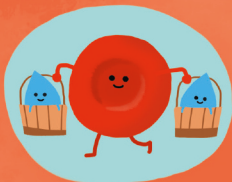
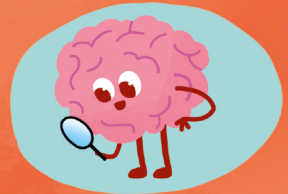




*Tell me about...*

# HUMAN BODY



**A FIRST  
SCIENCE book  
for curious  
minds!**

*Written by Emily Dodd  
Illustrated by Chorkung*

# Brilliant Body

So many amazing things are happening in your body right now! Let's take a look at just a few of them...

When you run, stretchy cords called muscles pull bones back and forward. Your bones connect together in a structure called a skeleton. And your skin wraps everything up.

As you breathe, spongy bags called lungs are sucking air in and putting it into your blood.



Tiny electrical signals are making your heart beat – bu-bum bu-bum – to pump blood around your body.



Your body is made from lots of different parts that work together to do important jobs. These parts are called organs.

When you think or laugh or wiggle your toes, you use energy. The energy comes from the food you eat. The food goes into your blood and all around your body.



If you look at the pictures in this book, you're using organs called eyes. And when you think about all of this, you use an organ called the brain.

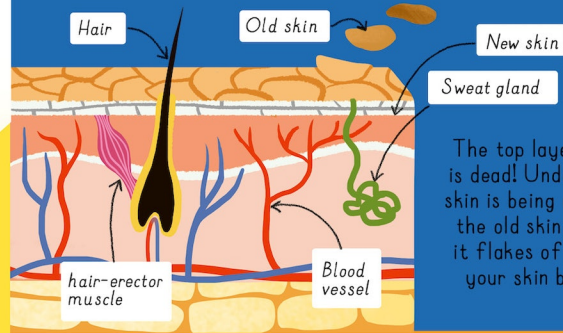
# The Skin

Let's begin our body tour with your skin. This stretchy waterproof layer wraps around your body keeping germs out and keeping your insides... inside!

Your skin is full of sensors that help you to touch and feel things. You can feel pain and warmth and the tiny footsteps of an insect crawling on your arm.

Did you know...?  
The skin is the biggest organ in the body!

Touch sensors help you to feel how hard to press when you lift and hold objects - so you don't drop or squash them.



The top layer of your skin is dead! Underneath it, new skin is being made. It pushes the old skin upwards until it flakes off as dust. Yes, your skin becomes dust!



Your hair and nails are made from the same stuff as skin. It's called keratin.

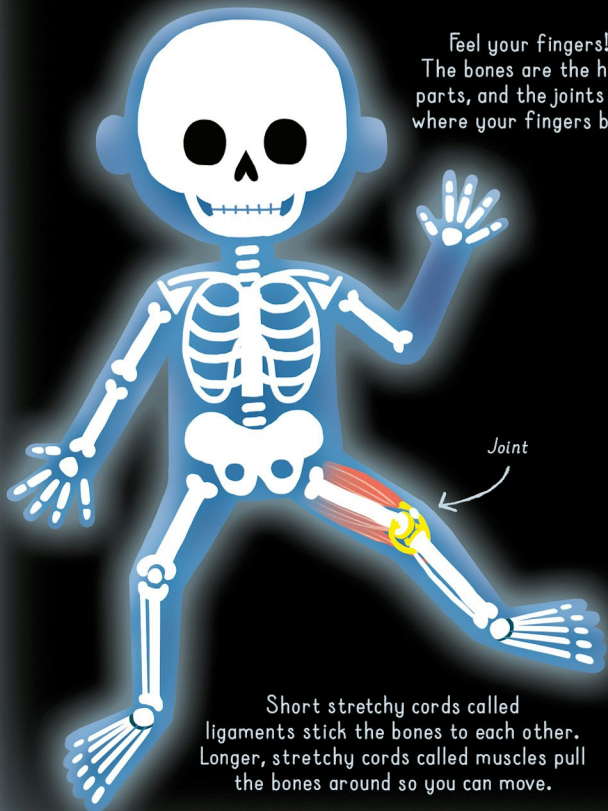


Your skin cools your body too. One way it does this is by making little drops of liquid called sweat.

When sweat drops are warmed by a hot body, they float off into the air taking heat away with them!

# Skeleton

The thing that gives your body its wonderful shape and height is a skeleton. It is made from 206 bones that join together at hinges called joints.



Feel your fingers!  
The bones are the hard parts, and the joints are where your fingers bend.

Short stretchy cords called ligaments stick the bones to each other. Longer, stretchy cords called muscles pull the bones around so you can move.



Strong bendy pieces called cartilage make up some parts of the skeleton including your ears, your nose and sections of your ribs.

The skeleton protects your insides too. Your ribs make a cage around your lungs and heart and your skull is like a helmet, protecting your brain.



Inside your biggest bones is a juice called marrow. New blood is being made in the marrow. That's right, your bones can make blood!

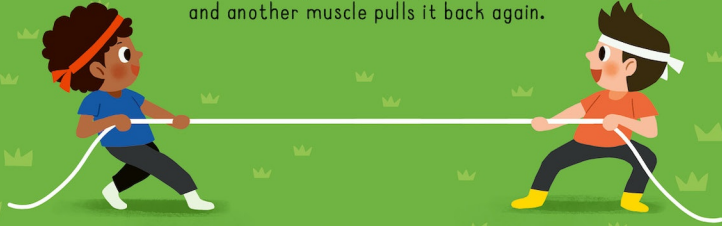


Bones are full of tiny holes that make them light. But the pattern of the holes makes them really strong too.

# Muscles

Muscles are stretchy cords that pull body parts to make them move. If you wiggle your eyebrows and stick out your tongue, you did it using muscles!

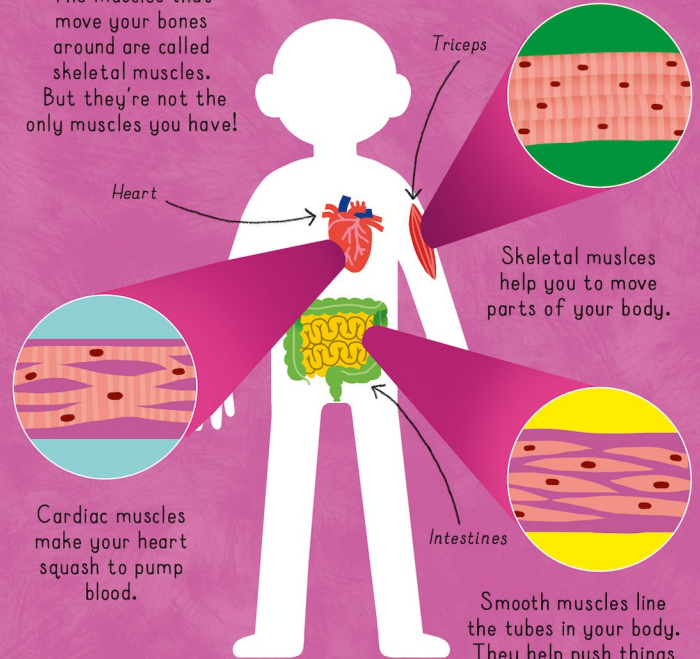
Muscles can pull, but they can't push so they need to work in teams. One muscle pulls a body part one way, and another muscle pulls it back again.



1. Bend your arm. The set of muscles at the front of your arm, called triceps, pulled it up by getting shorter.

2. Now straighten your arm. Another set of muscles at the back of your arm, called biceps, pulled your arm down to straighten it.

The muscles that move your bones around are called skeletal muscles. But they're not the only muscles you have!



Skeletal muscles help you to move parts of your body.

Cardiac muscles make your heart squash to pump blood.

Smooth muscles line the tubes in your body. They help push things through the tubes.

Did you know...?  
Muscles help you hold in pee until you're ready to let it go.

