### How Do We Get Information Out of Memory? Module Objectives: What are some types of memories? How can we retrieving memories?

What do you reme	mber?
<u> </u>	
Γwo types of long-term memories	
	(F. 1: ::)
- Memories with conscious recall	(Explicit)
- Wemones with conscious recan	
Procedural Memories	
- Memories without conscious recall	
	erations

## Declarative Memory C3 - These memories are learned quickly but compared to - Examples: - Being able to tell someone your phone number - The meaning of the word "consciousness"

# Two Types of Declarative Memories C3 1. Contains general knowledge that is not tied to the time when the information was learned -

Do You Remember	?
C3	
Who was the first person you kissed? What was your favorite toy in childhood?	





### Procedural Memory



These skills are essential part of our



 In this sense the memory is said to be implicit or non-declarative ... you just cannot explain how to ride a bicycle.

7

The skills may be difficult to acquire, but once learned they are never forgotten, even without occasional practice

8

### Encoding Specificity Principle

(2

The information present at the time of encoding or learning tends to be most effective as a retrieval cue.

cs -

- If you experience something while you're in a particular mood you are more likely to think of it again when you are in the same mood.
- State-dependent retrieval
  - The tendency to remember something better if your body is in

9



### Retrieval

How do we get information back out?

10

### How Do We Test Memory?

-03

Recognition is a memory task in which the

- Example-True-false, multiple choice and matching tests.

11

### Recognition Task



- The next time you see someone at a party who is having trouble walking properly, you might say, "He has had too much to drink, and it went right to his
  - Reticular formation
  - Cerebellum
  - Frontal lobe
  - Parietal lobe

12

# How is Information Retrieved? C3 Recall is a memory task in which the individual has Recall tests such as essay tests have poor retrieval cues.

○ The words positioned at the beginning and the end of a list are most likely to be remembered, a phenomenon called
- 14

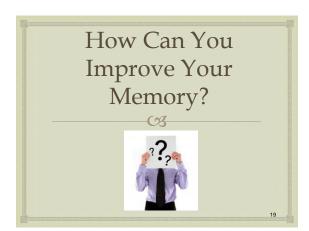




Your recall of the flash bulb memory is likely to be just as accurate many years from now as it is today.

These memories are encoded differently than semantic or episodic memories.





### **Mnemonic Devices**

 $\ensuremath{^{\bowtie}}$  Any memory aid that is based on encoding each item in a special way

- Use silly images
   The sillier the image the more effectively you will remember it
- Use pleasant images
   Your brain often blocks out unpleasant images
- Use vivid colorful images
   They are easier to remember than boring ones
- Use all your senses to code information
- Mnemonics can contain sounds, smells, tastes, touch, movements, feelings, and pictures

### Verbal Mnemonics

03

Word associations (i.e., acronyms or acrostics)

- ∞ Example:
  - ROY G BIV (acronym for colors of the spectrum)
  - King Philip Came Over For Good Sex (acrostic for order of taxonomy in biology)

### Verbal Mnemonics are often helpful in memory.



- Narrative stories and rhymes
  - Examples of rhymes:
    - Thirty days has September, April, June and November. When short February's done. All the rest have 31.
    - Red sun at night sailors delight, red sun in the morning sailors take warning
    - Righty tighty lefty loosey
    - Learning the ABCs to the tune of twinkle, twinkle little star

22

### How Should You Study?



- Distributed practice is better than massed practice
   Ten 1-hour blocks is better than one 10-hour block
- You should continue to rehearse the material after you first appear to have mastered it
  - Skimming or speed-reading will not promote longterm retention

23

### How Should You Study?



- ${\ensuremath{\mathbb{R}}}$  Active is better than passive (allows you to engage in deeper processing)
  - Writing out a detailed outline is better than passively reading over notes
  - Try to relate material to your own life and experience rather than just memorizing material
  - The better organized you are the better you learn and remember

24