

EXPERIMENT 2

MEMORY RECALL TASK:

Memory recall refers to the process of retrieving previously observed information from short-term memory. Since human memory capacity is limited, only a few items can be remembered at a time.

Chunking is a cognitive technique in which separate items are organized into meaningful groups, making them easier to remember. According to Miller's principle, short-term memory can hold approximately 5 to 9 elements.

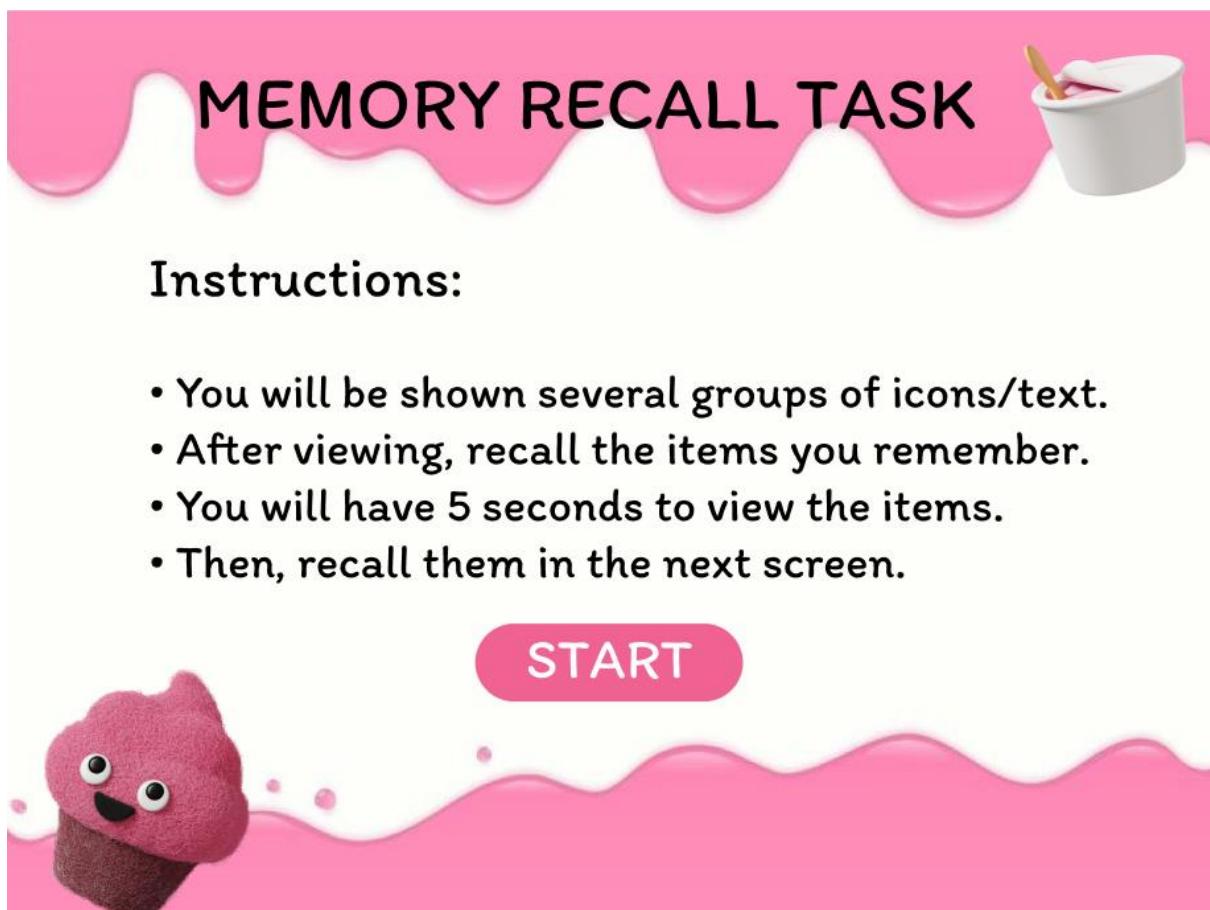
In this experiment, visual icons are presented in grouped form during the viewing stage. Grouping helps users process information efficiently, reduces mental effort, and improves recall accuracy.

This study demonstrates how structured grouping of visual elements enhances short-term memory performance compared to unstructured presentation.

1. Instruction Screen

- Shows the title “Memory Recall Task”
- Displays clear instructions about the experiment
- Includes a **START** button to begin the task

Purpose: To inform users about the memory recall activity before starting.



2. Chunking Phase

- Displays visual icons arranged in grouped format
- Icons remain visible for **5 seconds**
- Users observe and try to remember the grouped items

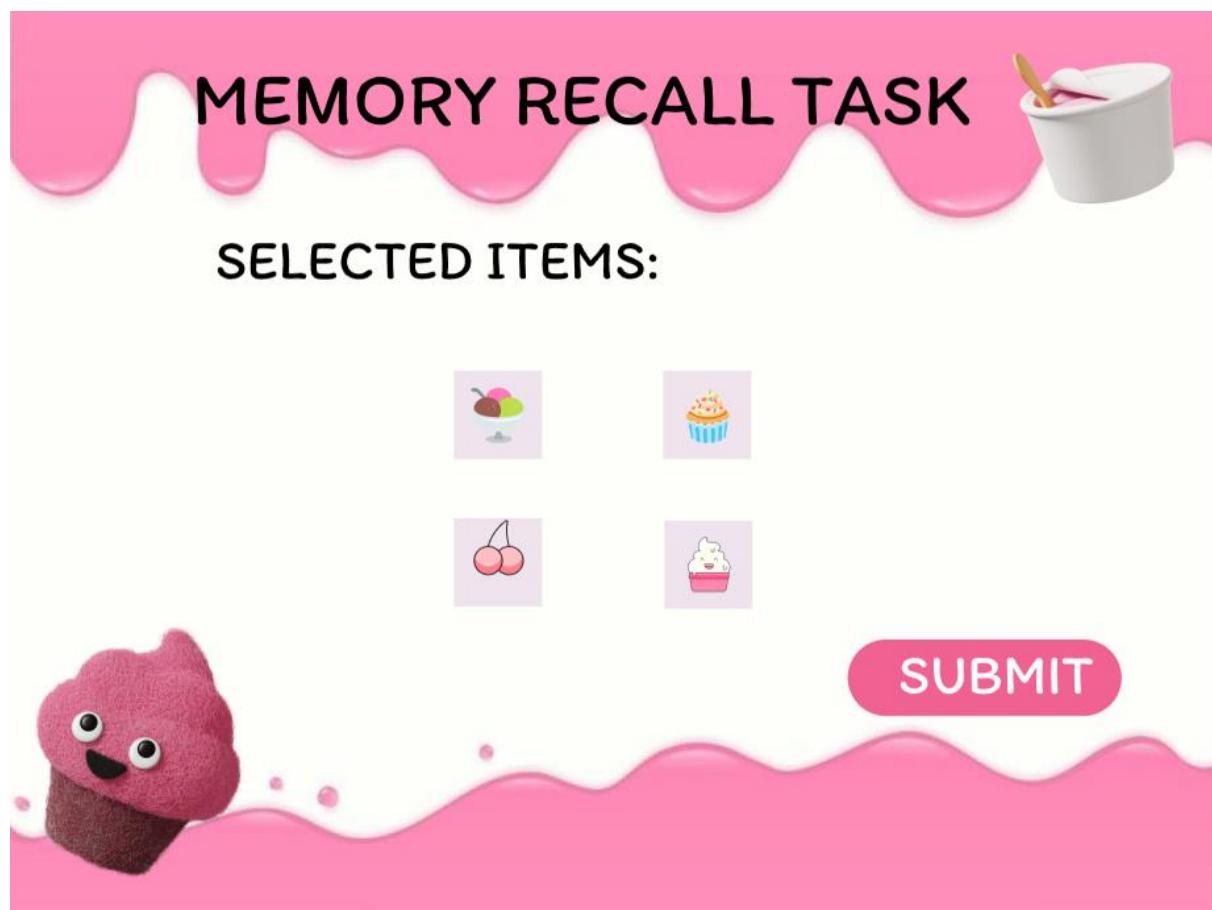
Purpose: To allow users to encode grouped visual information into short-term memory.



3. Recall Phase

- Users recall the items seen earlier
- Users select or enter remembered icons
- Contains a **SUBMIT** button

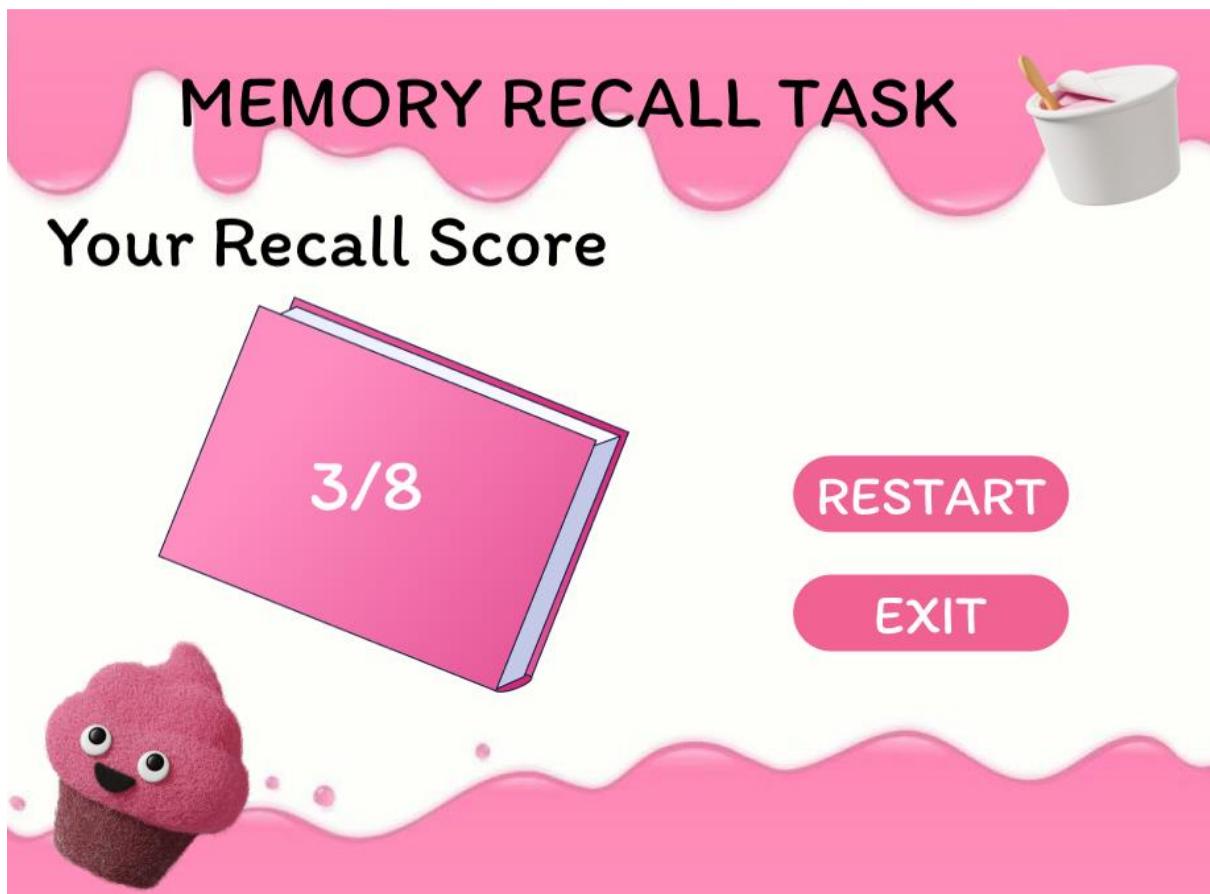
Purpose: To evaluate how accurately users can recall the observed items.



4. Result Screen

- Displays final recall score (example: **3/8**)
- Shows a simple feedback message
- Includes **Restart** and **Exit** options

Purpose: To provide feedback on user memory performance.



PROCEDURE:

1. Designed a Home Screen with instructions and a Start button.
2. Created a Chunking Phase showing grouped visual icons.
3. Applied a 5-second viewing duration using prototype delay in Figma.

4. After the viewing phase, automatically navigated to the Recall screen.
5. Designed the recall interface for selecting remembered items.
6. Linked the Submit button to the Result screen.
7. Displayed the recall score based on user response.

Running Link: figma.com/proto/9oPIY0kCqt6WZGsdsE41dC/Memory-Recall-Task?node-id=9-18&p=f&t=y1W3Kf6abpSCiG0h-0&scaling=min-zoom&content-scaling=fixed&page-id=0%3A1&starting-point-node-id=9%3A18