

NEUROSCIENCE TERMINOLOGY

With the rise of interest in brain exercises and neuroscience in general, there has been some confusion in popular culture and even amongst academics around the terminology. In fact, some definitions are still up for debate.

To make things as simple as possible, I have researched and designed a list that gives you the most used terms in a nutshell. The definitions here are closest to the common positions held by the academic community and in a language that non-scientists (like me) can understand. I hope it's helpful!



NUTSHELL DEFINITIONS

BRAIN NETWORK

The new term used in psychology and neuroscience that used to refer to brain zones or regions. The brain network more correctly describes how the brain works across pathways rather than in zones.

SHORT TERM MEMORY

Temporary, immediate and easily accessible pieces of information stored in the hippocampus. Scientists are divided on how much can be stored and for how long, but they all agree that the short term memory has limits. More information is found in our document: '[Remembering Memory](#)'.

LONG TERM MEMORY

Pieces of information that have moved over from short term memory and are stored over a long period of time (in the hippocampus). Scientists say the capacity of long term memory is limitless.

WORKING MEMORY

A tool that uses information in your long or short term memory, by applying it to a task. It is like a drafting tool that is temporary but hugely important for processing and using information. Research identifies multiple locations of the brain are used for working memory. More information is found in our document: '[Working Memory Bucket](#)'.

MEMORY SPAN

The longest list of items that a person can repeat back in correct order immediately after presentation. Items may include words, pictures or letters, etc.

DIGIT SPAN

Same as memory span, a measurement for determining the list of items a person can recall, but in this case with digits or numerals.

CHUNK

A chunk is the largest meaningful unit or grouping in the presented material that the person recognises. Eg. the word, 'boat' is one chunk for an English speaker, but it is four chunks for a non-English speaker someone who sees the word as a collection of letters or sounds.

EXECUTIVE FUNCTION

If your cognitive (thinking) skills are each musicians with their own instrument, the executive functions combine to become the conductor. Executive function helps you manage many tasks, including planning and organisation. They also include other skills which are detailed further in our document: '[Executive Function Explained](#)'.