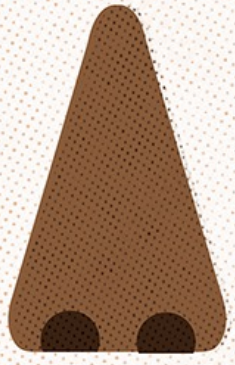
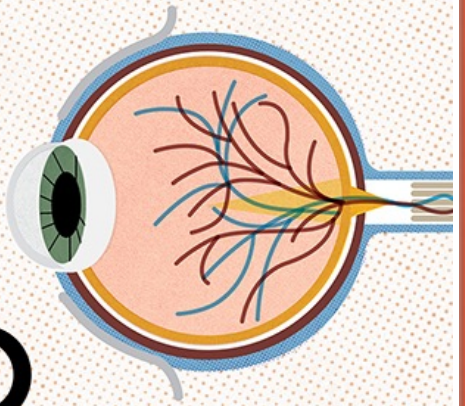
Head to Toe





An Introduction to the Human Body

post wave

Pui Lee

For Kyla, Mia, Kobi and Quinn
– my best art critics x

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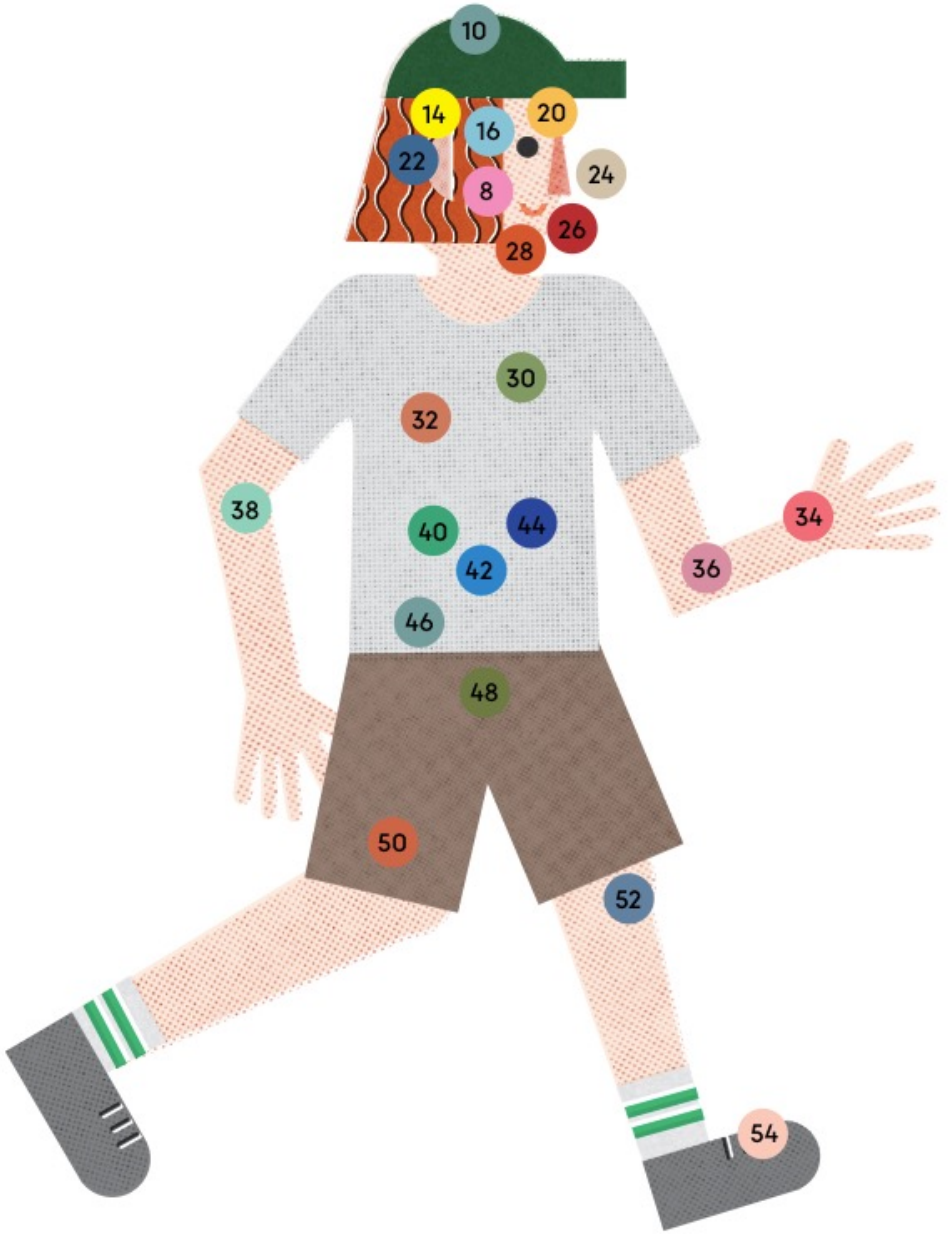

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Welcome to Your Body!

Have you ever wondered what makes your heart beat, how many memories your brain can store or why your eyes are a different colour from somebody else's? We are going to delve inside and out of the human body to discover what makes us tick. From organs and tissues, to what makes us all different on the outside, we will explore all these questions and much more.

The human body is special and comes in all shapes and sizes, making each one of us unique. So, let's get ready to explore and celebrate our bodies – from head to toe!

Face Shapes

No single person on the planet has the same face – not even identical twins! The shape of our face is a big part of what makes us unique and recognisable. Faces can be round, oval, square, heart-shaped – or even a mix of shapes! The shape affects how our features (like our eyes, nose and mouth) look. This is what makes each of us one of a kind.

Which face shape do you have?

An oval-shaped face is longer than it is wide, with its features evenly spaced out.

A rectangular face is longer than it is wide, with a square jaw and a high forehead.

A round face shape is characterised by a wide hairline and full cheeks.

This is the rarest face shape. It is defined by a narrow hairline, wide cheekbones and a pointed chin.

A square face has a strong jawline, a wide hairline and a shape that is roughly the same width and length.

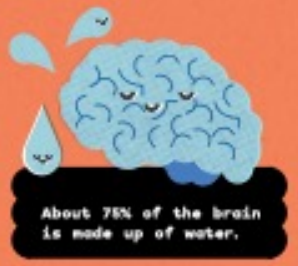
A heart-shaped face has a wide forehead, high cheekbones and a narrow chin.

Brain

The brain is a very complex **organ** responsible for most of our bodies' functions. It controls everything we do! It has the ability to send and receive lots of information – the human body sends an enormous amount to the brain every second! However, the conscious mind (the part of the brain that is aware of what you're doing right now) can only focus on a tiny fraction of it. This means our brains handle huge amounts of information without us even knowing.

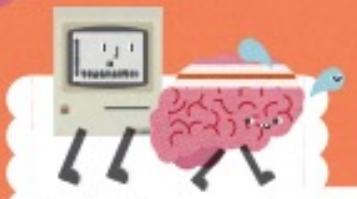
Size Doesn't Matter

The human brain continues to develop until around your forties, after which it starts to shrink a bit. But don't worry! There is no evidence that a larger brain is smarter than a smaller one. What really matters is how well your brain works. So, it's important to keep your brain active and healthy.



Automatic Breathing

The brain manages your breathing when you're awake and asleep. The **brainstem** (the lower part of the brain) monitors the amount of **oxygen** and **carbon dioxide** in your body, and sends signals to your muscles to breathe in or out more. This happens all the time, without you thinking about it.

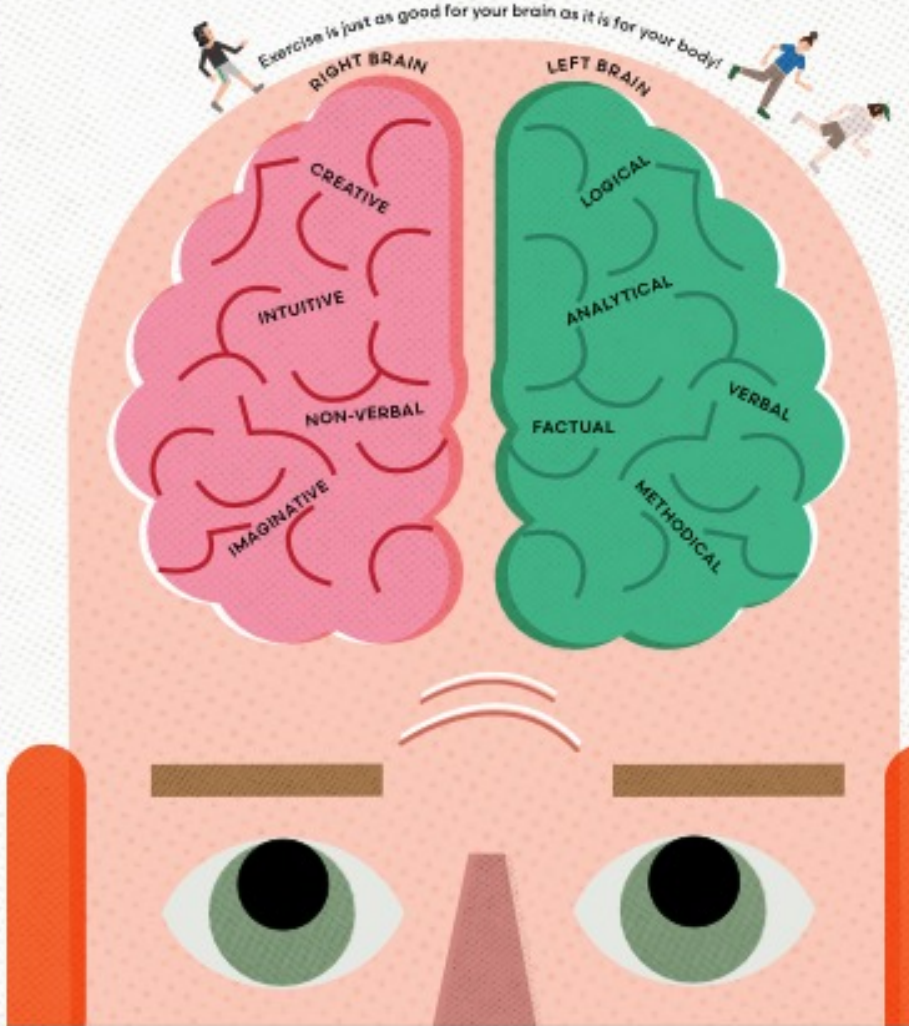


Brain vs. Supercomputer

The human brain is amazing at recognising faces. It can spot a familiar face in just a fraction of a second, even if the person looks different or hasn't been seen in years. Supercomputers need lots of data and time to do the same thing, and they still aren't as good at it as our brains!

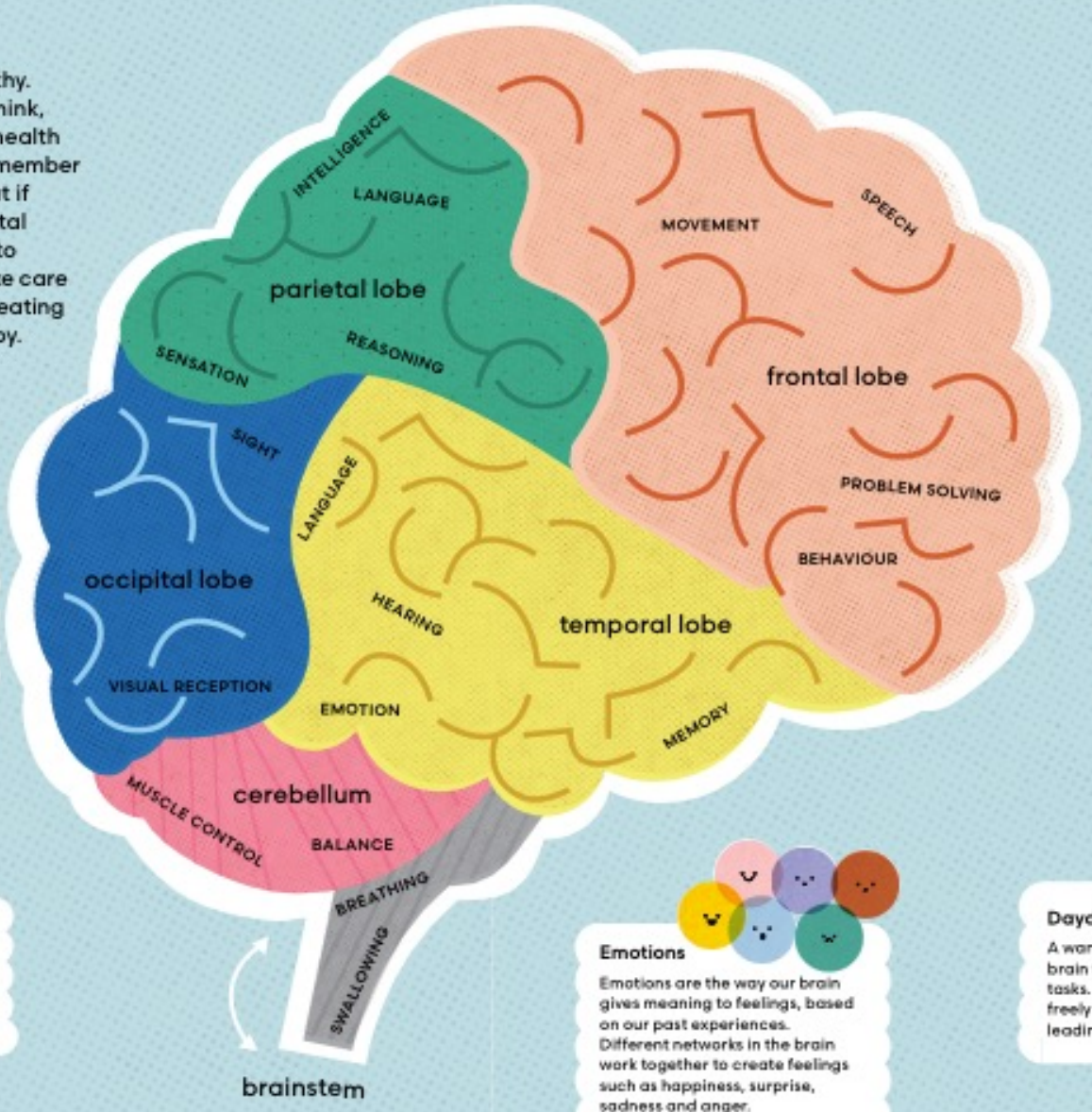
Left Brain and Right Brain

There's a popular idea that people are either 'left-brained' or 'right-brained' thinkers. The left side of the brain is often linked to logic, language and problem-solving, while the right side is thought to handle creativity, emotions and imagination. In reality, both sides of the brain work together for almost everything we do. For example, when solving puzzles or making music, different parts of the brain team up and work together. So, while some people might be better at certain skills, we all use our whole brain in different ways!



Brain Power

It's important to keep our brains healthy. Good mental health affects how we think, feel and do things. When our mental health is good, our brain can focus better, remember things and help us enjoy life more. But if someone is struggling with their mental health, their brain might find it hard to concentrate or feel happy. We can take care of our brains by getting plenty of rest, eating healthy food and doing things we enjoy.



Memory

When the brain creates a new memory or learns something new, it stores the memory in the tiny gaps between brain cells called **synapses**. It also forms new connections between these cells, helping to reshape and strengthen the brain.

Short- and Long-Term Memory

Our brain has two different types of memory. Short-term memory lasts about 20-30 seconds and is a bit like a notepad for jotting things down quickly. But our long-term memory is like a library, capable of storing a lifetime of memories.

Circadian Rhythm

This is the body's internal clock. It helps control what we do in a 24-hour cycle, like being awake during the day and asleep at night. It also affects things like hunger, digestion, body temperature and **hormones**.

Sleep

Sleep is important for your body and brain to work well. Without enough sleep, your brain can't work at its best. While you sleep, your brain collects all the memories from the day. Scientists think we dream to process emotions, solve problems and understand what we've learned. Most people have between four and seven dreams a night, but you might not remember them all.

Emotions

Emotions are the way our brain gives meaning to feelings, based on our past experiences. Different networks in the brain work together to create feelings such as happiness, surprise, sadness and anger.

Daydreaming

A wandering mind happens when your brain takes a break from focussing on tasks. This allows your thoughts to flow freely from one idea to another, sometimes leading to more creative thinking.