Fab Facts about our Brilliant Brains

The average brain weighs around 1.4kg

The brain is **super soft and squishy**! Its surface is wrinkly, and its texture is like jelly, squidgy mushroom or a very ripe avocado.

The Brain is composed of around 75% water, with the rest made up of protein and fats.

The **brain needs a lot of power** to do all things it needs to do to keep us going. Although the brain makes up only about 2% of body weight it uses up 20% of the oxygen and energy we use every day.

There are approximately **100,000 miles** of blood vessels in the brain to carry all the necessary oxygen and energy needed.

Each **minute** around 750ml of blood travels around the brain carrying oxygen and energy. 750ml is roughly the same amount as 2½ cans of fizzy drink.

Neurons are information signals. They take messages around your brain and nervous system.

The brain has over **86,000,000,000** (86 **billion**) **neurons** (microscopic nerve cells). That is a huge number to try and imagine… If you started counting '1, 2, 3, 4, 5…' it would take around 3000 years of non-stop counting to get to 86,000,000!

These billions of neurons can make **trillions of connections!** (1 trillion - 1,000,000,000,000). It is these connections that allow you to think, feel, and do everything that you do.

Neurons are super speedy. They travel in the brain at around 240 kilometres per hour (150 miles per hour).

With all the neurons whizzing around making connections and sending messages you brain **generates enough electricity to power a dim lightbulb**!

The brain is a superfast and **powerful supercomputer**. It is better than any computer on earth or even all of them working together.

A newborn **baby's brain grows incredibly fast**! It doubles in size in the first year. Then the brain **doesn't fully develop until around 25 years of age**.

The brain is always working even when we are sleeping. The brain is keeping the body running smoothly and processing information and memories.

We **breathe in and out around 22,000 times** each and our **heart beats an amazing 100,000 times**.

Laughing is great exercise for your brain! It uses many different parts of your brain and can release feel good chemicals in the brain.

Learning new things changes the brain! Every time we learn something new, like riding a bike or remembering our times tables, the brain makes new connections between brain cells. If we practice something a lot, those connections get stronger and thicker. **This is called neuroplasticity** - the brain is always learning, growing, and changing as we do new things and have new experiences.

Ever had a **"brain freeze"** from eating ice cream too quickly? This happens when something cold touches the roof of the mouth, causing the blood vessels in your head to constrict (squeeze together) and then quickly dilate (open), causing a short-term headache.

The scientific term for brain freeze is **sphenopalatine ganglioneuralgia** (*SFEE-noh-pal-uh-teen gan-glee-oh-new-RAL-juh*)…

…if you want to see **neuroplasticity in action**, try practicing saying '**sphenopalatine ganglioneuralgia'** until you can say it out loud…

(Psst. If you do get brain freeze some people say holding your tongue against the roof of your mouth makes it go away more quickly…)