An idea used to explain something.

Why Do We Dream? A New Theory on How It Protects Our Brains

By David Eagleman and Don Vaughn, Time, 29th December 2020 (adapted)

Whenever we learn something new or change our habits, our brain physically changes. Neurons, the brain's cells, constantly connect, disconnect, and reconnect in different ways, a process known as “brain plasticity.”

Many actions together to reach a goal.

Lets / makes possible.

Change the basic parts. Collocates with brain.

This allows the brain to adapt and rewire itself throughout our lives.

A field of study.

Believed in the past. Not now.

Neuroscience once believed that each brain area had a specific function. For example, the visual cortex at the back of the brain was thought to only process sight. However, new findings show that if needed, these neurons can adapt to handle other tasks.

Thought in the past. Not now.

New things we've learned.

Change and get used to.

Able to change easily.

Keep living when it is difficult.

Our brain's flexibility helps us survive by allowing us to learn, remember, and develop new skills. Recent discoveries have shown that brain rewiring happens much faster than we once thought. For example, studies with blindfolded participants revealed that the brain's visual regions could quickly start processing touch and sound.

Learn about something for the first time.

Having a cloth around your eyes so you can't see.

Fast / in a short time

adapt

able to

This rapid adaptability may explain why we dream. When we sleep, our visual cortex lacks input from the eyes.

don't have

information coming in

According to the “defensive activation theory,” dreams keep the visual cortex active to prevent other senses from taking over.

Stop something happening.

See, hear, smell, touch, taste...

REM sleep, when most dreams occur, helps protect the visual system. As we age, and our brains become less flexible, we spend less time in REM sleep, supporting this theory.

Get older.