# How Memory Works

Many of us wish that we had better memories. Improving our memory power would help us to learn faster, to avoid making mistakes that get us into trouble and to avoid losing things that belong to us.

And yet a great many of us would describe ourselves as absent minded, or our memory as being poor. We say this as though it were a fact that we couldn’t possibly do anything about. Like being short. Or bald.

But in truth, your memory is a skill that can be honed, trained and developed. If you have the inclination, then you can increase your memory power to the point where it’s possible to memorize the order of a pack of cards, or pi to hundreds of digits. We know this to be true, because plenty of people have achieved those things.

And with that in mind, with a little bit of training and effort, we *should* be able to get you to remember where you left your keys and what it was you came into the room for!

**Memory and Your Brain**

To start improving our memory power, you should understand how memory works and why it might be fallible to begin with.

Essentially then, your memory is distributed across your brain’s ‘connectome’. This is the network of neurons (brain cells) that is spread across your entire brain and that makes you who you are. This stores all of your memories, all of your abilities and all of your personality. New memories are created the birth of new neurons and/or new connections between *existing* neurons. This is what we call ‘brain plasticity’ – the ability of the brain to change shape in response to learning, just as a muscle gets larger and stronger in response to training.

The ‘autobiographical’ memories and ‘declarative’ (factual) memories that we tend to think of as ‘memories’ though, are located more specifically within our hippocampus – which is one of the most highly plastic parts of the brain. This is a part of the limbic system, which in turn is closely connected to our emotions.

And that’s our first clue as to what really makes memory tick: the limbic system is our emotional cortex. This is the brain region responsible for producing hormones and neurotransmitters. It helps us to feel excited, scared, angry, or anything else.

And ALL these things help us to better differentiate between what is important and what isn’t. This in turn helps our brains to know what to store and not to.

So how do you improve memory? You make it important. You add emotional charge.