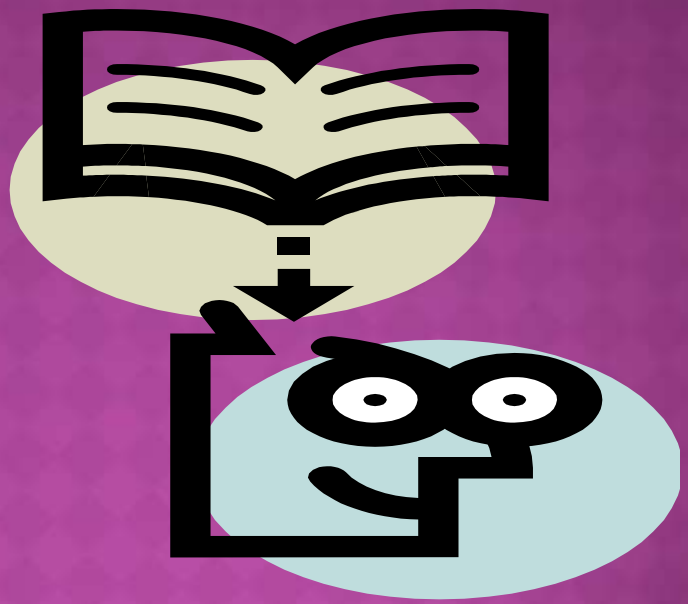
MEMORY



MEMORY

- The retention of information over time through *encoding*, *storage*, *and retrieval*.

HOW ARE MEMORIES ENCODED?

- Encoding- is the process in which information gets into memory storage.

ATTENTION

- Selective Attention
- Divided Attention

LEVELS OF PROCESSING

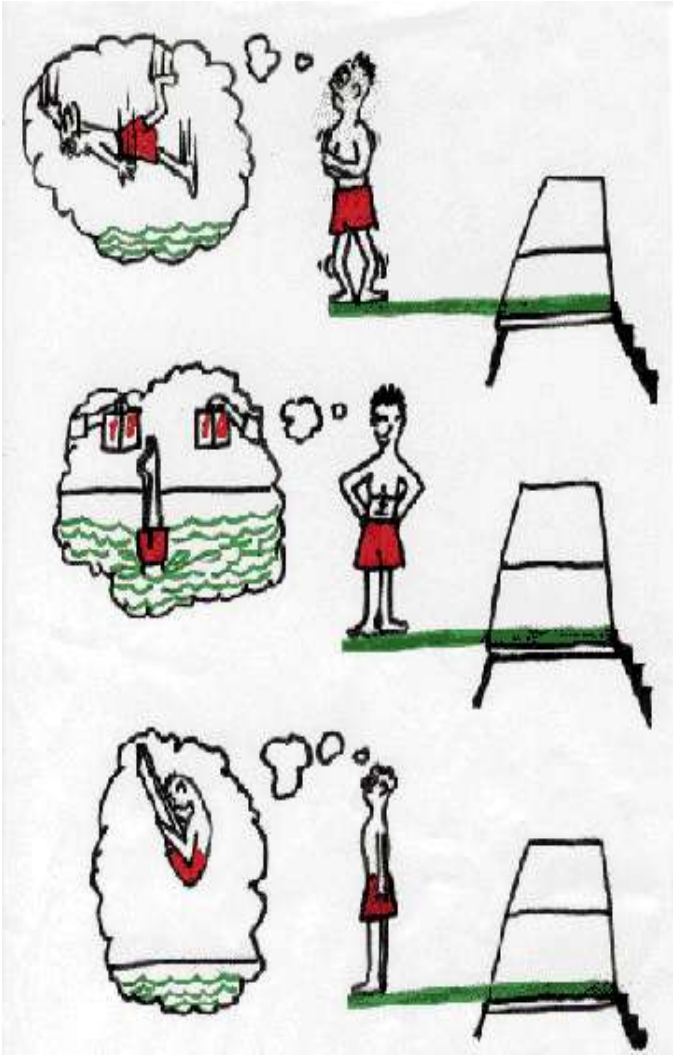
- Levels of Processing Theory
  - States that memory is on a continuum from shallow to deep, with deeper processing producing better memory.
- ***Shallow Level-*** *the sensory or physical features of stimuli are analyzed.*
- ***Intermediate Level-*** *the stimulus is recognized and given a label.*
- ***Deepest Level-*** *we make associations.*

ELABORATION

- It is the extensiveness of processing at any given level of memory.

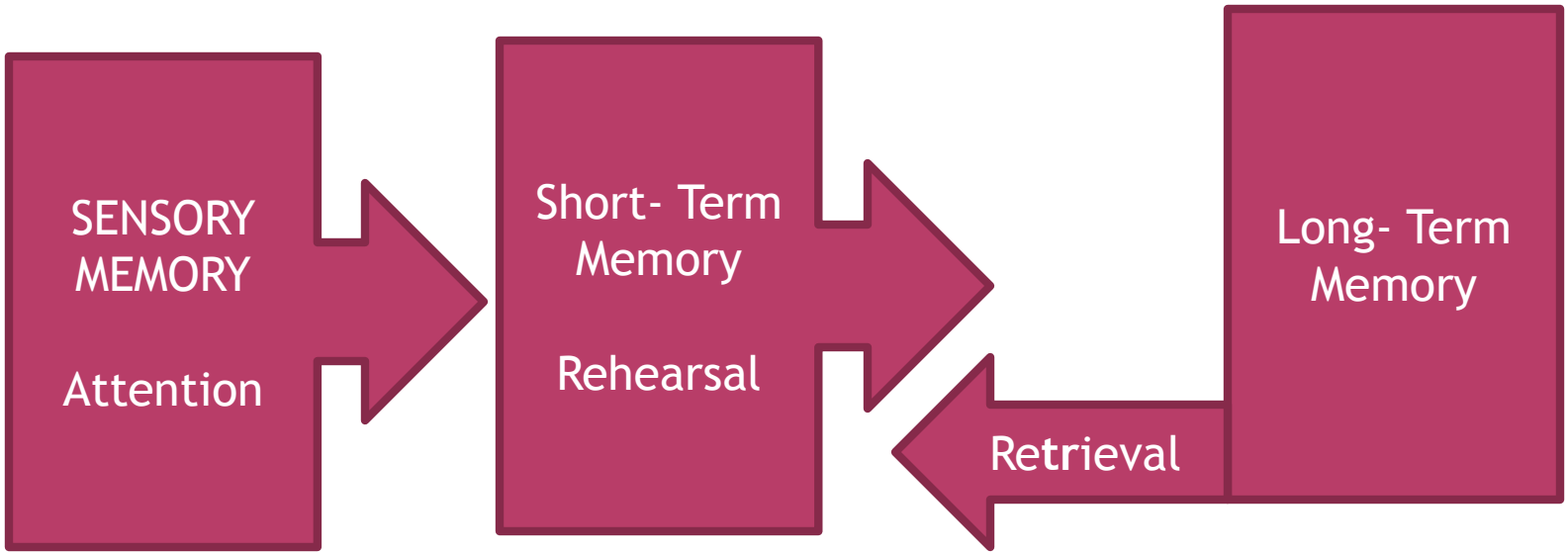
IMAGERY

- Memory is encoded through IMAGES.
- ***DUAL CODE HYPOTHESIS*** (Allan Paivio)- states that memory for images is better than memory for words because the memory for images is stored as an image code and as a verbal code.



MEMORY STORAGE SYSTEMS

Storage encompasses how information is retained over time and how it is represented in memory.
Atkinson-Shiffrin Theory - the view that memory involves a sequence of three stages:



SENSORY MEMORY

- Holds information from the world in its original form only for an instant, not much longer than the brief time it is exposed to the visual, auditory and other senses.
- **Echoic Memory-** auditory senses
- **Iconic Memory**- visual senses

SHORT-TERM MEMORY

- Is a limited capacity memory system in which information is retained for only as long as 30 seconds unless strategies are used to retained it longer.

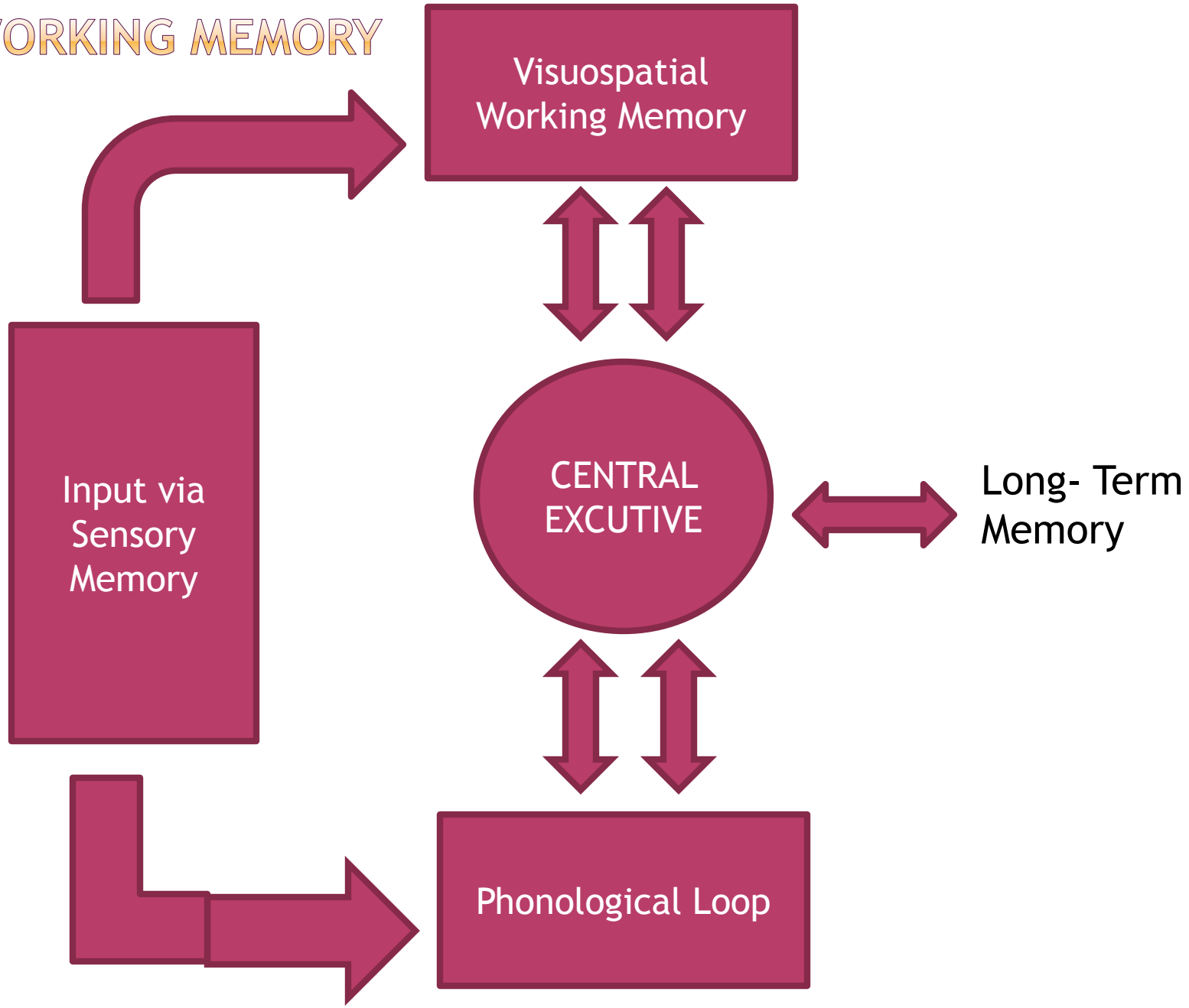
TWO WAYS TO IMPROVE SHORT- TERM MEMORY

- ***Chunking-*** *involves grouping or packing information. A form of memory encoding: specifically, elaboration. It works by making large amounts of information more manageable.*
- **Rehearsals-** the conscious repetition of information. Information stored in short-term memory lasts half a minute or less without rehearsal.

WORKING MEMORY (ALLAN BADDELEY)

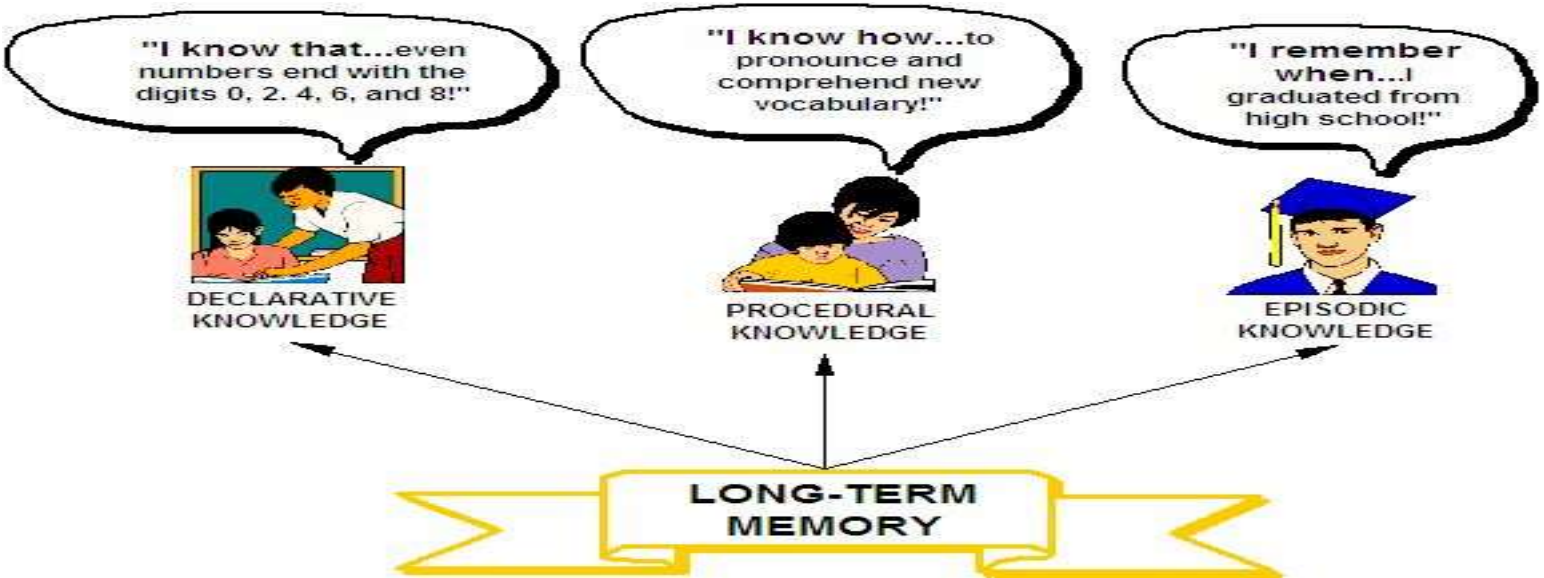
- A three- part system that temporarily holds information. It is a kind of mental workbench on which information is manipulated and assembled to perform other cognitive tasks.
- Three components of working memory:
  - **Phonological Loop**
  - **Visuospatial Working Memory**
  - **Central Executive**

WORKING MEMORY



LONG-TERM MEMORY

- A relatively permanent type of memory that holds huge amounts of information for a long period of time.
- It is divided into substructures:
  - Explicit Memory
  - Implicit Memory



EXPLICIT MEMORY

- Also called as DECLARATIVE MEMORY.
- The conscious recollection of information, such as specific facts, or events, and at least in humans, information that can be verbally communicated.
  - **Episodic Memory-** the retention of information about the where and when of life's happenings.
  - **Semantic Memory-** a person's knowledge about the world.

RETROSPECTIVE AND PROSPECTIVE MEMORY

- Retrospective Memory- remembering the past.
- Prospective- remembering information about doing something in the future; includes memory for intentions.
  - **Time- based prospective memory-** intention to engage in a given behavior after a specified amount of time has gone by.
  - **Event- based prospective memory-** you engage in the intended behavior when it is elicited by some external event or cue.

IMPLICIT MEMORY

- Also called as NONDECLARATIVE MEMORY.
- Memory in which behavior is affected by prior experience without that experience being consciously recollected.
  - **Procedural Memory-** involves memory for skills.
  - **Priming-** is the activation of information that people already have in storage to help them remember new information better and faster.
  - **Classical Conditioning-** involves the automatic learning of associations between stimuli.

CONVERGENT AND DIVERGENT THINKING

THINKING

- It is using the knowledge that has been gathered and processed; mentally manipulating concepts and images to perform such mental activities as reasoning, solving problems, producing and understanding language and making decisions.
- Cognition- the process of gathering and processing information, including sensing, perceiving, learning, remembering and thinking.

CONVERGENT THINKING

- The type of thinking needed when there is **only one correct answer** or solution to a problem.
- We select or converge on, a single correct answer or solution from among several alternatives.

DIVERGENT THINKING

- It is the opposite of convergent thinking.
- **We generate as many different, or divergent solutions as possible.**
- It is the type of thinking most often associated with creativity.

TECHNIQUES USED IN STIMULATING DIVERGENT THINKING

- Brain Storming
- Free Writing
- Journal
- Mind Mapping

SOURCE

- Papalia, D. et al (2004). Human Development 9th edition. Mcgraw Hill
- Kalat James W. (2002). Introduction to Psychology 6th Edition