

# NEUROSCIENCE

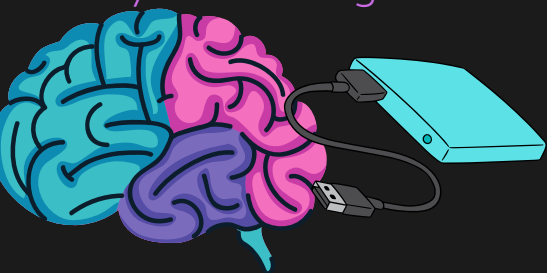


## ICE BREAKERS



### 1 BRAIN POWER

The brain makes up only about 2% of your body weight but uses around 20% of your energy. But, the brain also generates about 20 watts of electrical power, enough to power a dim lightbulb! So next time you're thinking hard, your thoughts could literally be lighting up the room.



### 2 MEMORY

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According to a Scientific American article, the human brain's memory storage capacity is estimated at around 2.5 petabytes, comparable to three million hours of TV shows.



### 3 PRUNING

During childhood and our teenage years, the brain actively removes or "prunes" unnecessary connections between neurons, like a gardener trimming plants. This process, called synaptic pruning, makes room for more efficient connections by keeping the ones that are more useful. A two year old's brain has around 50% more synapses than an adult's.



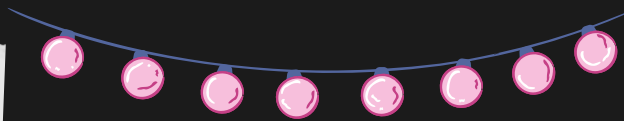
### 4 PAINFUL

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While it processes pain signals, the brain itself has no pain receptors. This is why brain surgery can often be done on awake patients. The interpretation of sensory inputs in the brain results in feeling pain, but it doesn't exist until the brain decides that it does. Before then, it's just a series of neuronal signals from the body into the brain.

### 5 BEDROOM

Italian neuroscientist Rita Levi-Montalcini conducted early research on nerve growth factor (NGF) during WWII. She set up a makeshift lab in her bedroom due to the anti-jewish regime forbidding scientific equipment. She studied NGF in chicken embryos and her work eventually earned her the 1986 Nobel Prize.



### 6 STONED APE

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Terence McKenna's "Stoned Ape" in 1992 proposed that the consumption of psychedelic mushrooms by early humans may have accelerated our 'cognitive evolution', although this idea remains speculative and controversial.

### 7 EEG IMPOSSIBLE

German psychiatrist Hans Berger invented the electroencephalogram (EEG) in the 1920s, which measures brain waves. Initially, other scientists were skeptical, thinking brain waves couldn't be measured, but today it's essential in diagnosing brain disorders and research.

