



### WHAT IS MEMORY?

Memory is a set of complex processes that manages information. Knowing how each stage functions will help you better understand how to memorize and to retrieve memorized information later.

It has the following **four** stages:

**Registration:** the reception and selection stage

- Information you receive is selected as *relevant or not*
  - Relevant information is then transferred to your **short-term memory**

**Short-term memory (STM):** this memory stage is brief, lasting as little as 15 seconds

- If information is clumped so that it is *meaningful* to you, you will improve your STM
  - If the information is made *meaningful* to you through clumping, it will move into your **working memory**

**Working memory:** the “thinking” stage

- During this stage, thinking occurs through selection, association, organization and rehearsal of information
- This stage’s efficiency is contingent upon how well you choose to process information
  - If you rehearse the material (see below) effectively—even for a short time—it will be transmitted into your **long-term memory**

**Long-term memory:** the “depositing” stage

- How well you have rehearsed information determines how long the information you have learned will stay here
  - The following rehearsal and memory techniques will help you deposit information deeply within your **long-term memory**

### I. Four Approaches to Memory Improvement

#### 1. Mnemonic Devices

- a. Acronyms
- b. Abbreviations
- c. Rhymes and Songs
- d. Gimmicks
  - Ex: A principal is your pal. A principle is a rule.
- e. Keyword

Verbal Method: Find a familiar word that sounds like what you are trying to remember.

**Visual Method:** Form a mental image that connects the keyword with what you are trying to remember.

## **2. Mental Imagery**

Science students trying to remember the details of their lab experiment might find it useful to remember and visualize themselves doing the experiment.

## **3. Self-Recitation, Over learning, and Drill**

By reinforcing information through repetition and rehearsal, you will help your speed, accuracy, and confidence.

## **4. Organization, Association, and Relating**

When new information is organized according to pattern or context, it is easier to retrieve. Relating material to other material helps to significantly increase the amount of material remembered. Don't forget to condense and summarize information.

## **II. General Memory Strategies**

- **Note cards**, especially for foreign languages
- **Recreate graphs and charts**, especially for social sciences
- Work with **study group**, quiz each other
- **Minimize distractions**
- **Spaced study**
  - more efficient
  - prevents forgetting
  - small amounts at a time means better storage in long-term memory
- **Simulate test conditions**

## **III. Important questions to ask after looking over the material once**

- a. How does this relate to what I already know?
- b. What does it remind me of?
- c. What can I associate it with?
- d. Can I picture it in my mind?
- e. How does it relate to the topic as a whole?
- f. How can I use a crazy association to help remember?

## **IV. Factors of Forgetting**

- **Interference**
- **Disuse**
- **Never learned or understood** material