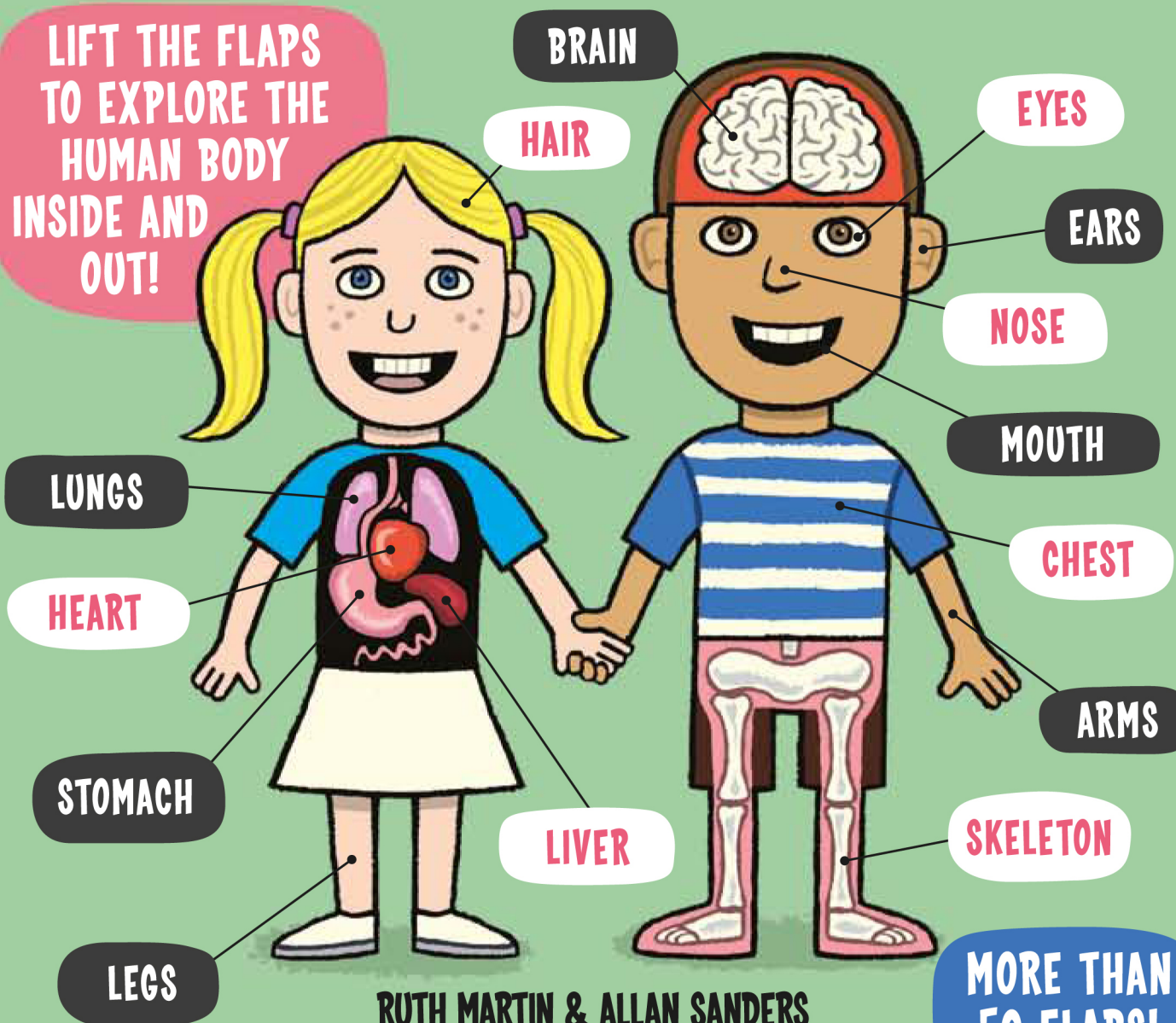


LITTLE EXPLORERS

# MY AMAZING BODY

LIFT THE FLAPS  
TO EXPLORE THE  
HUMAN BODY  
INSIDE AND  
OUT!

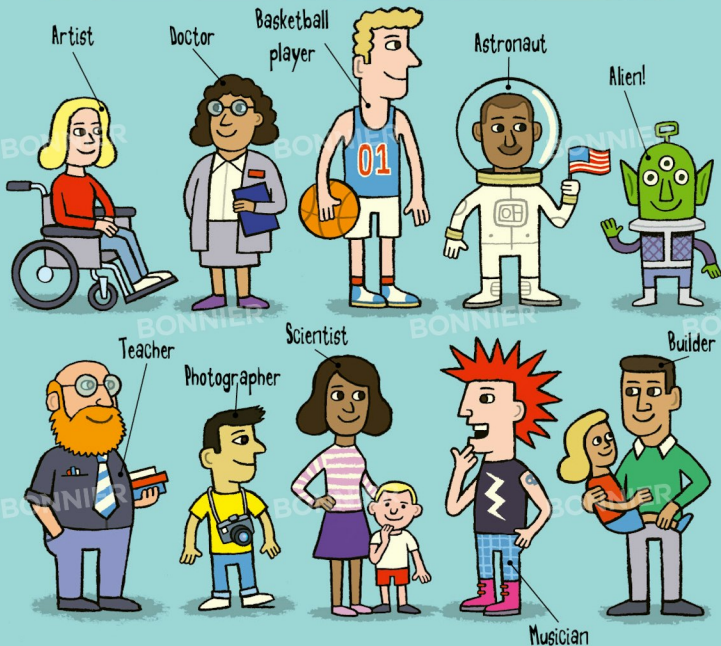


RUTH MARTIN & ALLAN SANDERS

MORE THAN  
50 FLAPS!

# WHY ARE WE ALL SO DIFFERENT?

There are more than seven billion people in the world and no two are exactly the same! Let's explore what makes us all different... and what we all have in common.



People have many different skills and do many different jobs. Humans can be many shapes and sizes, but everyone here has one thing in common – a human body! (Except one – can you spot him?)

The human body is made up of lots of parts that all work together to help us live our lives. Do you know all the main parts?

## Eyes

Eyes can be brown, blue or green but they all help us see.

## Mouth

No matter what language you speak, it comes from your mouth.

## Fingers

You've probably got ten!

## Hands

Practising crafts or skills can make you very handy.

## Feet

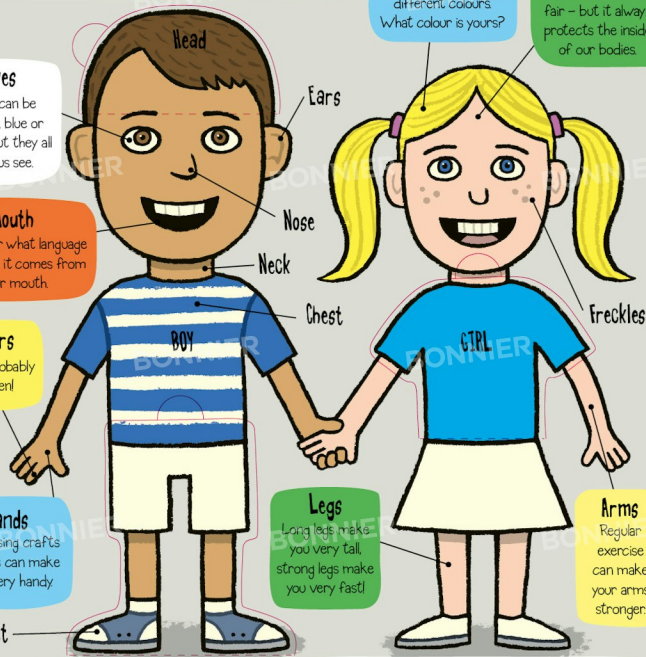
We are each in charge of our own body. We choose what to eat, how to exercise and what to do each day.

## Hair

Hair can be many different colours. What colour is yours?

## Skin

Skin can be dark or fair – but it always protects the inside of our bodies.



## Legs

Long legs make you very tall, strong legs make you very fast!

## Arms

Regular exercise can make your arms stronger.

No matter who we are, it's important to look after our bodies so we can grow strong and stay healthy. Let's take a closer look at how our amazing bodies work.



## WHERE DID I COME FROM?

Human babies start life inside their mothers. At first, they look just like a tiny blob of jelly! Then they grow for about 40 weeks before they are born – that's about nine months. Let's explore how they grow...

### Baby bump

As the baby grows, the mother's belly gets bigger and bigger!

### Belly button

A special cord feeds the baby with all the goodness it needs to grow! Look at your tummy and you will see where the cord joined – it's your belly button!

### Water baby

The baby grows in a part of the body called the womb, surrounded by watery liquid.

### Taking shape

Bit by bit, the little blob grows until it has a head, arms and legs and starts to look like a baby! The mother will start to feel the baby stretch, kick and even have hiccups! When it has grown big enough, the baby is ready to be born.



2 weeks   4 weeks   6 weeks   8 weeks   12 weeks   22 weeks   30 weeks

### Growing, growing, gone!



Babies grow into children very quickly. By the time they reach one year old they are about three times heavier than when they were born! Children grow about 6 centimetres a year.

### Taller, faster, stronger!



Teenagers grow even faster than children – as much as 8-9 centimetres a year – until they reach full adult height.

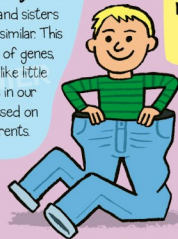
### How about hair?



Hair and nails never stop growing. The parts we cut are made up of dead cells – that's why it doesn't hurt!

### Genes not jeans!

Brothers and sisters often look similar. This is because of genes, which are like little messages in our bodies, passed on by our parents.



Tape measure  
How tall are you?

When were you born? What do you look like now? How fast do you grow?



## HOW DOES MY BODY WORK?

Inside your body is a skeleton made up of all your bones. A bit like a giant coat hanger, it keeps your body the right shape! Let's explore how it helps you stand up and move around.

### Bones

Babies are born with 300 bones. Some of these join together as you grow. A fully-grown adult has 206 bones.

### Ribs

### Skull

When you were born, your skull was almost full-sized already! Babies' heads have more flexible bones, that only fix into place as you get older.

### Shoulder joint

### Muscles

You have more than 600 muscles in your body. Some help to move food or blood around, while others let you move about.

### Elbow joint

### Spine (back bone)

### Pelvis



Uh oh...

### Knee joint

Unlike the skeletons you see in museums, the bones inside you are alive and keep growing until you are an adult.

### Joints

Where two bones connect you have a joint. Joints let your body move smoothly and comfortably, without any bits snapping off!

## Blood and guts!

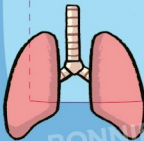
As well as your skeleton, there are lots of very important body parts working together so you can breathe, think, move and grow.

### Skin

Skin protects your body and keeps everything safe inside. It lets you feel the things you touch and keeps you just warm or cool enough.

### Lungs

Lungs help you breathe in fresh air and get rid of used air.



### Blood vessels

Blood flows all around your body in tubes called blood vessels. Without blood, your body wouldn't get the goodness it needs from the food you eat and the air you breathe.

### Brain

Your brain is in charge! It tells your body what to do and makes sure you grow.



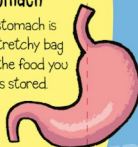
### Heart

The heart is a strong muscle that pumps blood around your body. It is about the size of your fist.



### Stomach

Your stomach is like a stretchy bag where the food you eat is stored.



Now you know what's hidden under your skin, listen out for the noises that tell you everything is working inside!



## WHERE DOES MY FOOD GO?

You know what it feels like to be hungry, but what happens once you've eaten? Every bite you eat and every sip you drink goes on an amazing journey. It all starts when you open your mouth...

### Burp!

When you swallow, food is pushed down a tube to your stomach. If you swallow air at the same time it comes back up to your mouth - burp!

**Say ahhh...** When you take a bite of a juicy apple, your body starts working on it straight away.

Throat

Tongue

You use your tongue to taste food and move it around your mouth.



Gums

Lips

Teeth

Teeth are used to bite off food and chew it into little chunks.

### Spit!

Your mouth adds watery liquid called saliva to your food to make it easier to swallow.



Stomach

First stop - the stomach! If you eat a lot and feel very full it's because your stomach has stretched to hold all the food.

Muscles keep food moving through your body.

The pancreas, liver and gall bladder make and store special juices that help your body make the most of your food.

Pancreas

Liver

Your liver is very big and very clever! It cleans your blood gets rid of anything dangerous and makes sure your body can use the goodness from your food properly.

Gall bladder

Small intestine

This wiggly tube is thin but very, very long! Food can take 4 hours to get through!

Large intestine

This fatter tube is the last stop on the journey.



Colon

It's time to go to the toilet! All that's left is the waste you don't need.

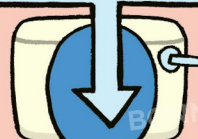
## WHAT ABOUT WEE?

Inside your body are two bean-shaped kidneys. When your blood passes through your kidneys, they help to get rid of any waste and extra water you don't need.



Kidneys

Bladder



Bottom

Splash!

Don't forget to flush...



and wipe!

## WHAT DOES MY BRAIN DO?

Your brain controls everything in your body. It tells you how to move and what to do, as well as how to grow and learn. It even stores your memories!

The brain is very complicated, but it has three main parts shown here. They all work together, but each has special jobs to do.

### That's nuts!

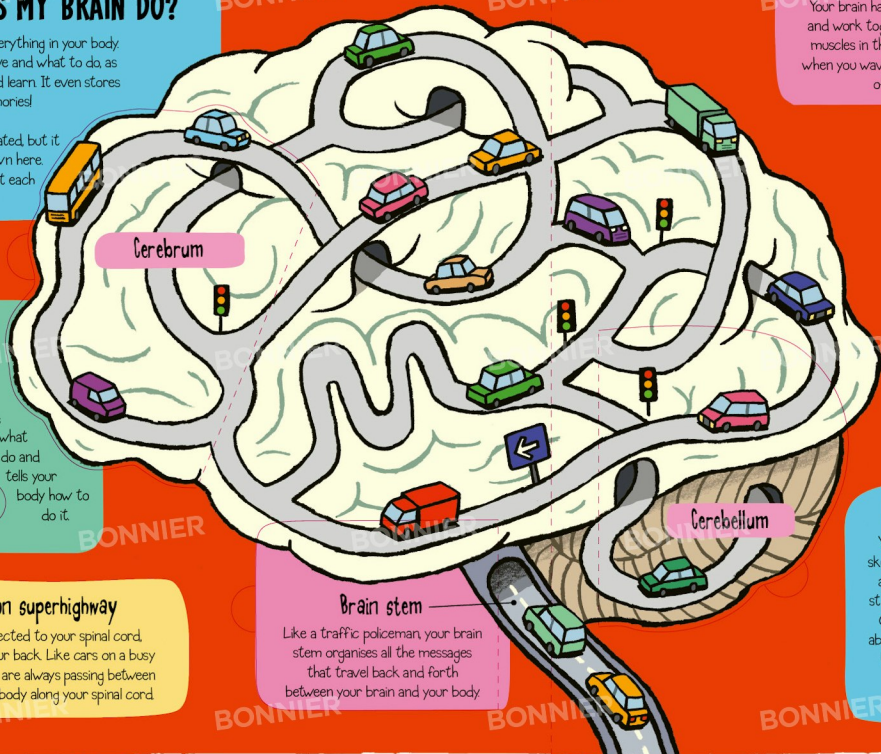
Your brain looks a bit like a wrinkly walnut! But no matter what it looks like, it is in charge of all of you.

It decides what you do and tells your body how to do it.



### Information superhighway

Your brain is connected to your spinal cord, which runs down your back. Like cars on a busy motorway, messages are always passing between your brain and your body along your spinal cord.



Cerebrum

Cerebellum

Brain stem

Like a traffic policeman, your brain stem organises all the messages that travel back and forth between your brain and your body.

### Is that right?

Your brain has two sides. They are connected and work together, but each side controls the muscles in the opposite side of your body. So when you wave your left hand, it's the right side of your brain in action!



### Live and learn

Messages pass from your brain to your body to help you try new activities and learn skills. As you practise them, it becomes easier and easier because of the clear pathway the messages have made.

### Practice...



### Look after your brain - it looks after you!

Your brain is protected by your skull, as well as tough layers of cells and clear, watery liquid, but you still need to look after it carefully! Give your brain plenty to think about and whenever you ride your bike, don't forget your helmet!



Brain saver!



## HOW DO I SEE AND HEAR?

Now you've explored your amazing brain you'll know that it is busy all the time with messages from your body. Your eyes and ears, as well as your nose, mouth and skin, gather lots of information to send to your brain - this is called using your senses. Let's explore the senses you use to understand the world around you.

### Eyes

Your two eyes let you see what is happening around you.

### Brain

Special nerve cells in your body pass messages to your brain about everything you sense.

### Ears

Your two ears let you hear sounds.

### Skin

Your skin lets you feel things. When you touch something very hot, messages pass to your brain so that you know to move away. They also tell you if something is cold, hard, soft, smooth, sticky or gross... yuck!

### Nose

When you sniff the air, your nose lets you smell.

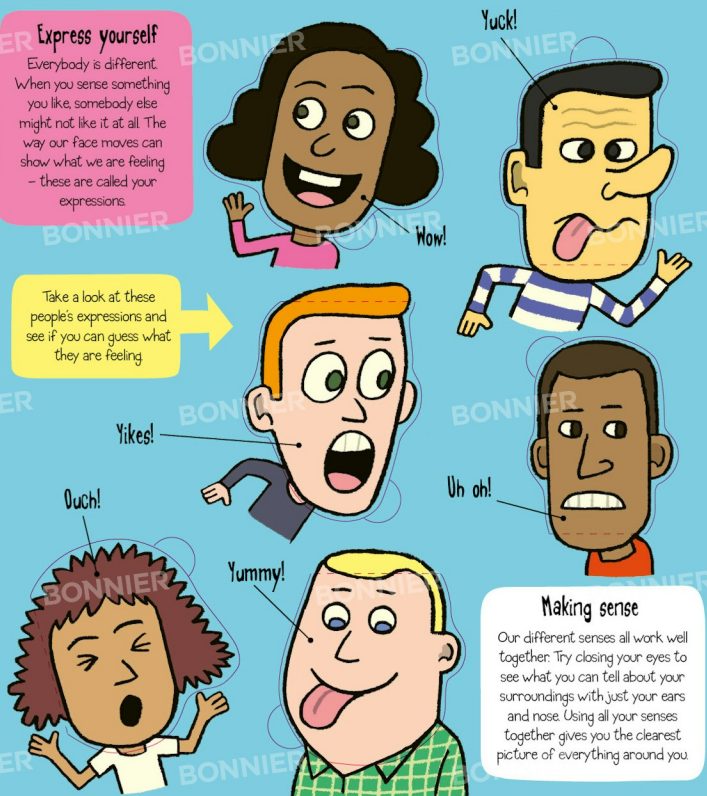
### Tongue

As you eat or drink, your tongue lets you taste.

## Express yourself

Everybody is different. When you sense something you like, somebody else might not like it at all. The way our face moves can show what we are feeling - these are called your expressions.

Take a look at these people's expressions and see if you can guess what they are feeling.

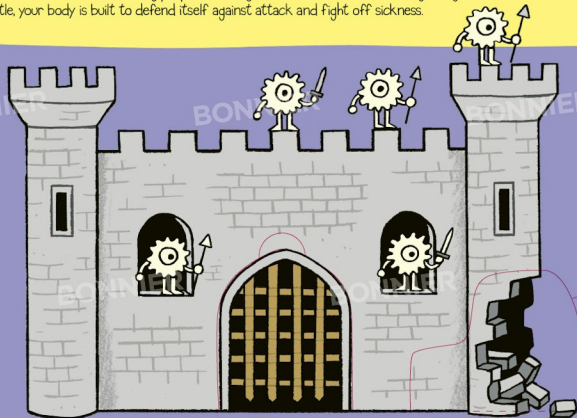


## Making sense

Our different senses all work well together. Try closing your eyes to see what you can tell about your surroundings with just your ears and nose. Using all your senses together gives you the clearest picture of everything around you.

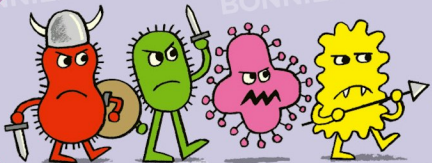
## WHY DON'T I FEEL WELL?

Your body tries very hard to keep you well, but sometimes you can feel ill. Illness can be caused by a part of the body that isn't working properly or by germs from outside the body getting inside. Just like a castle, your body is built to defend itself against attack and fight off sickness.



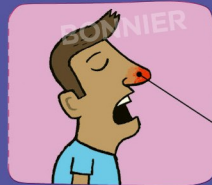
### Invasion!

Germs are like tiny invaders. They are living things that can cause infection in your body and make you ill. Some give us viruses, like colds or flu, and others may cause an upset stomach.



### Get well soon!

As we grow, we learn how to help ourselves get better from sickness or pain. Have a look at the medical problems on this page. Do you know what these people need to do to make themselves well again?



Colds

Sickness



Viruses



Broken bones



Toothache



Luts and bruises

There are many different things that can make you feel unwell. It's important to tell someone and see the doctor if you need help to get better. Taking care of your body is the best way to avoid being ill. Turn the page to find out how.



## HOW CAN I LOOK AFTER MY BODY?

By finding out how your body works, you've already made a great start looking after yourself. To stay fit and healthy, try to make good choices about what you eat and what you do each day.

Take a look at the healthy habits on this page. They'll help to keep you in tip-top condition... and then you can achieve anything!

### Have your shots



### Learn first aid

Having a first aid kit and learning what to do if someone is hurt or ill can be very useful.



### Get your vitamins



### Eat well



### Stay safe

Cross the road carefully and look out around you to avoid accidents.

### Clean your teeth

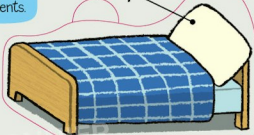
Brush twice a day and visit the dentist for check-ups.



### Wash your hands



### Sleep well



### Playtime!

It's lots of fun, but playtime is very important for your body too. Relaxing and enjoying time with friends can be a brilliant way to stay healthy.



### Have fun

Finding activities that you enjoy can keep you fit and help you have fun.

### Water

You lose lots of water from your body when you sweat. Have plenty to drink when you exercise to stay topped up.



### Sun protection

Playing outside in the fresh air and sunshine is very good for you. Stay cool and use sunscreen to protect your skin.

### Friends

Good friends make you laugh and look out for you. Both old friends and new friends can make us very happy, so make as many as you can!

### Exercise

Whether you enjoy football, swimming, dancing or running, make sure you exercise every day.

The human body is like an amazing machine, keeping you alive and helping you do whatever you want to do. Each day, there are choices you can make to keep yourself fit and healthy. Have fun and look after your amazing body - it's yours for the rest of your life!