

# Long-term Memory

by Sophia Tutorial



## WHAT'S COVERED

This tutorial will cover long-term memory. Our discussion breaks down as follows:

1. Long-Term Memory
2. Types of Long-Term Memory

## 1. Long-Term Memory

**Long-term memory** is a system of memory that allows information to be filed and stored away for later retrieval and use. This memory storage is seemingly limitless. A person doesn't need to forget old information in order to remember something new.

In the long-term memory, information is stored according to its meaning, because information encoded with meaning is stored better. Humans don't tend to remember things in lists; information isn't memorized without any context to it.

Instead, people put information into categories grouped by similarities, differences, images, or symbols. This helps a person to place bits of information together and to connect it in their mind so that it makes sense. This concept plays a role in cognitive theories of psychology and the creation of schema, which are mental constructs that organize information.

These long-term memories are considered to be relatively permanent. Unless something interferes with the information or it's badly encoded, to begin with, it will be remembered essentially for the rest of a person's life.

Long-term memory is normally outside of consciousness. A person doesn't remember all of their memories all the time. If information in long-term memory is needed, it is retrieved or brought to consciousness by memory in order to be used.



### TERM TO KNOW

#### Long-Term Memory

The system of memory that allows information to be filed or stored away for later retrieval and use

## 2. Types of Long-Term Memory

There are different types of long-term memory storage that a brain uses:

- Procedural Memory
- Declarative Memory

## 2a. Procedural Memory

The first type is **procedural memory**, which pertains to actions or skills, or how to do certain things. Procedural memory includes abilities like riding a bike, driving, tying shoes, or cooking a meal.

Procedural memory is more implicit, and is a conditioned response. It is related particularly to the hindbrain, the section of the brain that includes the cerebellum; it is a more basic part of the brain, and at the core.



### DID YOU KNOW

In cases of amnesia where people forget information like who they are, who their spouse or children are, or even their childhood memories, the person oftentimes will still retain their procedural memory. They will still be able to perform certain kinds of practiced actions that they learned throughout their lives. They haven't lost all of their memory, just more of their declarative memory, which will be covered next.



### TERM TO KNOW

#### Procedural Memory

Long-term memory of actions and skills, or how to do certain things

## 2b. Declarative Memory

**Declarative memory** is the opposite of procedural memory. This is the long-term memory of more explicit and factual information like words, numbers, or symbols. Declarative memory comes in two forms:

- **Semantic memory**, which is any fact-based memory that is impersonal and detached. It isn't directly related to the person and is more knowledge of the world around us.
- **Episodic memory**, which is personal information of specific events, experiences, or different episodes in our lives. The episodic memory would include things like your fifth birthday, your first kiss, the birth of your child, or your marriage.



### TERMS TO KNOW

#### Declarative Memory

Long-term memory of more explicit, factual information, like words, numbers, and symbols

#### Semantic Memory

Fact-based, impersonal knowledge of the world

#### Episodic Memory

Personal memory of specific events and experiences



### SUMMARY

**Long-term memory** is a system of memory that allows information to be filed and stored away for later retrieval and use. The storage space is seemingly limitless and relatively permanent. Information is stored and tied with meaning.

There are two **types of long-term memory**. Procedural memory is memory of action or skills, while declarative memory is the memory of more explicit, factual information, like words, numbers, and symbols. Declarative memory comes in two forms: semantic and episodic. Semantic memory pertains to information that is impersonal, like scientific facts, and episodic memory involves information related to an individual's personal memories of specific events and experiences.

Good luck!

Source: This work is adapted from Sophia author Erick Taggart.



## TERMS TO KNOW

### **Declarative Memory**

Long-term memory of more explicit, factual information, like words, numbers, and symbols.

### **Episodic memory**

Personal memory of specific events and experiences.

### **Long-Term Memory**

The system of memory that allows information to be filed or stored away for later retrieval and use.

### **Procedural Memory**

Long-term memory of actions and skills, or how to do certain things.

### **Semantic memory**

Fact-based, impersonal knowledge of the world.