

Even brain interprets
time, we must first



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Even in prehistoric times, people had the desire to understand time. Some of the earliest ways to tell time include the sundial, hourglass, or simply by looking at the position of the sun. Now a days, clocks are everywhere: on our wrists, on the wall, even on our phones. However, there is more much to time than simply numbers on a clock. Our brains are constantly calculating how much time has passed and how much time until certain events.

Unfortunately, there isn't one specific part of the brain in charge of all things time. On the contrary, many different parts of the brain work together to grasp an understanding of the concept of time. However, before we can understand how the brain interprets time, we must first understand structure and development of the brain.

Within the brain there are four lobes: the frontal, parietal, temporal, and occipital. The frontal lobe, as explained in the name, is located at the front of the brain. It is the last lobe of the brain fully develop around the age of 25. The next lobe, the parietal lobe, is in the top of the center of the brain, and finishes development in the early twenties. The temporal lobe is located in the bottom of the middle of the brain, and finishes developing in the late teenage years.

And the last lobe, the occipital lobe, is located at the back of the brain. This lobe is the first to finish development around the age 14-16. Each of these lobes play a part when the brain is interpret and track time. Because the frontal lobe is in charge of guiding behavior, it is crucial when calculating the amount of time an action will take. If the action has never been performed

before and therefore doesn't know the amount of time the task will take, the brain will attempt to discover that information for later.

This lobe of the brain also searches memory. Information from memories is needed when interpreting time to understand how much time has passed since certain events. Unlike the frontal lobe, the temporal lobe does not improve your sense of time. On the contrary, in fact, the temporal lobe can completely throw off your time perception.

That is because the amygdala, the emotional center of the brain, is located in this lobe. In stressful or fear inducing situations, the amygdala sends a signal that something is wrong. The signal is carried through the autonomic nerves and to the adrenal glands.

These glands begin to release epinephrine, the hormone adrenaline, into the body. The adrenaline hyper-affects your nervous system. This makes it so messages are being sent through your nervous system faster than normal, thus making it seem like time is going by faster than it really is.