

# Improving Memory: Encoding Strategies

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## WHAT'S COVERED

This tutorial will cover methods to improve memory, focusing on the following encoding strategies:

1. Improving Memory
  - a. Repetition and Rehearsal
  - b. Processing
2. Strategies Large Amounts of Information
  - a. Whole vs. Part Learning
  - b. Serial Position Effect
  - c. Over-Learning
3. Cues, Mnemonics, and the Keyword Method

## 1. Repetition, Rehearsal, and Processing

There are certain ways that a person can improve memory and make it easier to remember information. It is possible to improve memory at all three stages: encoding, storage, and retrieval. Improving each of these in some way can help with remembering and recalling information.

### 1a. Repetition and Rehearsal

Repetition and **rehearsal** are two basic ways that memories can be encoded into long-term memory and ensure that they're not forgotten. The more times a person hears or says something, the more likely it is that it will stick in their memory.



#### TERM TO KNOW

#### Rehearsal

Repeating information to oneself, which allows one to retain information longer in the short-term memory

### 1b. Processing

Using elaborative processing, in which you connect new ideas to old ones, makes connections to the memory stronger and provides better retention overall.

One way to elaborately process information is through the **organization** of that information, by placing each piece of information into a meaningful group. Bits of information that are related to each other are more likely to stick together as a whole within our memories.

🔗 **EXAMPLE** Grouping words that are similar to each other, like grouping all the colors, for instance, makes it easier to memorize them.

Another processing strategy is **selection**. This refers to taking important information to remember and boiling it down into smaller, more digestible parts. This can help with retention.

🔗 **EXAMPLE** Summarizing information is an example of selection, because it doesn't involve memorizing everything verbatim, but rather just trying to recall the important ideas. In addition, the process of summarizing helps to make it the information meaningful within our own minds.



#### TERMS TO KNOW

##### Organization

Placing information into meaningful groups

##### Selection

Recognizing important information to remember and changing it into smaller, more digestible parts

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## 2. Strategies for Larger Amounts of Information

These next strategies apply to learning large amounts of information. There are several different approaches that can be used to improve the learning and retention of those types of memories.

### 2a. Whole vs. Part Learning

When you're learning a large selection of information, like a speech or a poem, it's better to learn the selection as a **whole vs. part learning**. The reason why is because a person remembers larger, more meaningful pieces easier than shorter or less meaningful pieces. An individual can also understand things as a whole better because they can understand how each piece fits together.



#### TERM TO KNOW

##### Whole vs. Part Learning

Remembering larger, more meaningful pieces as a whole, which is easier than shorter, less meaningful pieces

### 2b. Serial Position Effect

Suppose you are learning a list of items that aren't necessarily related. How would you go about memorizing something like that?

Well, you're more likely to remember the first and the last items within that list. This is called the **serial position effect**. It's useful to keep that in mind and pay closer attention to the items that are in the middle of that list because you're more likely to forget those things.



## TERM TO KNOW

### Serial Position Effect

When learning a list of information, a person is more likely to remember the first and last items on the list

### 2c. Over-Learning

When learning any information, a person should continue to study that content after they are able to simply remember it. This is called **over-learning**, and it ensures through practice that you're better able to consolidate those memories within your mind. You'll be more likely to remember them for a longer period of time afterwards.

Keep in mind, this is different from just simply learning until you feel like it's sufficient. Given a different kind of situation or different kinds of environmental concerns, you might be more likely to forget that information.



## TERM TO KNOW

### Over-Learning

When learning information, a person continues to study after he or she is able to simply remember it

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## 3. Cues, Mnemonics and the Keyword Method

### 3a. Cues

The use of **cues** and aids in retrieving information can also be helpful in remembering that information better for later use. Cues are environmental stimuli that are present when a person learns about the information in the first place. When information is encoded into the memory with a cue, it will help the person to remember or retrieve that information later on.

➞ **EXAMPLE** If you visualize the room that you're going to be taking a test in while you're studying, you're going to be able to better recall or retrieve that information later when you're actually inside of that room.



## TERM TO KNOW

### Cues

Environmental stimuli present when a person learns the information that help a person to remember, or retrieve, information later

### 3b. Mnemonics

Another tactic you can use is **mnemonics**, which are any systems or techniques that help people to remember and recall information. You've likely heard many examples of mnemonics.

➞ **EXAMPLE** For instance, mnemonics include rhymes used to remember information like the number of days in each month: "30 days hath September, April, June, and November..."



## TERM TO KNOW

### Mnemonics

Different systems or techniques that help people to remember and recall information (for example, ROYGBIV, a mnemonic for the sequence of hues in the visible spectrum, in order from longest to shortest wavelength: Red Orange Yellow Green Blue Indigo Violet)

### 3c. Keyword Method

One last tactic to better remember information is the **keyword method**. This is a way in which you use familiar words and images to remember new words or information.



**EXAMPLE** When you're learning a foreign language, you might make connections between the way the word sounds and a visualization linked to the sound of something familiar.



## TERM TO KNOW

### Keyword Method

When a person uses familiar words or images to remember new words or information



## SUMMARY

There are several strategies you can use to improve memory and remember information better.

**Repetition** and **rehearsal** involve repeating information to yourself, to help that information be encoded into long-term memory. Elaborative **processing** techniques like organization and selection, connect new ideas to old ones, making connections to the memory stronger.

When **learning a large amount of information**, it's better to memorize the whole vs. the parts. Also, if you are memorizing a list, you will naturally remember the first and last items better, so it's important to focus on remembering the middle items. Over-learning, or continuing to study content after you are able to remember it, also helps to consolidate memory.

Lastly, the use of **cues, mnemonics, and the keyword method** can aid in retrieving information.

Good luck!

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



## TERMS TO KNOW

### Cues

Environmental stimuli present when a person learns the information that help a person to remember, or retrieve, information later.

**Keyword Method**

When a person uses familiar words or images to remember new words or information.

**Mnemonics**

Different systems or techniques that help people to remember and recall information. (example ROYGBIV)

**Organization**

Placing information into meaningful groups.

**Over-Learning**

When learning information, a person continues to study after he or she is able to simply remember it.

**Rehearsal**

Repeating information to oneself, which allows one to retain information longer in the short-term memory.

**Selection**

Recognizing important information to remember and changing it into smaller, more digestible parts.

**Serial Position Effect**

When learning a list of information, a person is more likely to remember the first and last items on the list.

**Whole versus Part Learning**

Remembering larger, more meaningful pieces as a whole, which is easier than shorter, less meaningful pieces.