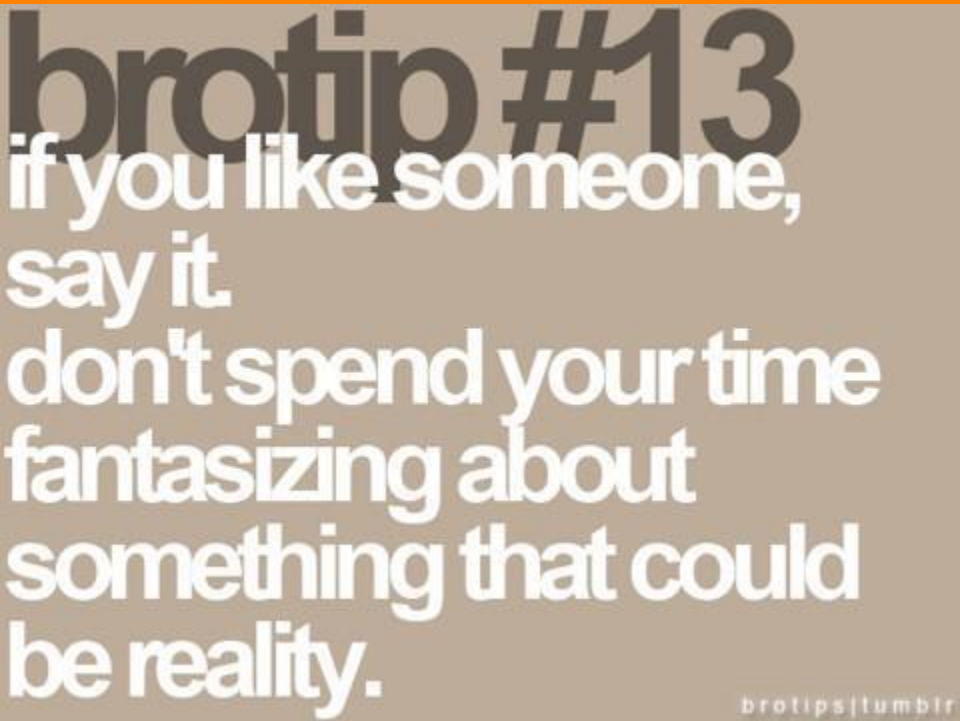




PSYCHOLOGY

# WELCOME TO PSYC 110



## **PSYC 110 (General Psychology)**

### **Module 6:** Memory

Trenton C. Johanis, Ph.D.



# Stop/Start/Continue Follow-up!

## I think Dr. T should STOP:

“Repping Toronto”

“Sometimes you go very fast through the slides”

“Playing music before class at such a high volume”

“Saving clicker questions for the very end of the lecture”

“Stopping so often to answer questions, I feel like it disrupts the flow of the class”

“Letting mfs tell him he aint a DAWG!!!!”

## I think Dr. T should START:

“incorporating more textbook info into the lectures”

“Releasing Friday quiz grades early”

“Putting the full powerpoints on canvas”

“I think it would be easier if the inquisitive was due on Friday with the quizzes”

“Playing songs by mumble rappers about trapping”

## I think Dr. T should CONTINUE:

“Being a chill guy”

“Relating the information to personal experiences or something we can understand”

“posting the answers to the friday quizzes”

“The brainrot announcement videos...they bring a lot of light to my day and I share them with my friends.”



# Overall notes going forward with our course

I'll slow down—my b I get excited

- Call it out! Nobody will judge you if you ask to go back or wait—especially not me

I will do my best to get Friday Quiz grades back earlier

- Analysis takes time and I want to make sure each quiz is fair with 100% certainty

InQuizitives

- Lowered to 1000 points rather than 1500
- Remember it is and always has been textbook-content only
- Remember, you don't have to (and are recommended not to) wait until Sunday to do it

Research says Professor-designed exam study guides aren't the best for you

- The slides are your study guide—everything is fair game on assessments
- We'll talk about the benefits of self-generated study guides this week in MEMORY



# Overall notes going forward with our course

I can't cover more material in class than I already am ☹️

- The point of the textbook is to supplement in-class material—not be redundant with it

Friday Quizzes have to stay the same

- Trust me, there's a method to this madness (education research, long-term memory, etc.)

Full lecture slides have always and will continue to be posted every night before class

- I suggest to write separate notes during class, then review the slides to elaborate and confirm

Y'all want extra credit? Stay tuned for my announcement on Wednesday 😊



**point**  
**solutions**



# What should we get out of today?

## THE PLAN

### **PSYCHOLOGICAL PERSPECTIVES ON MEMORY**

### **THE THREE-TIER MODEL OF MEMORY**

### **SENSORY MEMORY**

### **SHORT-TERM MEMORY**



# Memory is modelled as familiar concepts





# There are problems with some of these metaphors



## **Computer Data**

Stored data is identical to inputted information

Retrieved data is identical to inputted information



## **Human Memory**

Stored memory includes context and interpretations

Retrieved memory may be altered





# Memory involves three components





The **encoding** phase:

**Remember this list of words:**

Shirt  
Sheets  
House  
Seven  
Bell  
Socks

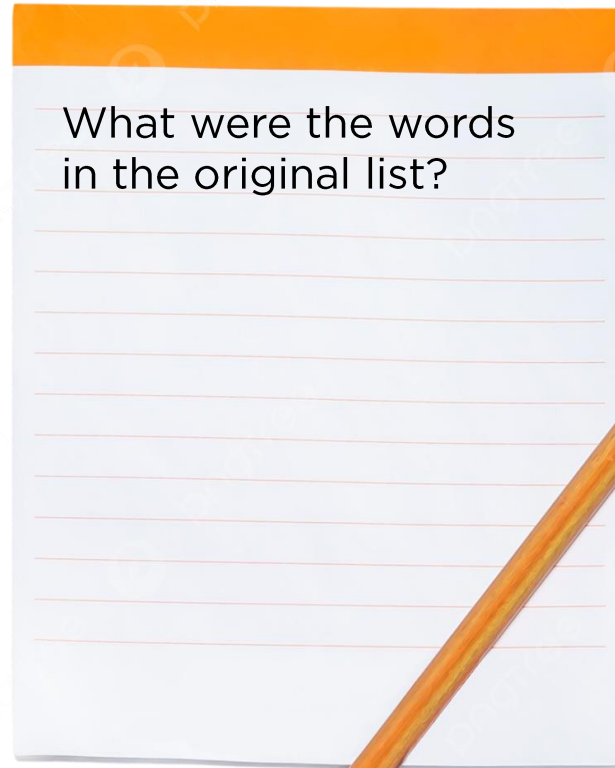


# A basic memory task involves encoding and retrieval

**Retrieval** usually involves one of two tasks after encoding:

## Recall Test

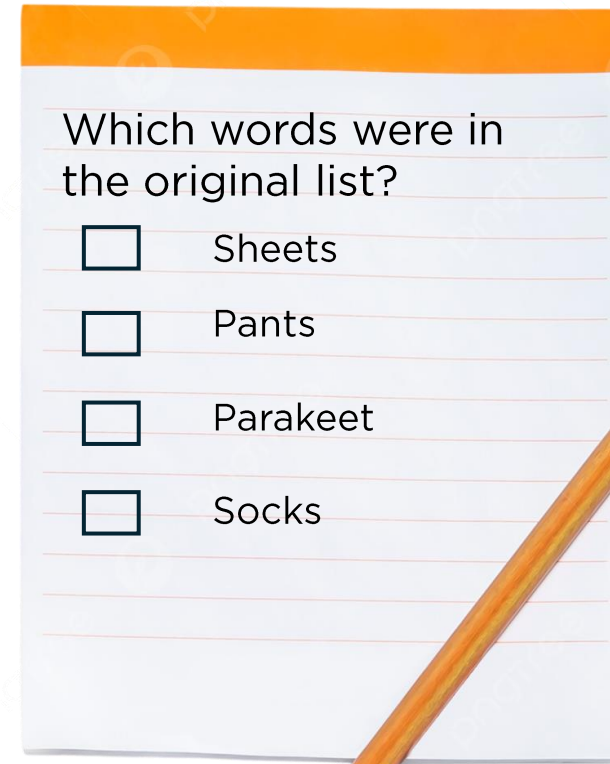
What were the words  
in the original list?



## Recognition Test

Which words were in  
the original list?

- ☐ Sheets
- ☐ Pants
- ☐ Parakeet
- ☐ Socks





# The most accepted model of memory has three tiers



# The most accepted model of memory has three tiers



All info on screen enters sensory memory.



(a)



Focus on 555-5100. It enters STM.

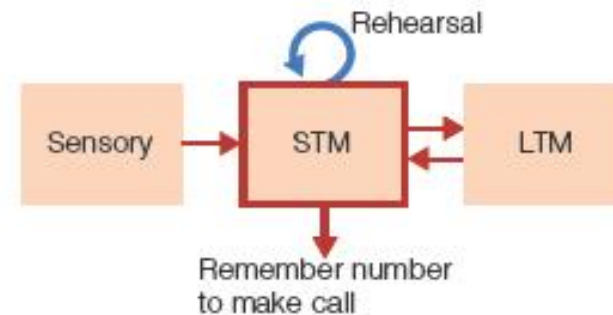


(b)



Rehearsing

Rehearse the number to keep it in STM while making the phone call.



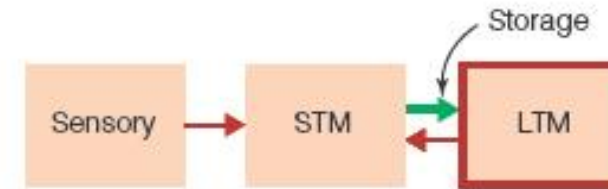
(c)



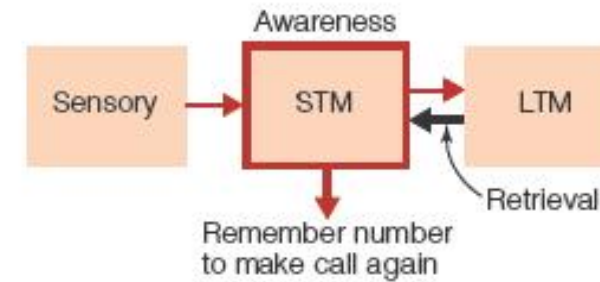
# The most accepted model of memory has three tiers



Store number in LTM.



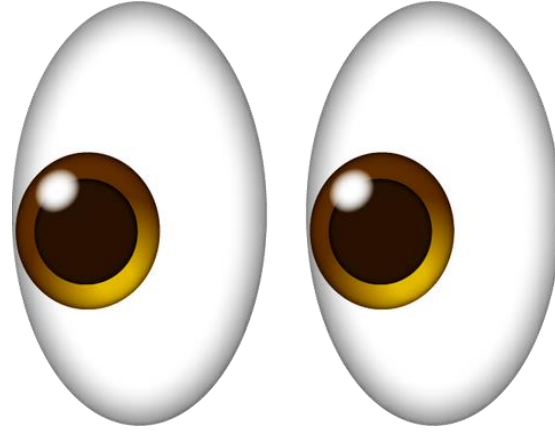
Retrieve number from LTM. It goes back to STM and is remembered.





# Sensory Memory comes from each of the five senses

Each sense has its own register, which holds information about a perceived stimulus for a fraction of a second after the stimulus disappears



**Iconic**



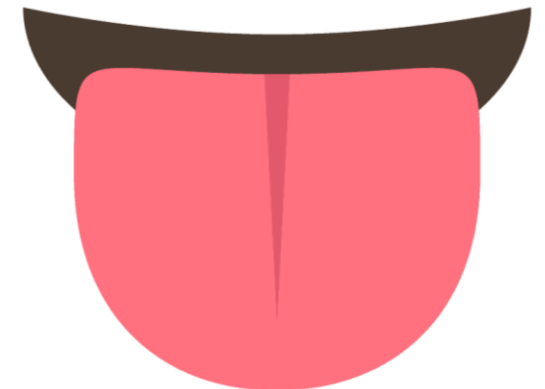
**Echoic**



**Haptic**



**Olfactory**



**Gustatory**



# Sensory Memory lasts less than one second

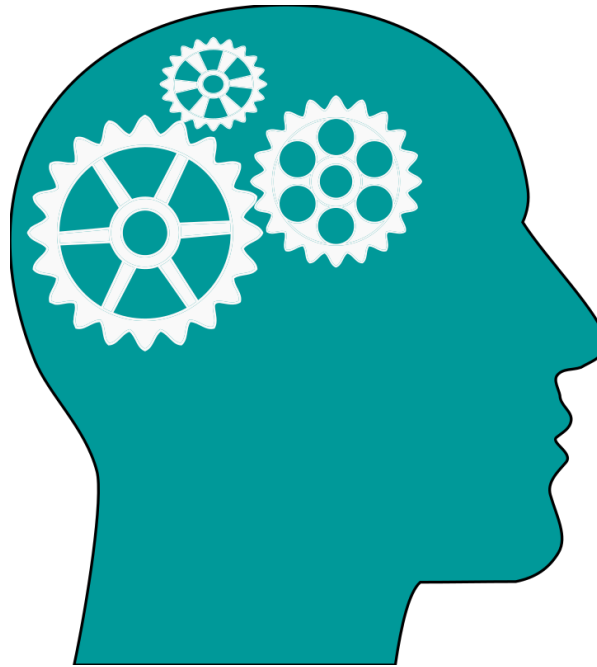
For example: *Persistence of Vision*







# Short-Term Memory (STM) makes up our conscious thought



## **STM...**

...receives information from sensory memory

...sends and receives information from long-term memory

...is how we use information in the present



# Does STM have limits?

*I need THREE volunteers!*

*Silently read the number that appears below, then  
close your eyes and try to say them in order*

8 6 2 4 3 9 8 5 6 9

7 4 6 3 9 5 3 9 3 3

2 7 4 9 4 6 2 8 4 6





# STM has a capacity limit

## Miller's Rule (Item Capacity)

Item = an object that has meaning  
(letter, number, word, etc.)

**7 ± 2 items**



**point**  
**solutions**



# STM has another limit

*I need ONE volunteer!*

*Silently read the number that appears below, then close your eyes and try to remember while Dr. T talks to the class (ignore Dr. T)*

4 2 8 3 0 9 7

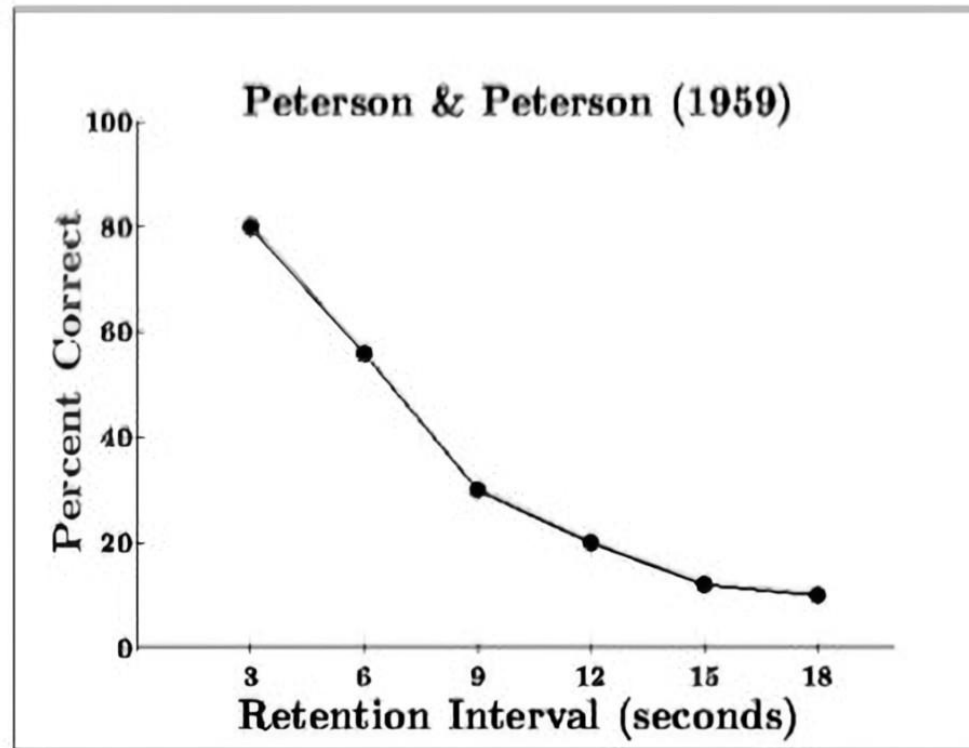
*Silently read the number that appears below, then pay attention to Dr. T*

8 3 7 0 9 6 2





# STM has limits of duration



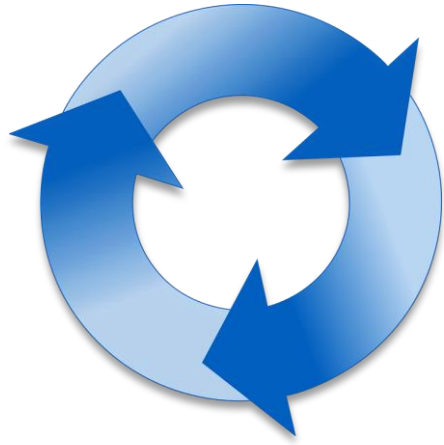
**STM lasts ~20 seconds (tends to vary from 10s to 30s)**

But wait, why was the volunteer able to remember the numbers so much better when they ignored Dr. T, even though it was longer than 30 seconds?





# We overcome limits of duration through rehearsal



## **Maintenance Rehearsal**

Repeating information over and over

- Best for short-term memory, not long-term
- Repetition without contextualization
- Often leads to forgetting after a short time
  - When rehearsal stops, memory begins to decay



# We overcome limits of duration through rehearsal

[#KingArthur King of Queens - Remembering Jerry Stiller \(youtube.com\)](#)





# What should we get out of today?

## THE PLAN

**PSYCHOLOGICAL  
PERSPECTIVES ON MEMORY**

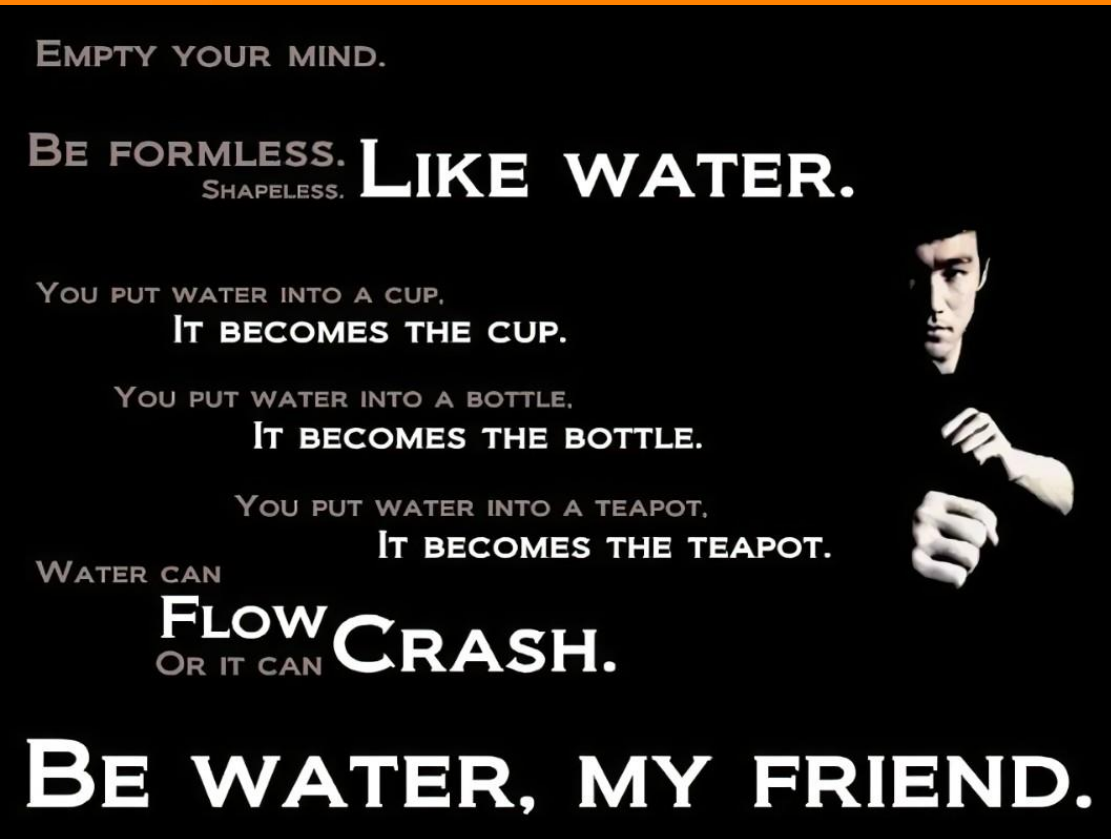
**THE THREE-TIER MODEL OF  
MEMORY**

**SENSORY MEMORY**

**SHORT-TERM MEMORY**



# How did we do?



## For y'all:

Friday Quiz **on March 7**

InQuizitive **due March 9**

Reflection Journal **due March 9**

Remember to get your SONA credits done!

Start thinking about your Collab Project groups!