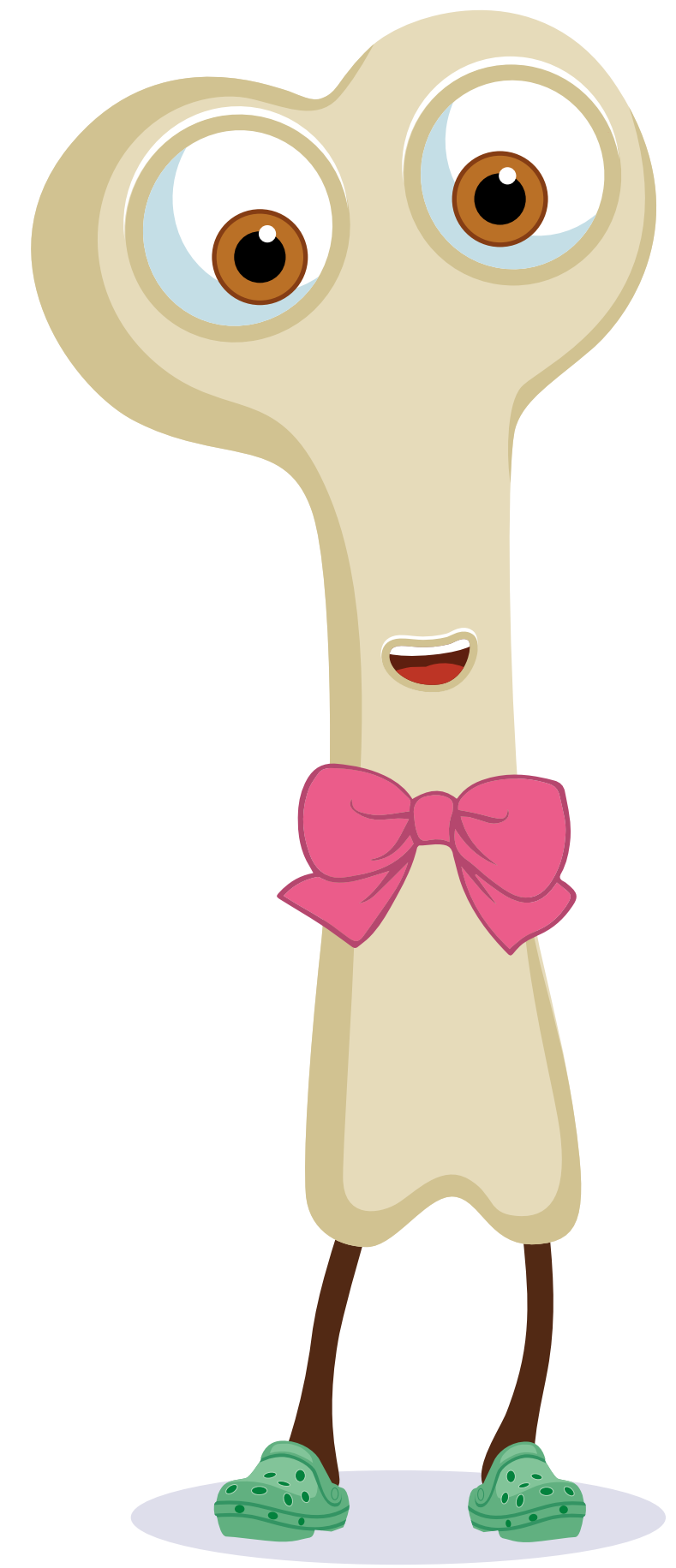




# CAPTAIN MARROW

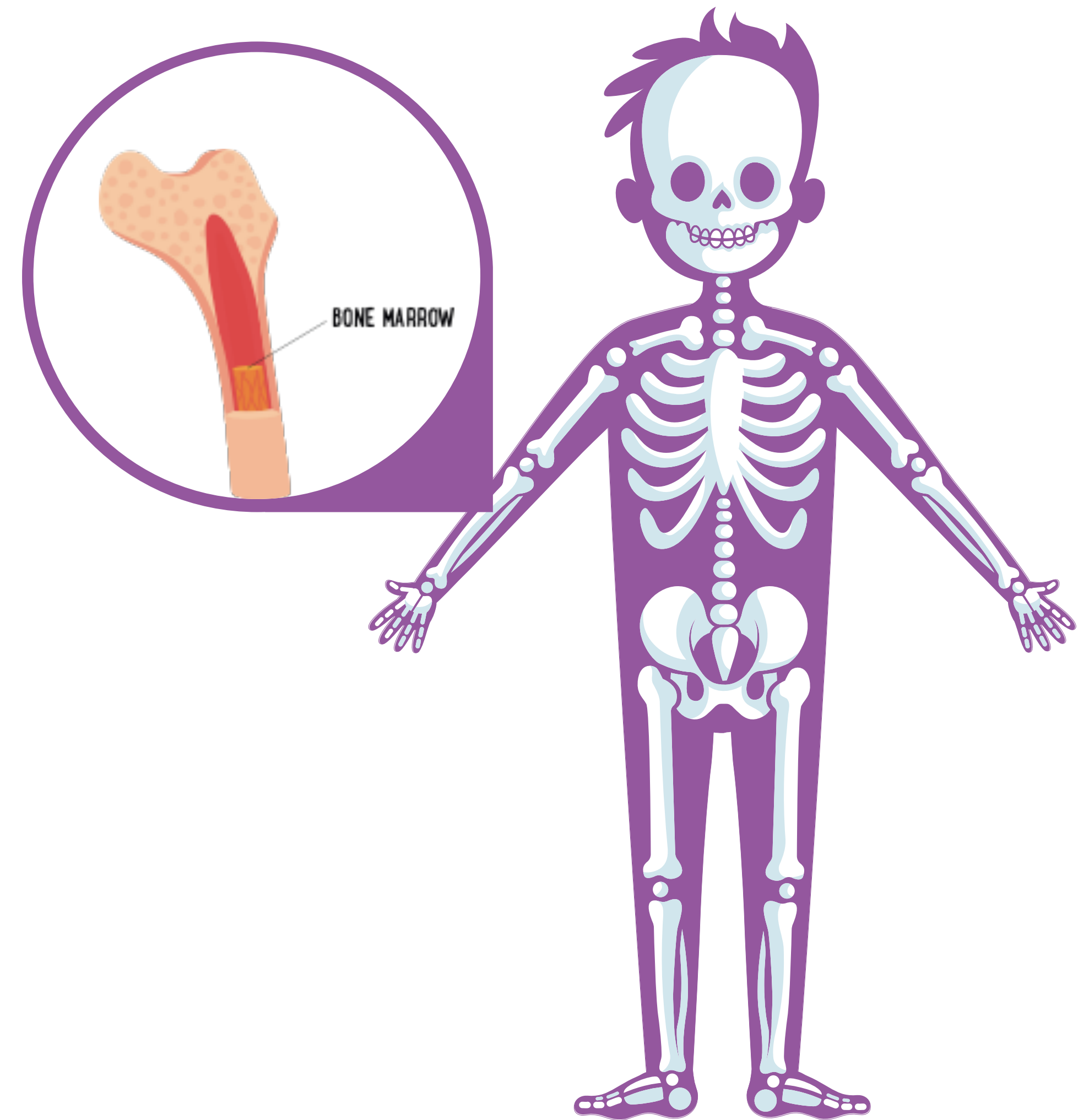
This is **Captain Marrow**, the leader of the Orgamites! Captain Marrow is not an organ like the rest – Marrow refers to the bone marrow and blood stem cells inside our bones. This is a type of tissue that can be donated and therefore is a Mighty part of us.

OTHER THAN JUST  
HOLDING US UP?  
WHAT IS MY PRIMARY  
FUNCTION?



# CAPTAIN MARROW

This mighty special part of us produces lifesaving stem cells that make our blood. Stem cells can help other people whose own stem cells aren't working properly.



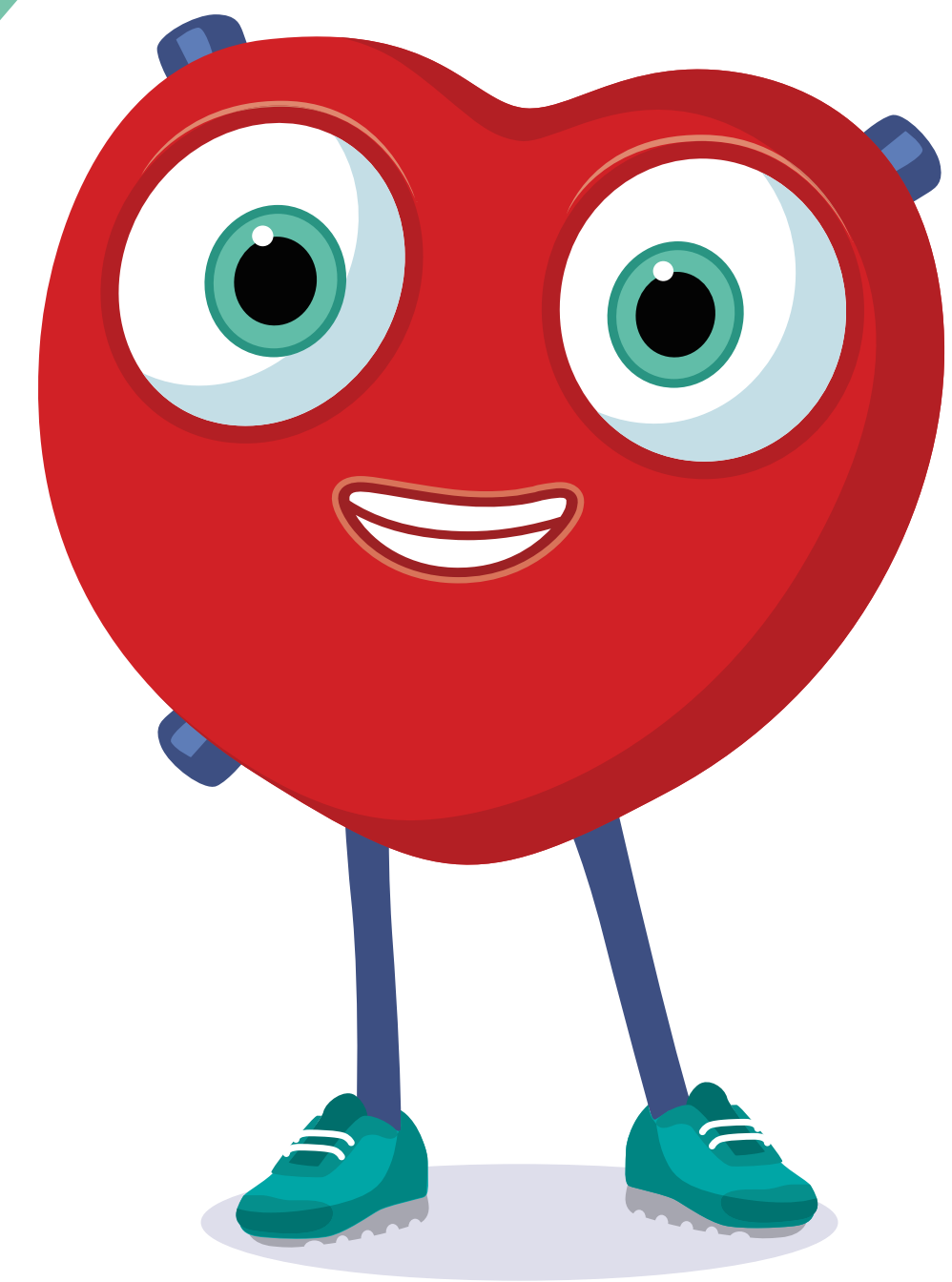


# HEART

Here's **Heart**... the hardest working organ in our bodies...

Put your hand on your heart right now.  
Close your eyes and try to feel it beating.

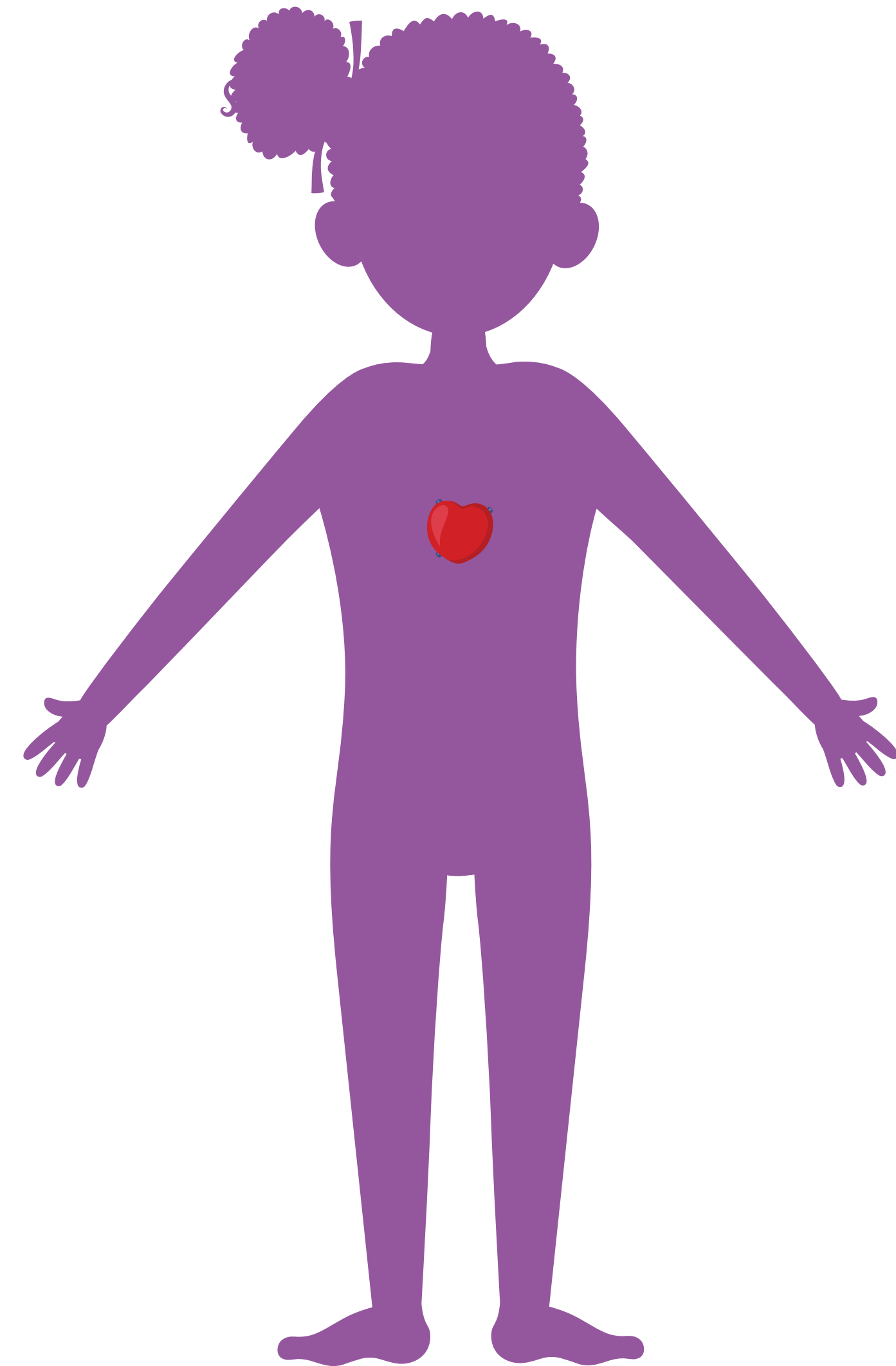
I KEEP  
EVERYTHING MOVING  
WITH MY STEADY  
RHYTHMIC BEAT



# HEART

Your heart is about the size of your clenched fist. It lies in the front and middle of your chest, behind and slightly to the left of your breastbone.

Heart acts as a powerful pump that moves blood around your body.



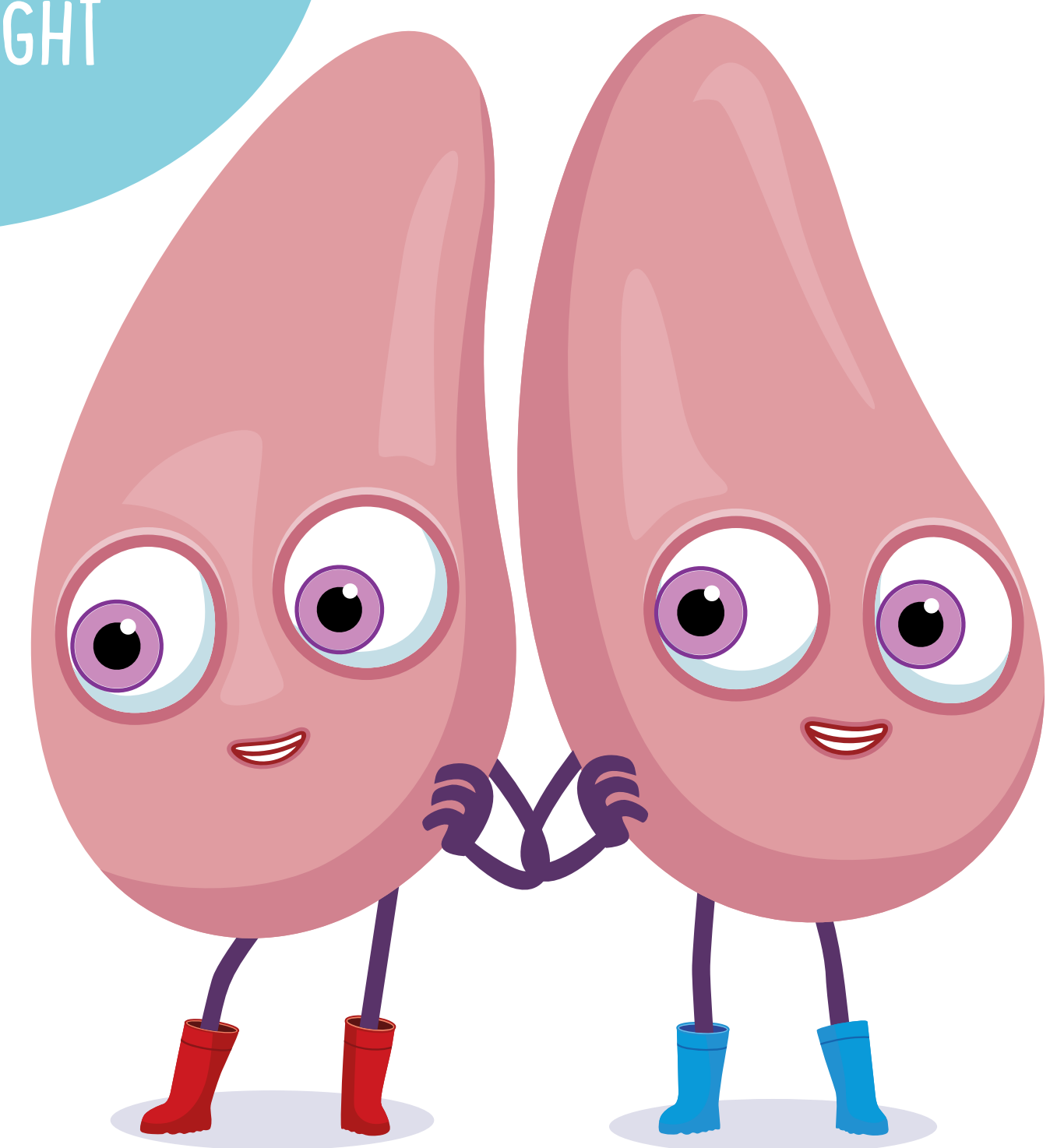
# LUNGS

Next, let's meet the **Lungs** - they are our breathing buddies.

They live beneath our ribs - on either side of the breastbone inside our chest cavity.

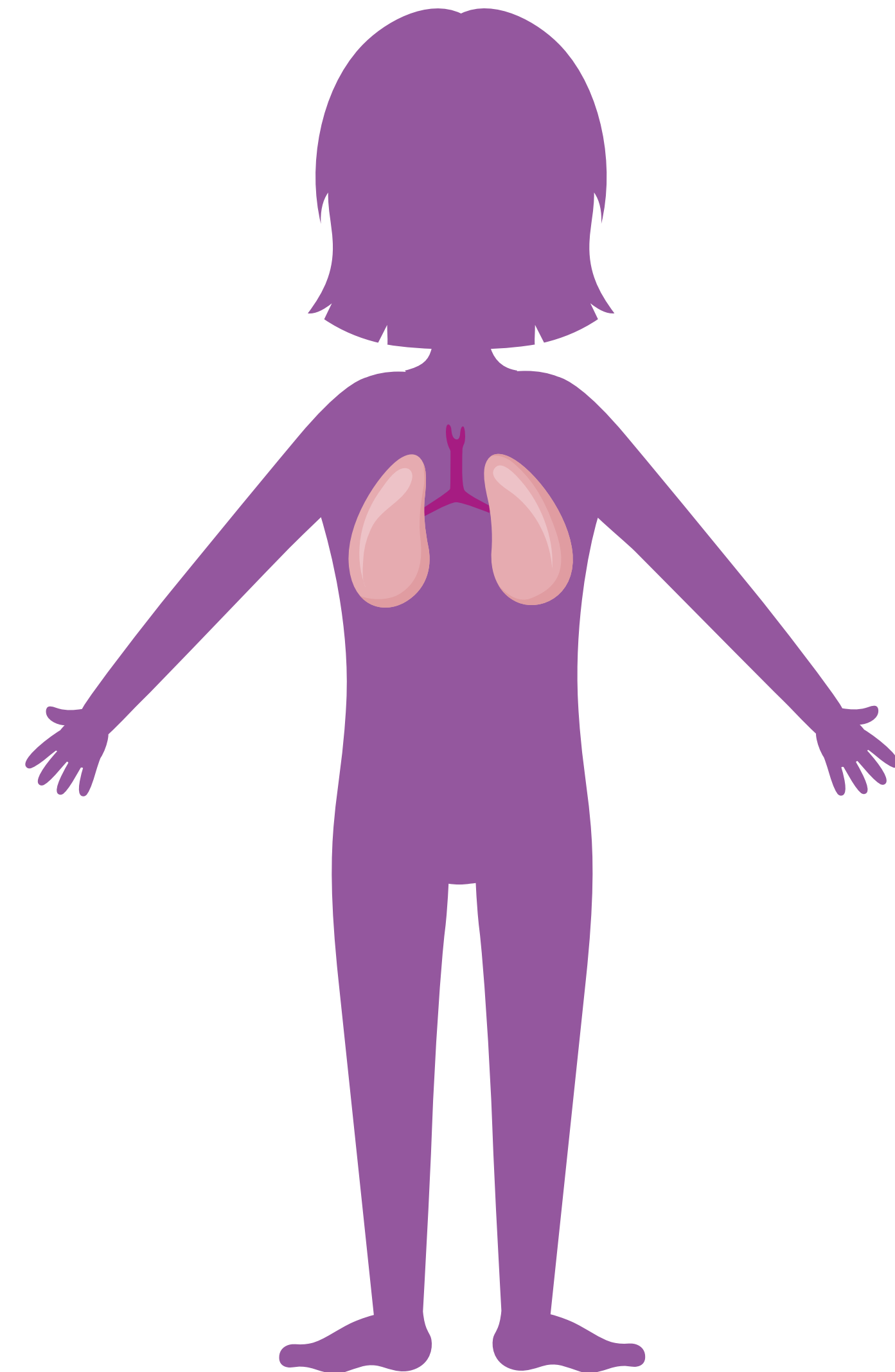
Feel your lungs in action. Put your hands on your chest and breath in deeply, you should feel your chest getting a little bigger.

DID YOU KNOW?  
THE LEFT LUNG IS ACTUALLY  
A LITTLE SMALLER  
THAN THE RIGHT



# LUNGS

When we inhale (breathe in), our lungs take oxygen from the air and move it to our bloodstream (which carries it to every cell in our body). And when we exhale (breathe out), our lungs take carbon dioxide from our bodies and release it into the air.

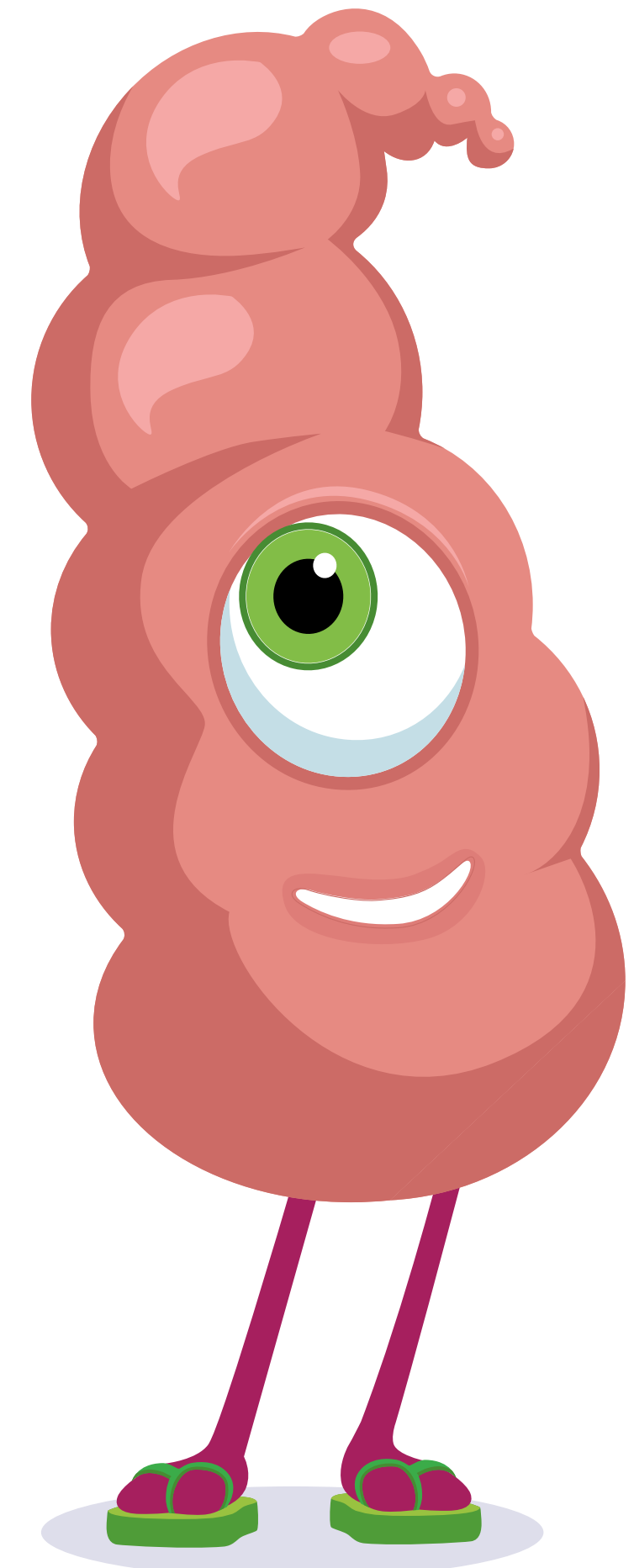


# SMALL BOWEL

**Small Bowel** is next, also known as your small intestine.

This is an organ in our gastrointestinal tract, which lies between the stomach and large intestine.

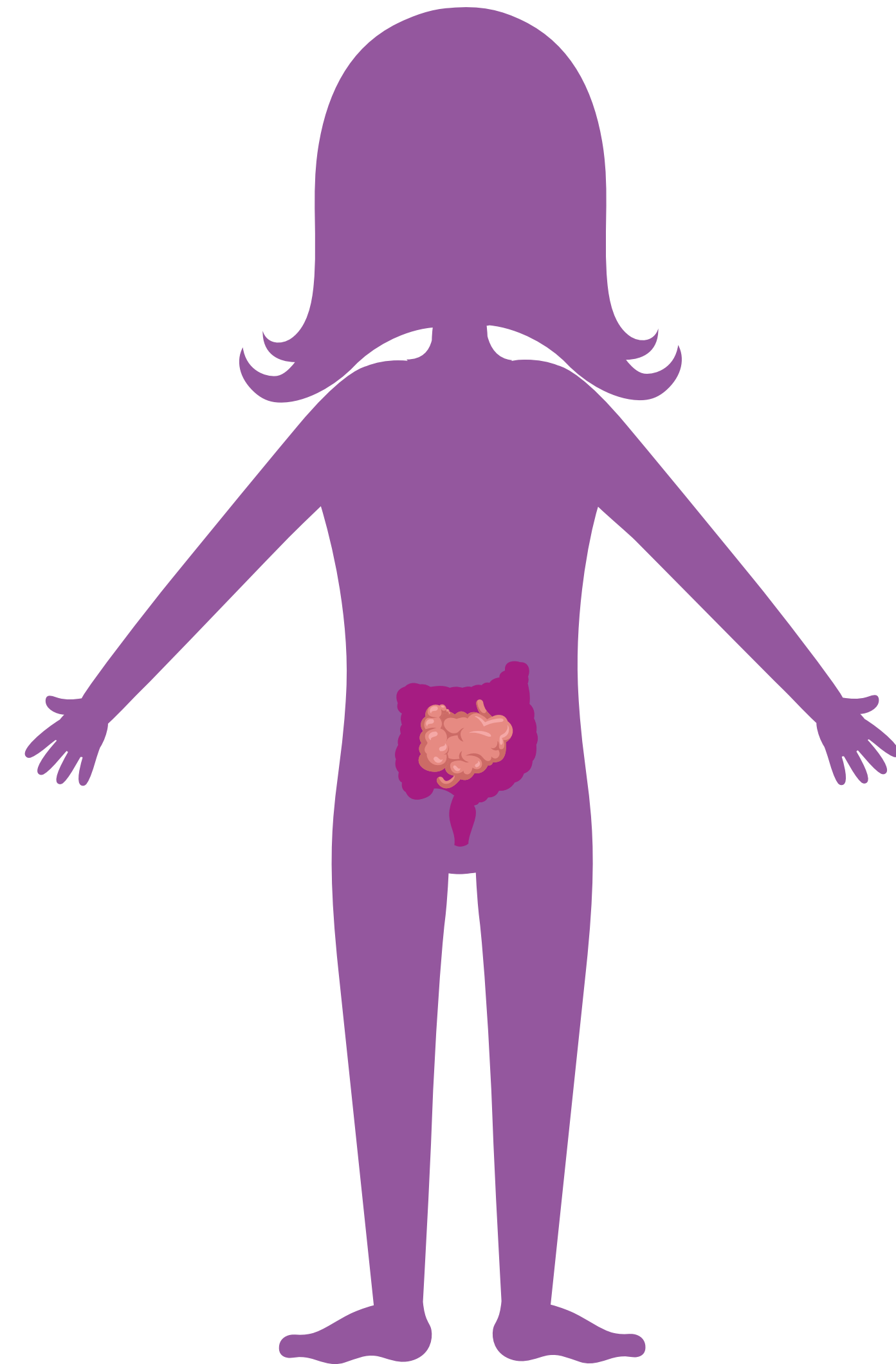
TRY TO SAY  
GASTROINTESTINAL  
TRACT THREE  
TIMES FAST!





# SMALL BOWEL

This Mighty Organ is a long and winding tube in your abdomen that carries food from your stomach to your large intestine.



# PANCREAS

Say hello to **Pancreas!**

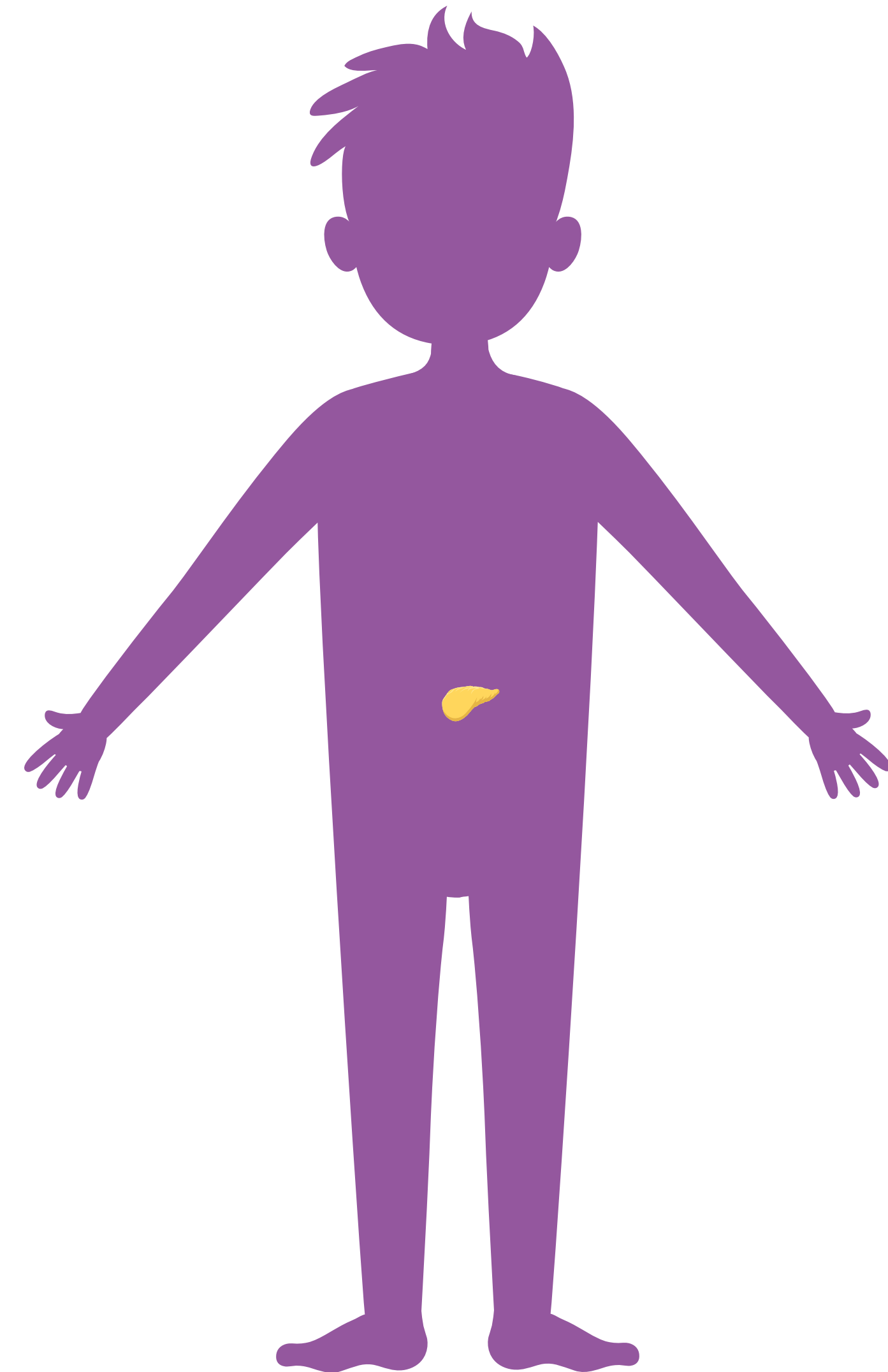
Located inside your abdomen, just behind your stomach, your pancreas is about the size of your hand.

DID YOU KNOW?  
YOUR PANCREAS PRODUCES  
ABOUT 250 ML OF DIGESTIVE  
JUICES EVERY SINGLE DAY!



# PANCREAS

Pancreas works side-by-side with **Small Bowel** - making pancreatic juices called enzymes and other substances that help to break down foods for digestion. He also works to keep our blood sugar stable, giving us energy throughout the day from the food we eat.

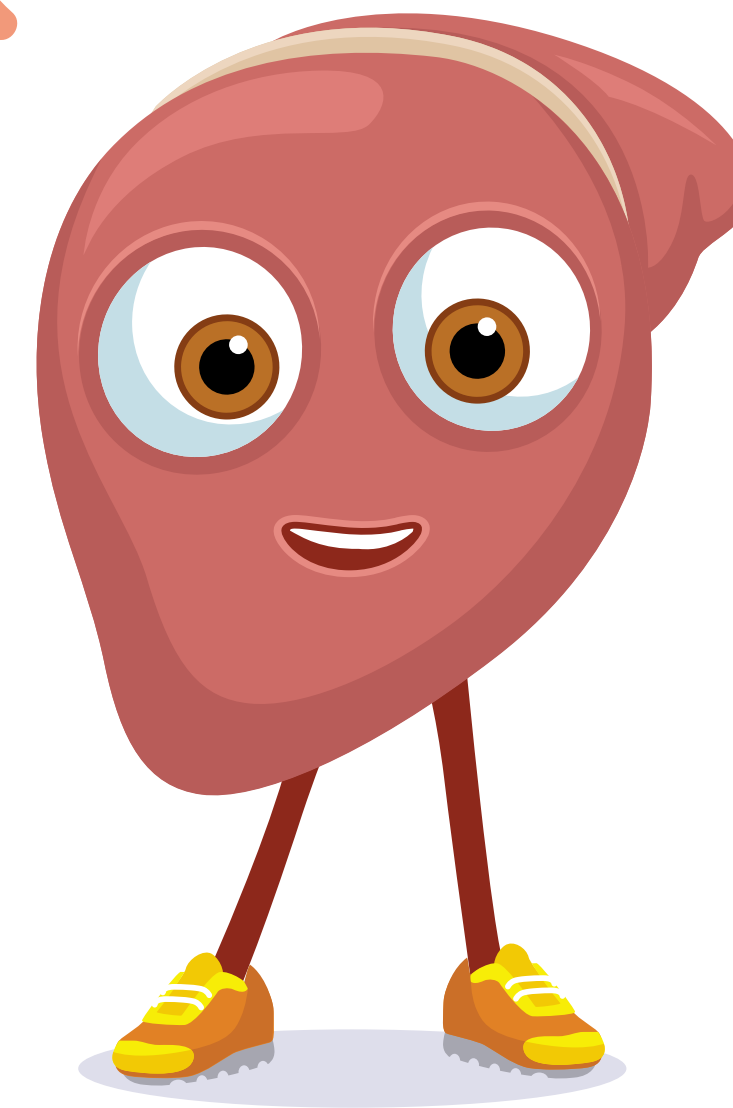


# LIVER

This is **Liver**, an excellent multi-tasker!

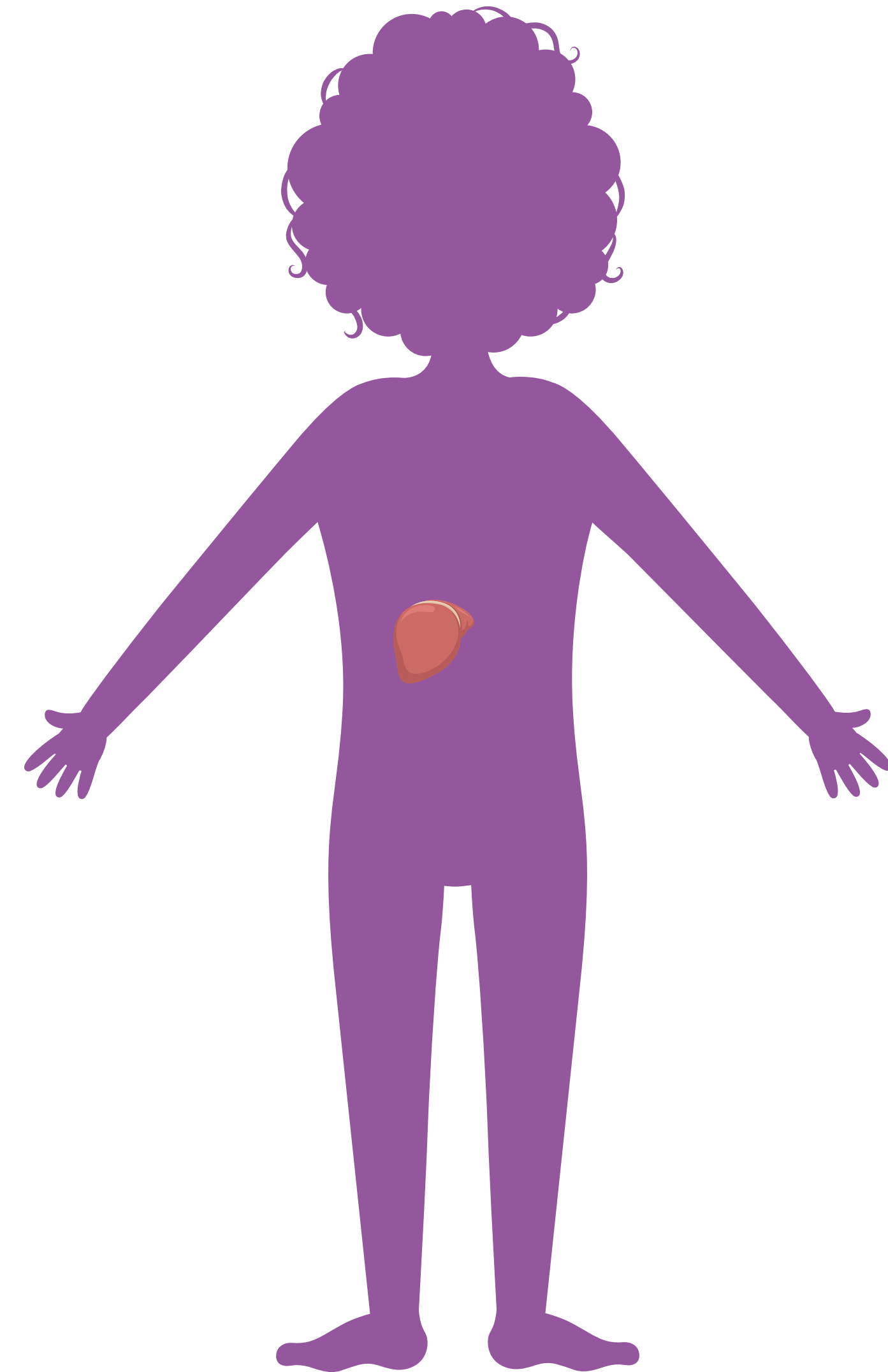
One of the busiest organs, Liver cleans our blood and builds up our energy stores. Liver also helps Kidney slow down and encourages our bowels to speed up.

DID YOU KNOW?  
A QUARTER OF THE LIVER CAN  
'REGROW' TO ITS ORIGINAL SIZE!



# LIVER

After our skin, Liver is the second biggest organ in our body – sitting on the upper right-hand portion of our abdominal cavity, beneath the diaphragm and on top of the stomach, right kidney and intestines.



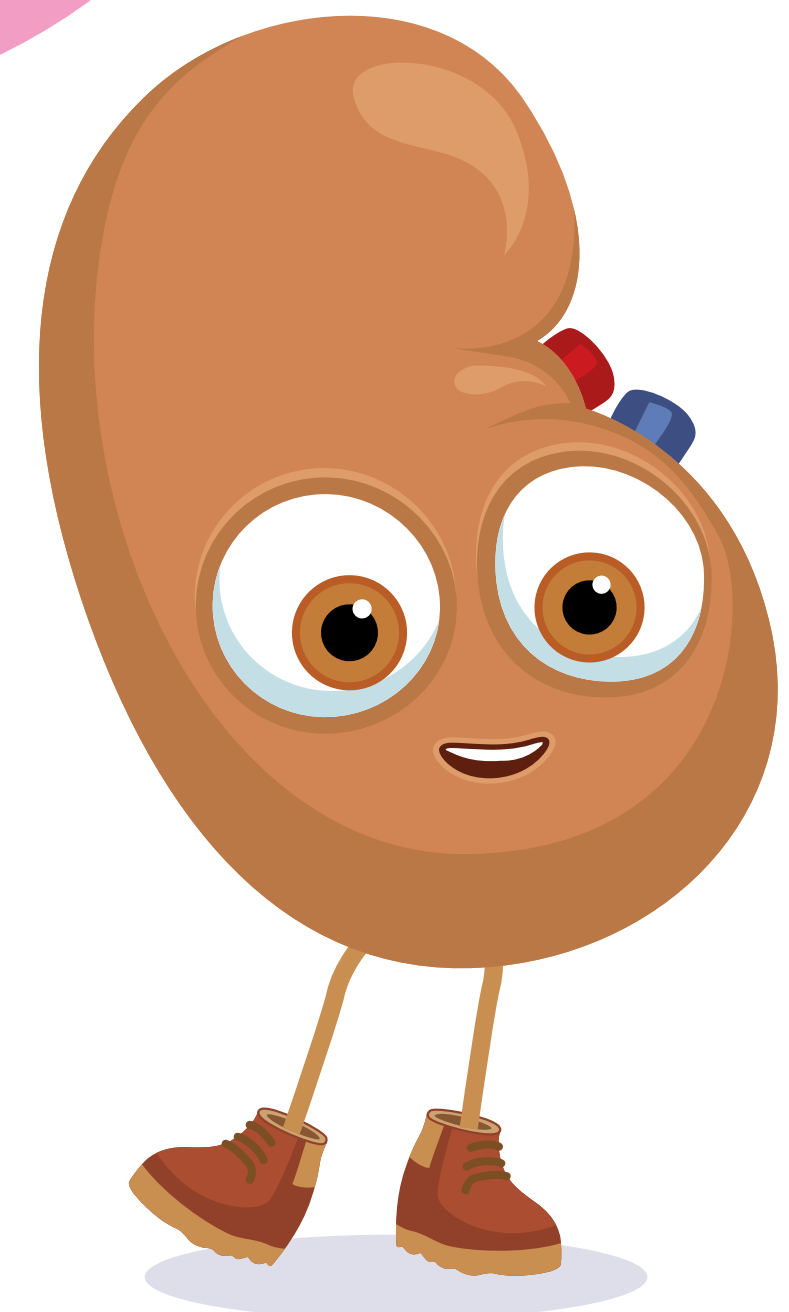


# KIDNEY

And here is **Kidney**, the cleaning marvel!

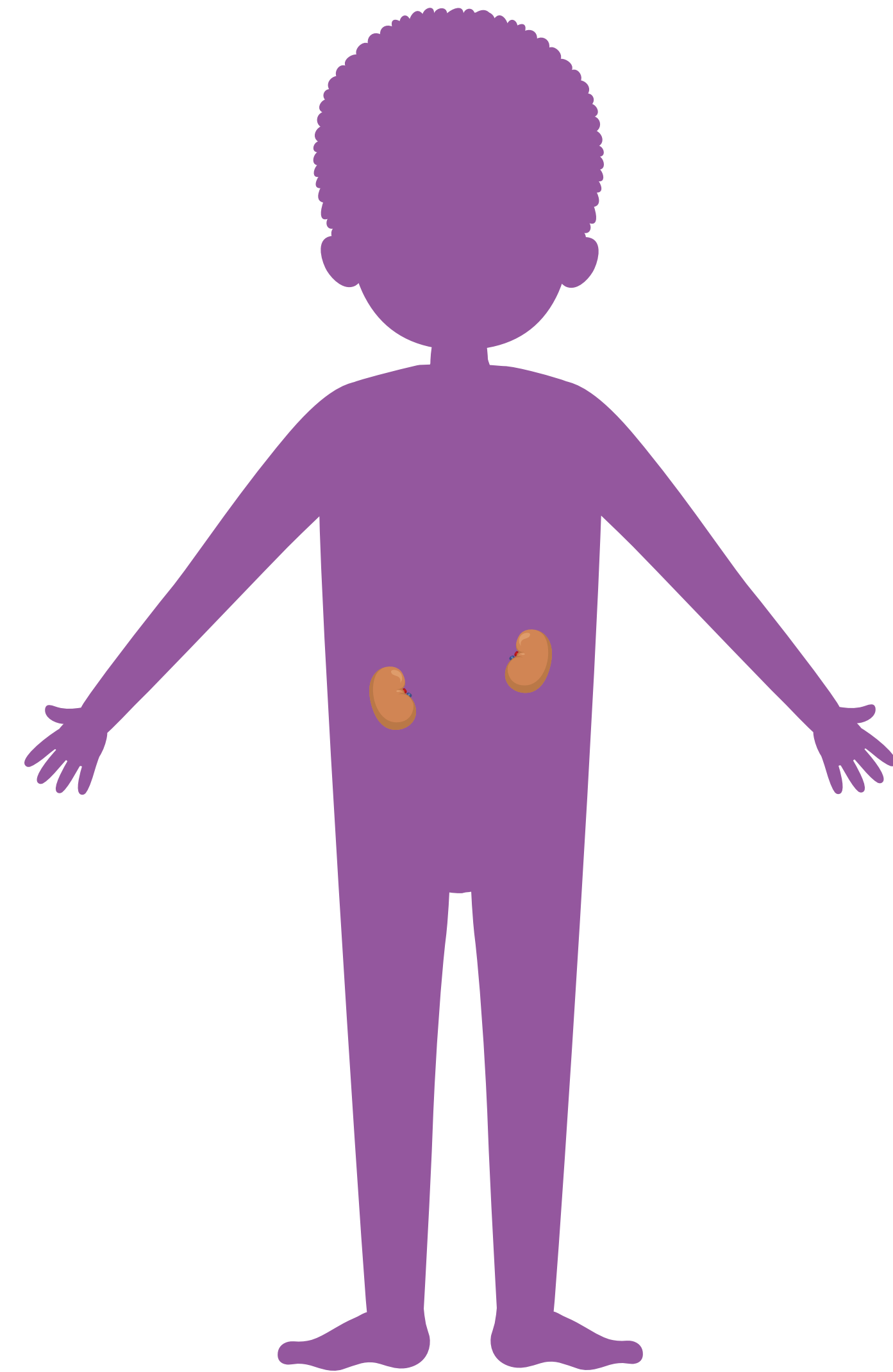
Most of us have two of these bean-shaped organs, each about the size of your fist. They are located just below the rib cage, one on each side of the spine.

DID YOU KNOW?  
SOME PEOPLE HAVE  
JUST ONE KIDNEY



# KIDNEY

Our kidneys are working constantly to filter waste and extra water from our blood. Inside each one is about a million little filters called nephrons that work to catch all the stuff our bodies doesn't need.

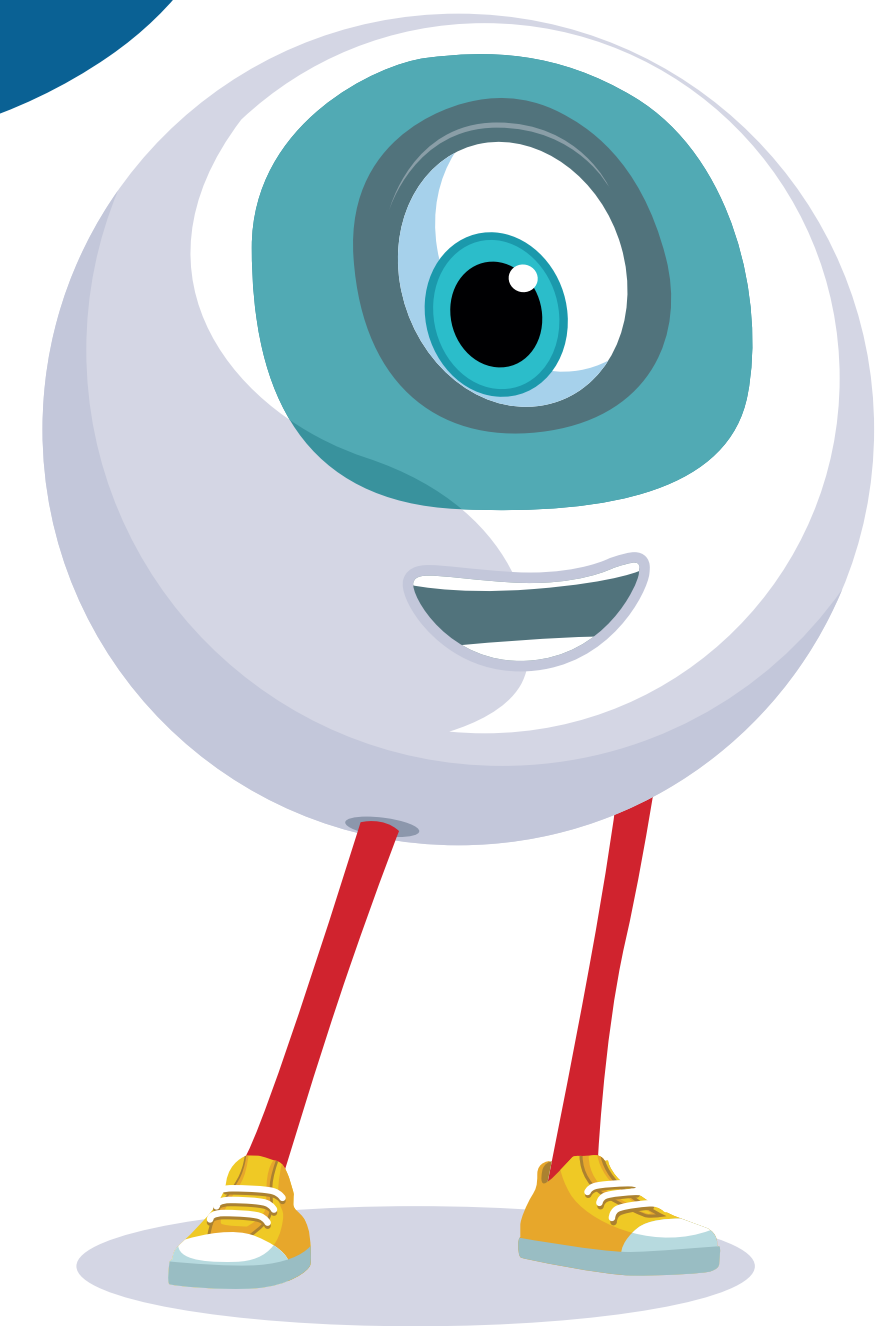


# EYE

Last up in the Mighty Organs line-up  
is **Eye!**

We may only have two eyes, but we have  
six extra ocular muscles per eye to help us  
move and control our eyes.

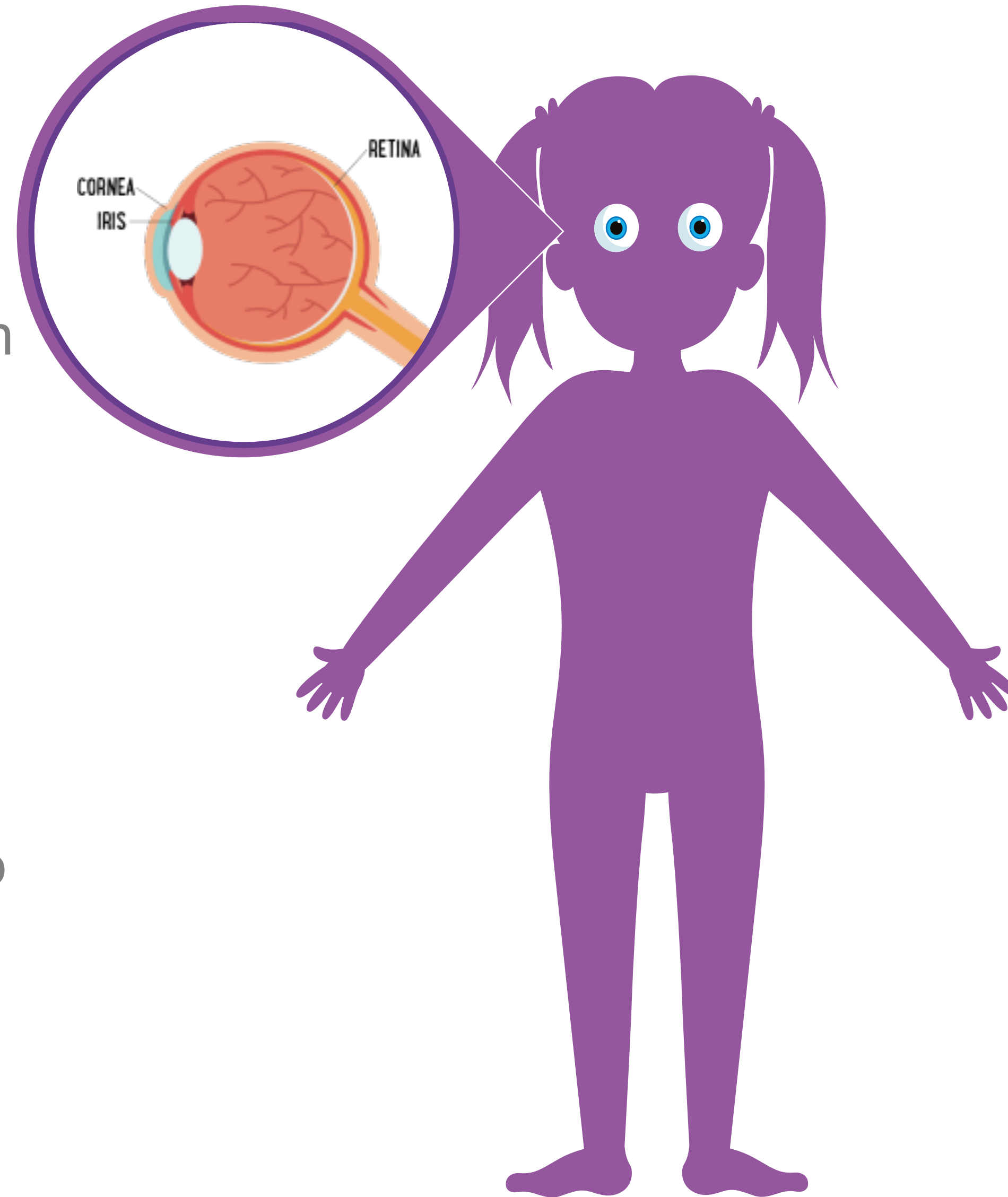
DID YOU KNOW?  
THE EYE IS THE FASTEST  
MUSCLE IN YOUR BODY



# EYE

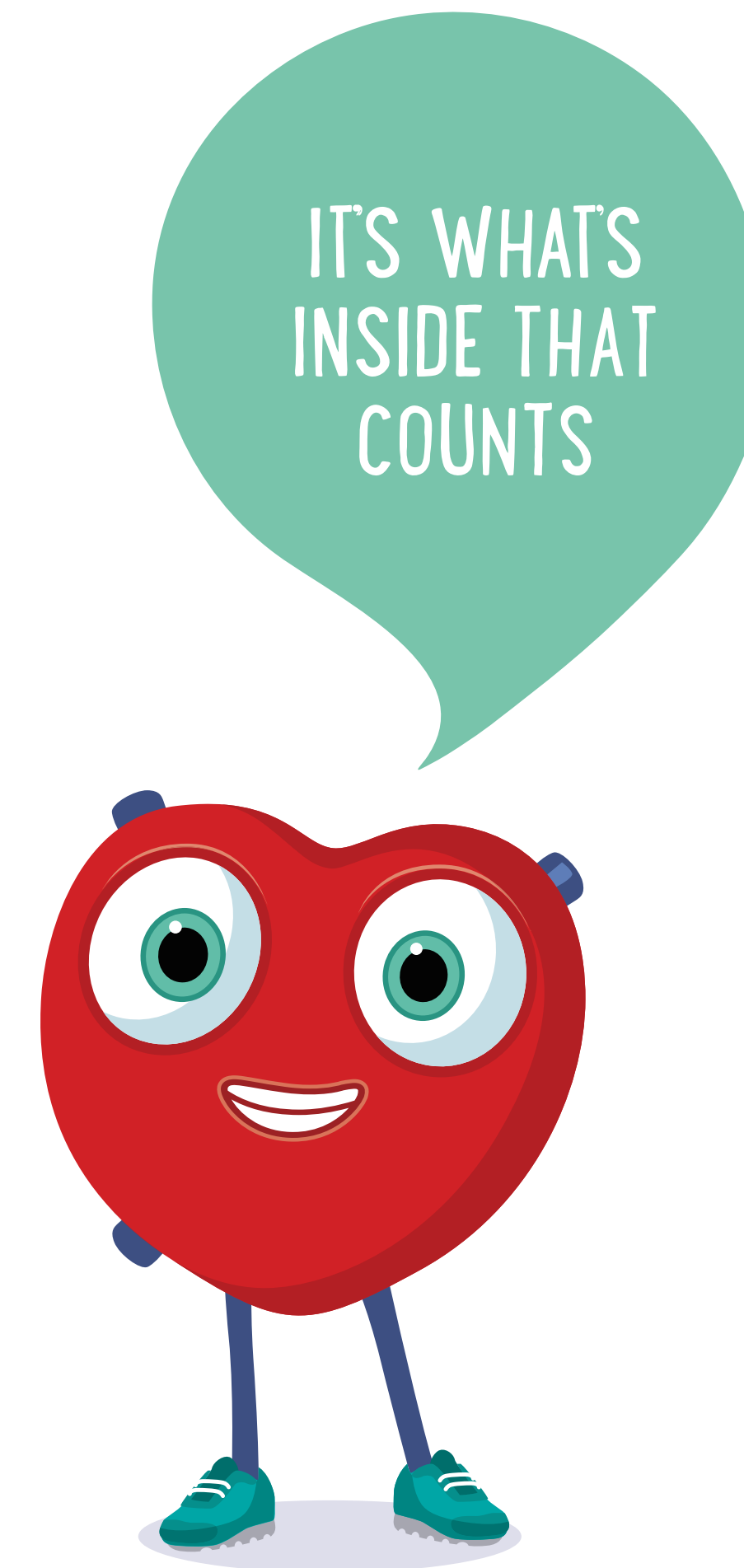
Our eyes see light, shapes and colour, then send that information to the brain, where the images are finally put together.

The cells in your eye come in different shapes. Rod-shaped cells help you to see shapes, and cone-shaped cells help you to see colour.



# WHAT IS AN ORGAN TRANSPLANT?

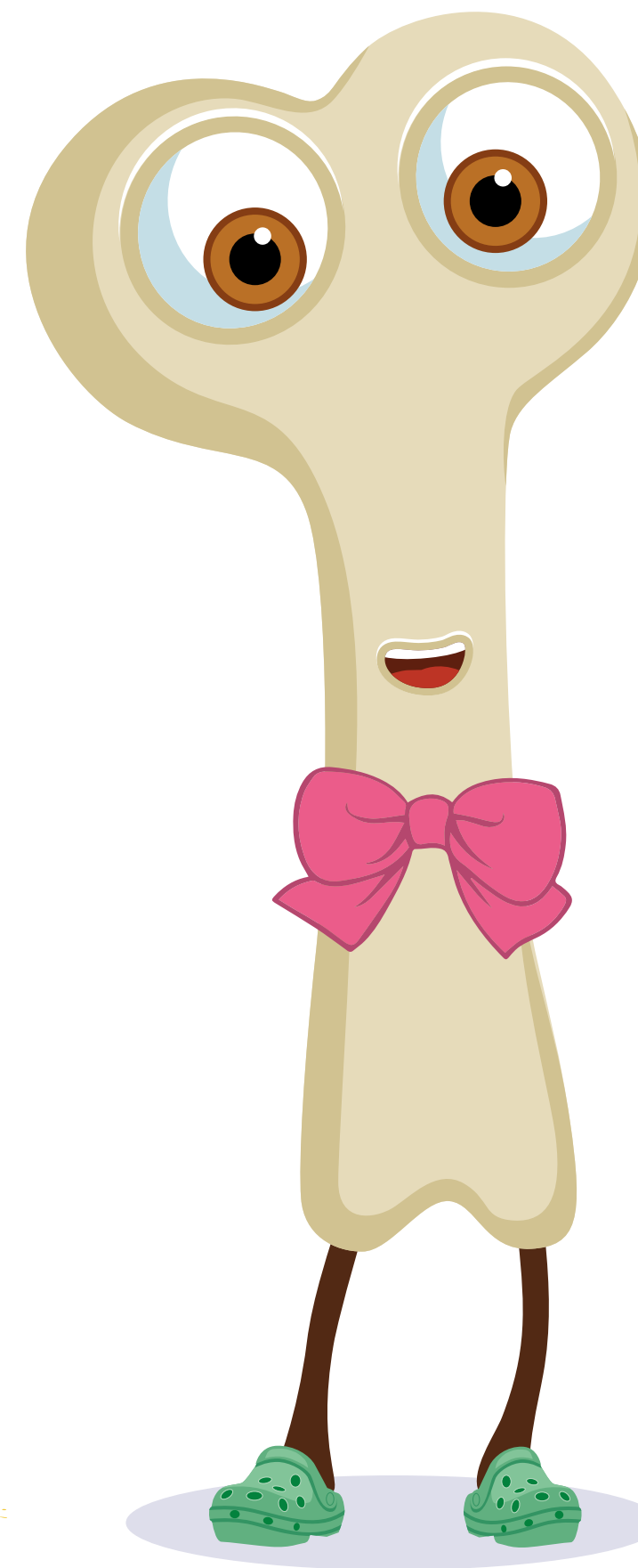
Sometimes organs can stop working and our bodies can get very sick. When this happens, some organs can be replaced with healthy organs from someone else. This is called an organ transplant.





# WHAT IS AN ORGAN DONOR?

People who have made the choice to donate their organs when they no longer need them are called organ donors.



DID YOU KNOW?  
ONE ORGAN DONOR  
CAN SAVE MORE  
THAN EIGHT LIVES!

# WHY DO WE TALK ABOUT ORGAN DONATION AND TRANSPLANTS?

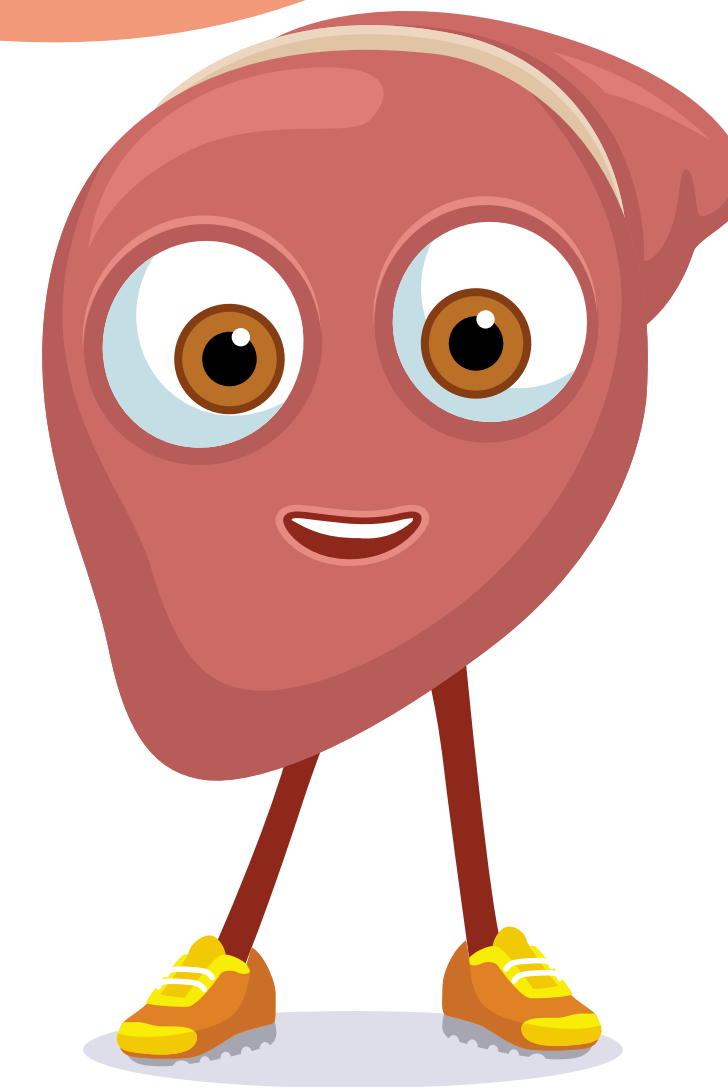
At the moment, there are around 4,400 people on the transplant waiting list in Canada – this means they are waiting for an organ donation that could save their lives.



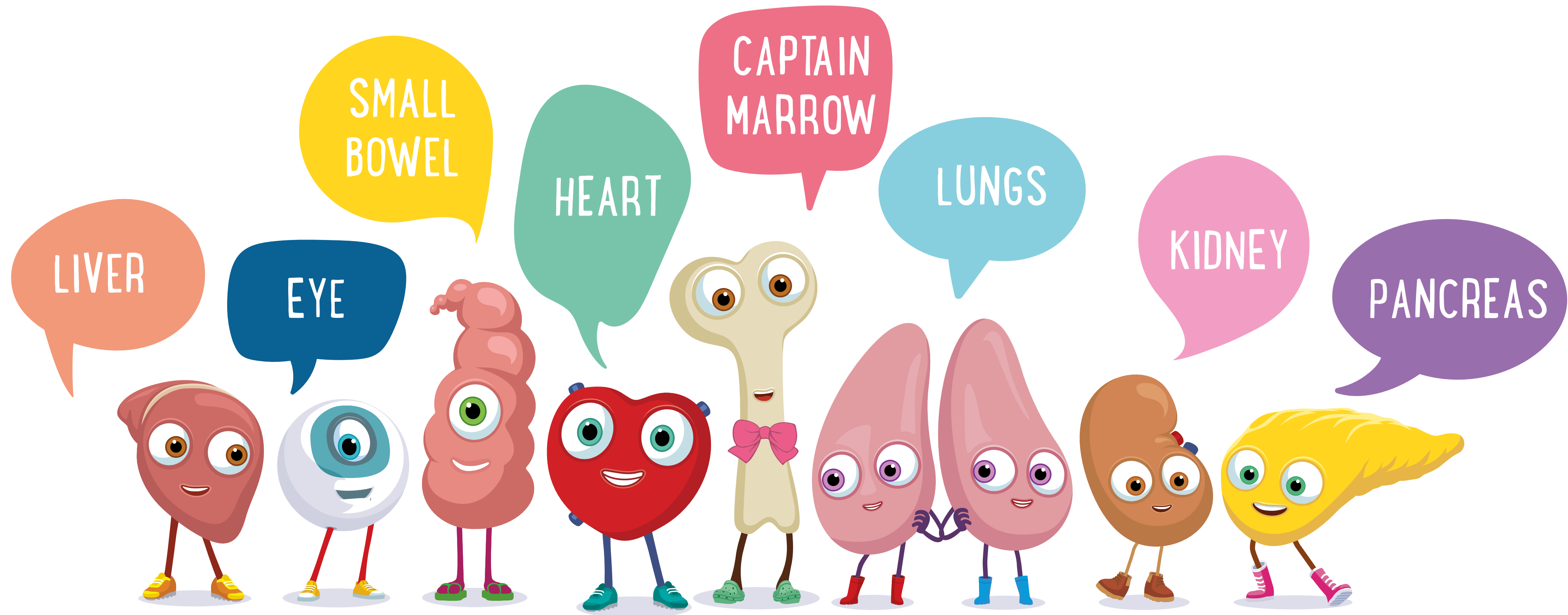
# LET'S TALK!

- What are the Mighty Organs?
- Why might someone choose to donate their organs?
- Why might some people not want to donate their organs?
- Why is it important to talk with our families about organ donation?

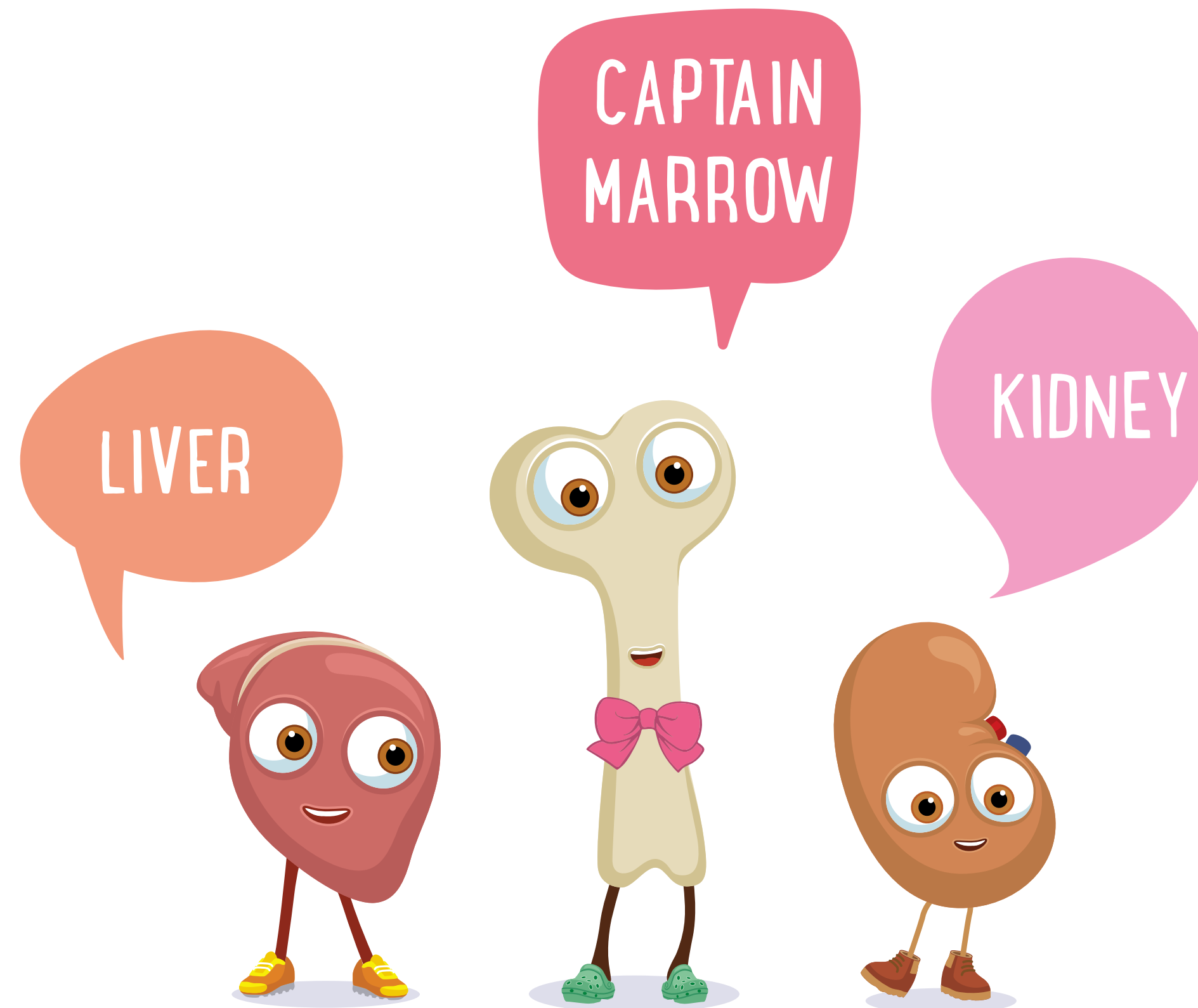
ONLY A THIRD OF ADULTS  
HAVE SHARED THEIR ORGAN  
DONATION CHOICE WITH  
THEIR FAMILY



# WHICH ORGANS CAN BE DONATED?



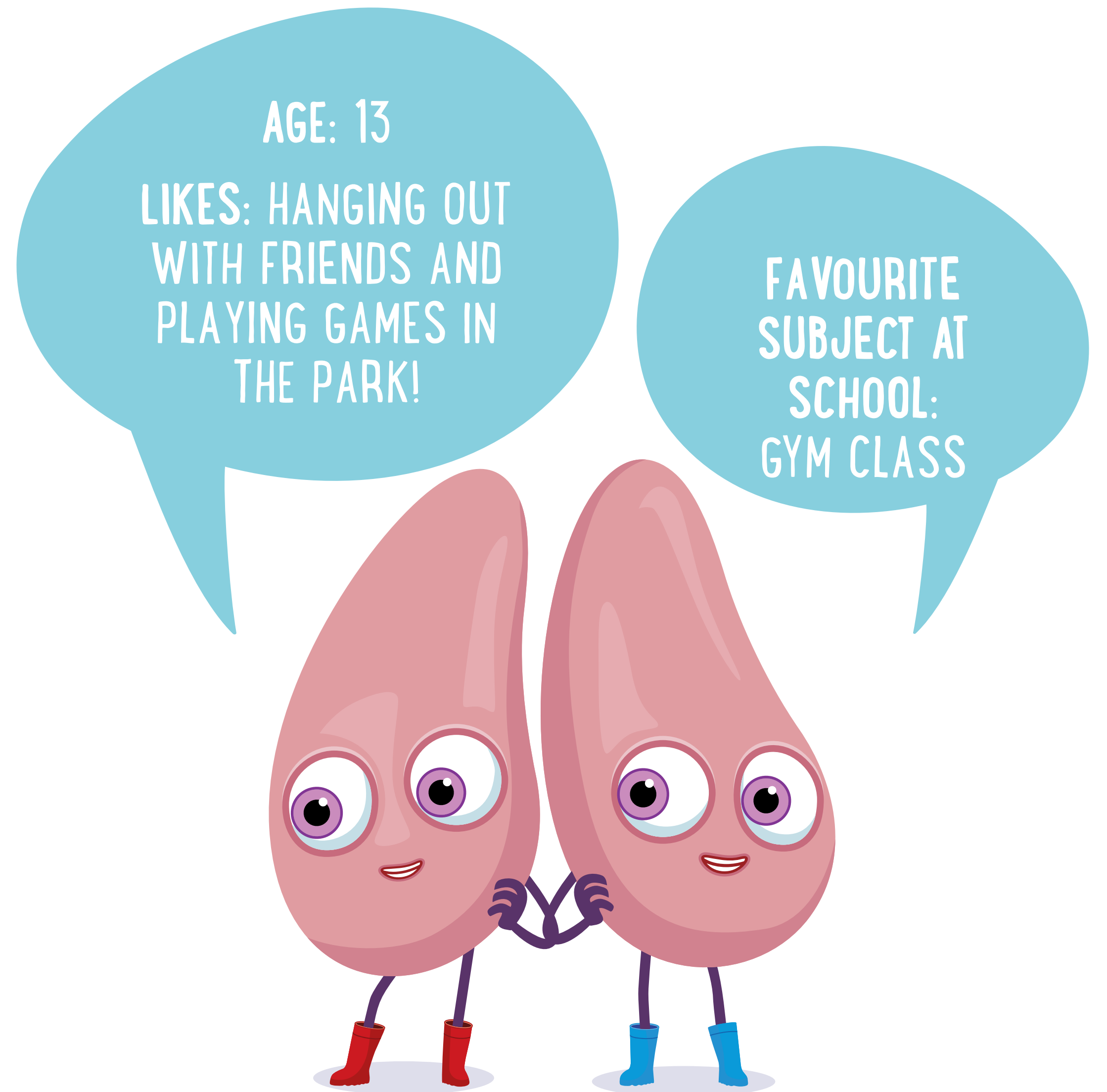
# WHICH ORGANS MIGHT BE DONATED BY LIVING DONORS?





# MEET CALEB

Caleb was born with a disease which stops his lungs working properly. It has gotten worse as he has gotten older and he has started using an oxygen tank to help him breath. This makes it difficult for Caleb to go out of the house. He also has to visit the hospital a lot.



# DISCUSS THE SCENARIO CARDS

1

Which organ does the person need?

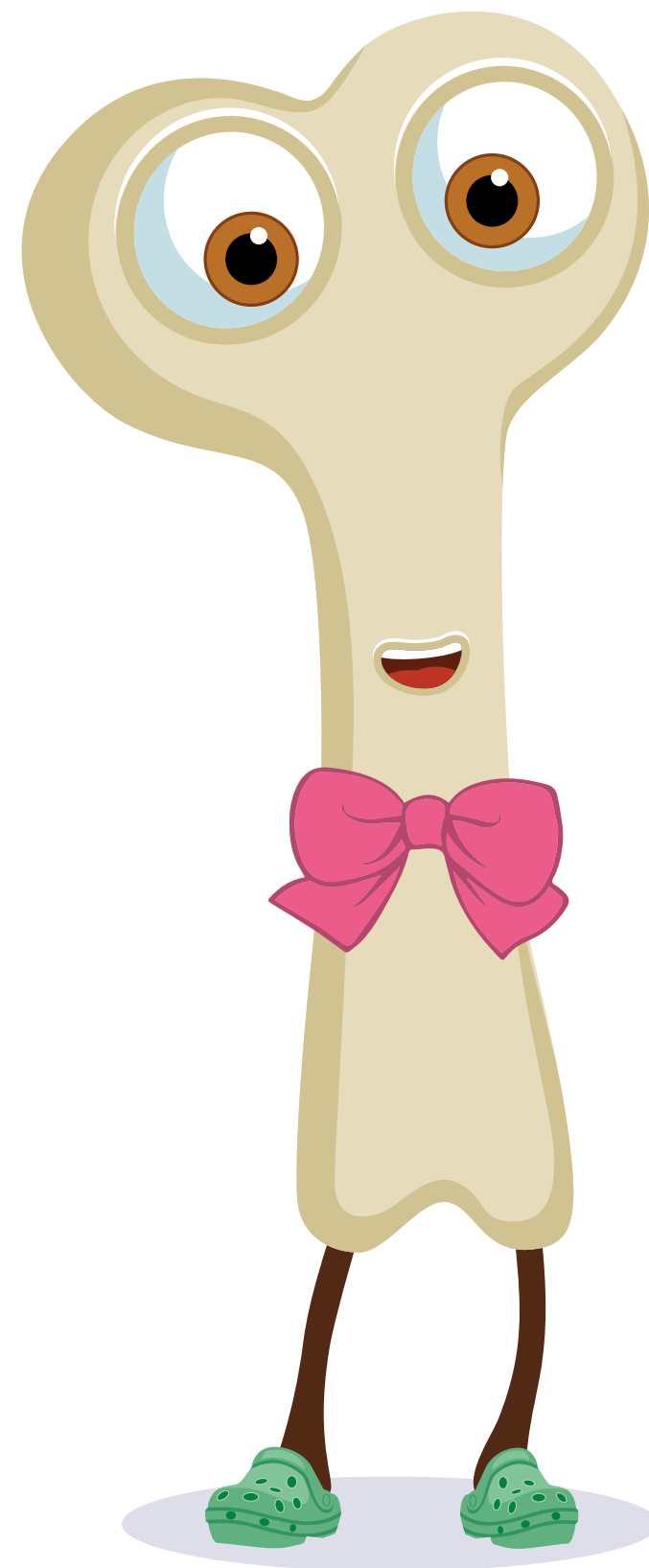
2

How might a donated organ improve their life?  
(Think about what they might be able to do that they couldn't do before.)

3

How do you think they would feel to receive their donated organ?

# QUESTIONS TO THINK ABOUT



WHY MIGHT SOMEONE  
CHOOSE TO DONATE  
THEIR ORGANS?

WHY MIGHT SOMEONE  
NOT WANT TO DONATE  
THEIR ORGANS?





# WHAT IS THE LOGAN BOULET EFFECT?

Logan Boulet loved hockey. Logan and his Humboldt Bronco team were traveling to a playoff hockey game on April 6, 2018 when the bus they were on was in a terrible crash. Logan and fifteen other people died, and others were seriously injured.

The summer before the crash Logan had told his Dad that he wanted to be an organ donor just like his mentor and coach had been the year before.





Because Logan talked to his family about wanting to be a donor, they were able to say yes to organ donation.

**Logan donated his strong heart, lungs, liver, corneas (eyes) and kidneys saving the lives of many people.**

In the weeks following the crash, Logan's story inspired more than 100,000 Canadians to become registered organ donors. This became known as the "Logan Boulet Effect".



# GREEN SHIRT DAY

April 7 (the day Logan passed away) has become known as GREEN SHIRT DAY. This is a day to honour Logan and his legacy. On this day we recognize the Logan Boulet Effect by wearing green (the colour of the Broncos, Saskatchewan, and organ donation), and by learning about and talking about organ donation and saving lives.

1. Why is it important for people to remember Logan's story?
2. Is there a person in your life who inspires you?



# IT'S WHAT'S INSIDE THAT COUNTS

Having a talk with family and friends about organ donation is important – it's a good way to make sure your family know what your choice is and that you know theirs!

Talking about organ donation helps people to honour one another's choices.

