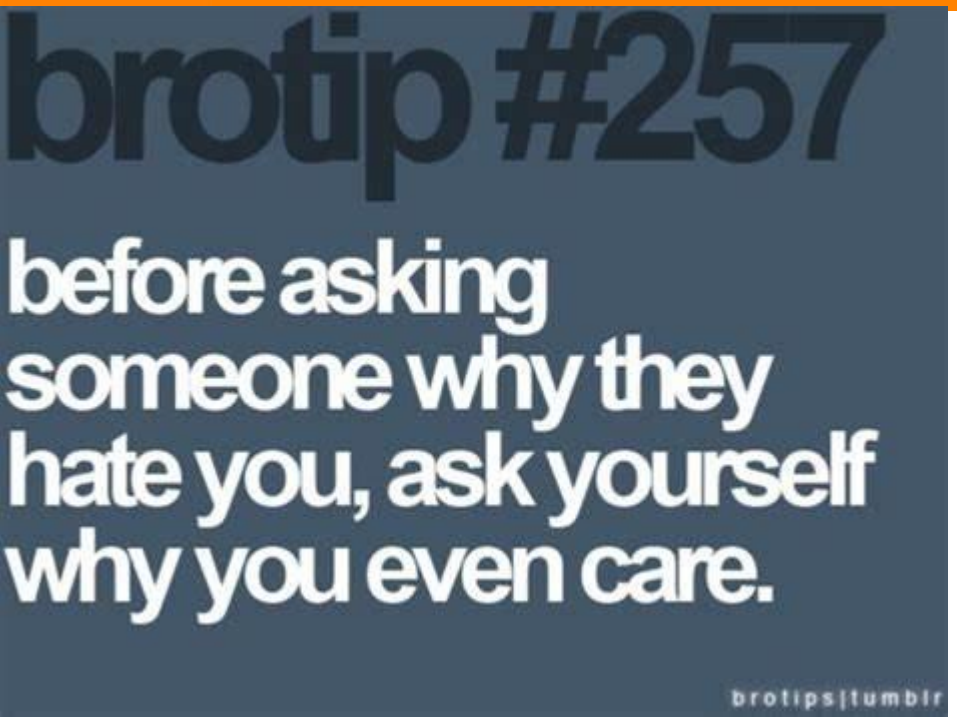
WELCOME TO PSYC 110

PSYCHOLOGY



PSYC 110 (General Psychology)

Module 6:
Memory

Trenton C. Johanis, Ph.D.

Time to start thinking about the Collab Project!

Collaborative Project: FYP or die (20%)

- Choose groups of two to four in your Discussion Section
- Creative media demonstration (i.e., content) of *anything* in the course, for example:
  - PSA (e.g., a commercial)
  - Video (e.g., IG Reel, TikTok, YouTube Short)
  - Podcast "clip"
  - If you have a different idea but are unsure of its relevance, check with your TA
- 60 to 180 seconds (maximum three minutes)
- Group Selection (1%) due **March 14**;
  TA Check-In (3%) due **April 4**;
  Final Submission (12%) + Reflection (4%) due **April 30**
- Full assignment guidelines are posted on Canvas

Course schedule update

The final class of the term will be ***ClickerFest***

13	Apr 28	Psychological Disorders	Chapter 14 [Disorders] Chapter 15 [Treatments]	Apr 30–May 2	Collab Project Final Submission (Apr 30) Collab Project Reflection (Apr 30) Friday Quiz 11 [Disorders] (May 2) End-of-Term Assessment (May 7) InQuizitive Ch. 14 [Disorders] (May 7) Reflection Journal 13 [Disorders] (May 7) InQuizitive Ch. 15 [Treatments] (May 7) Reflection Journal 14 [Treatments] (May 7)
	Apr 30				
	May 5	Psychological Treatments			
	May 7	*ClickerFest*			

An exam review period of 20+ clicker questions

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Clickerfest is May 7

CLICKERFEST

This will be a full class of Lecture Clickers, all collaborative, one-for-one

However, they will not count toward the usual drop criteria

Instead, they will count for Extra Credit!

Your performance can earn you up to 2% of Extra Credit

For example:
100% correct = 2% Extra Credit
75% correct = 1.5% Extra Credit
50% correct = 1% Extra Credit

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How are we doing on SONA participation?

section	average credits earned	% of students who have...	
		started	finished
	1.7	75%	9%
	1.3	63%	4%
	1.3	65%	3%
	1.0	43%	5%
	0.9	49%	3%
	0.8	43%	2%

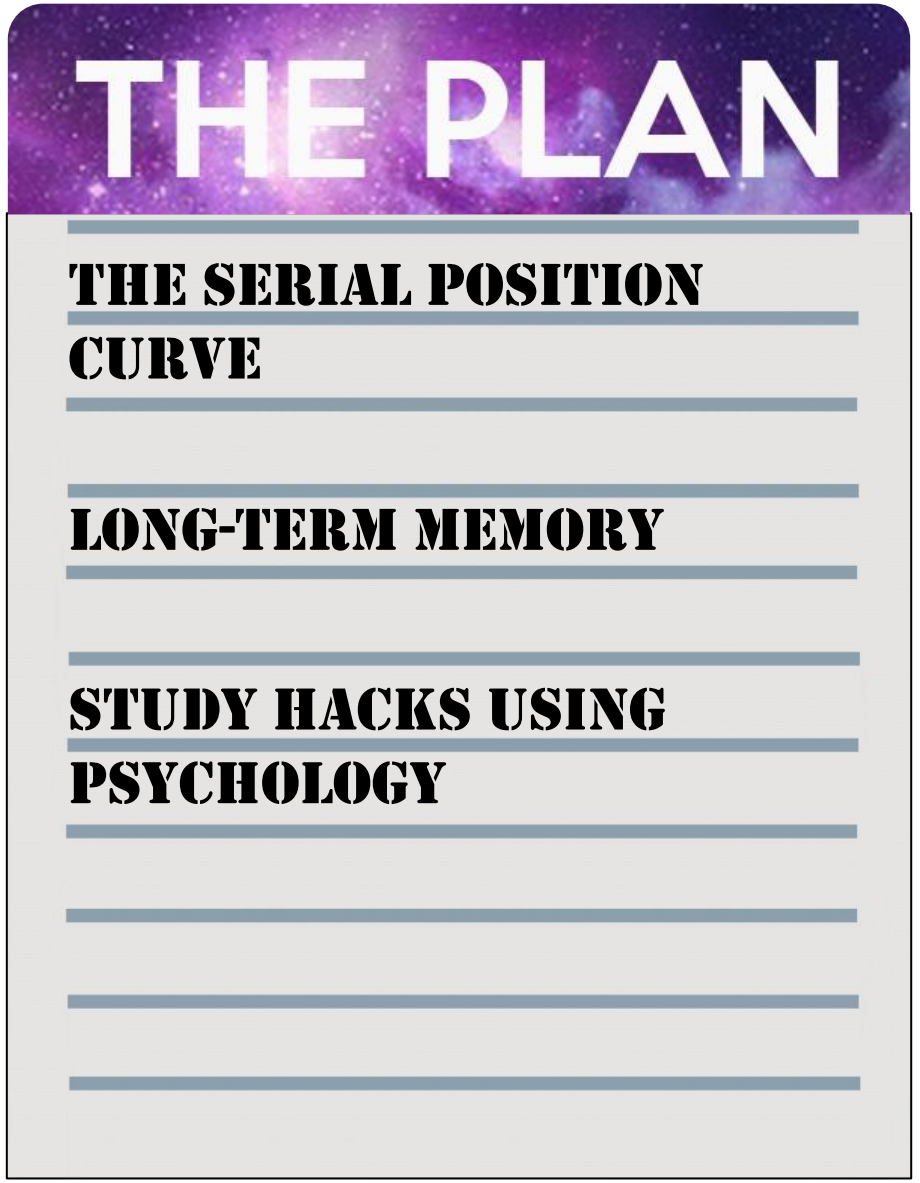
not bad yo

Let's make a deal bc I'm competitive...

If our section places in the top TWO for research participation in all of PSYC 110 by May 5 (second-last class of the term)...

I'll perform a LIVE DJ SET for ClickerFest

What should we get out of today?



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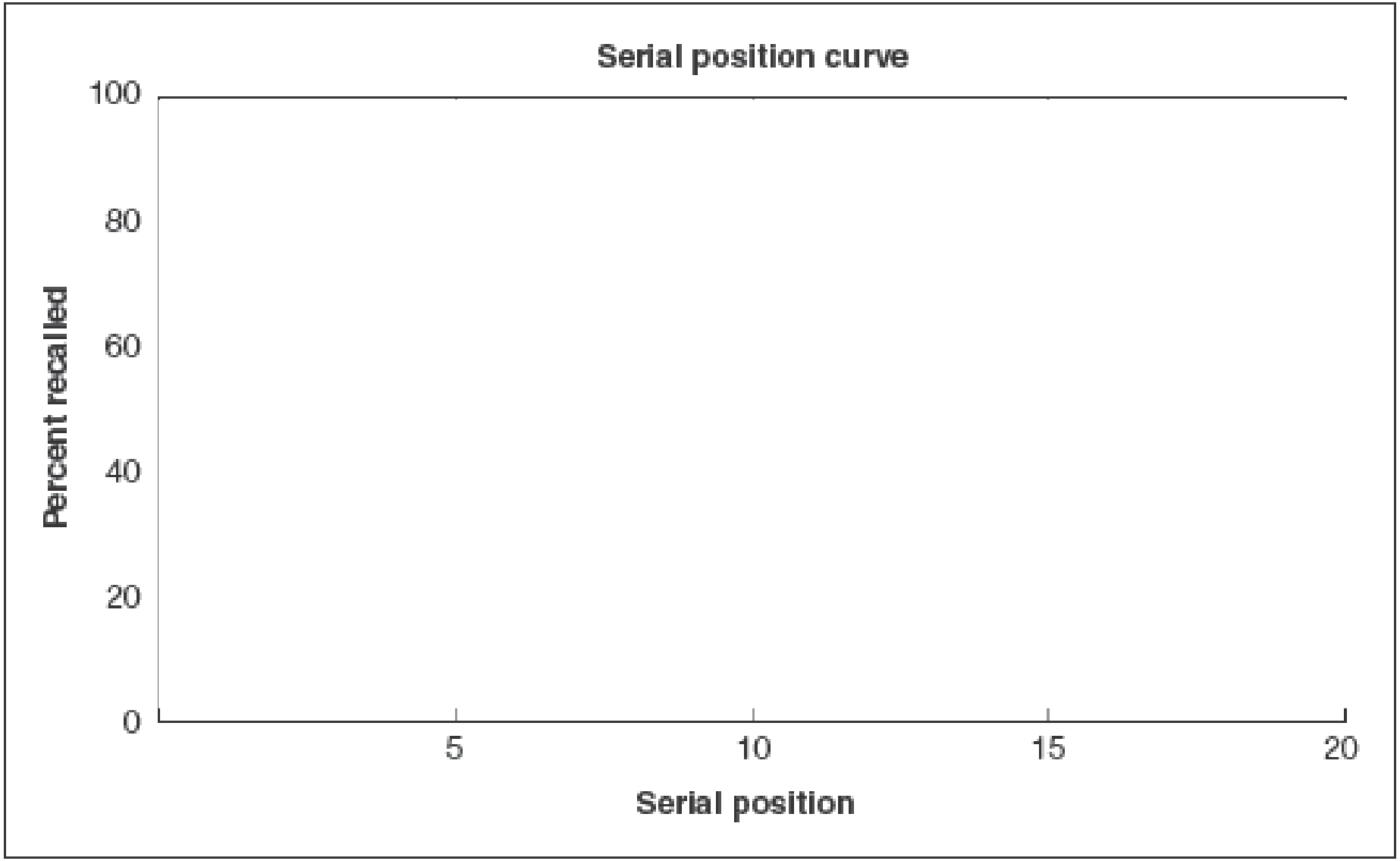
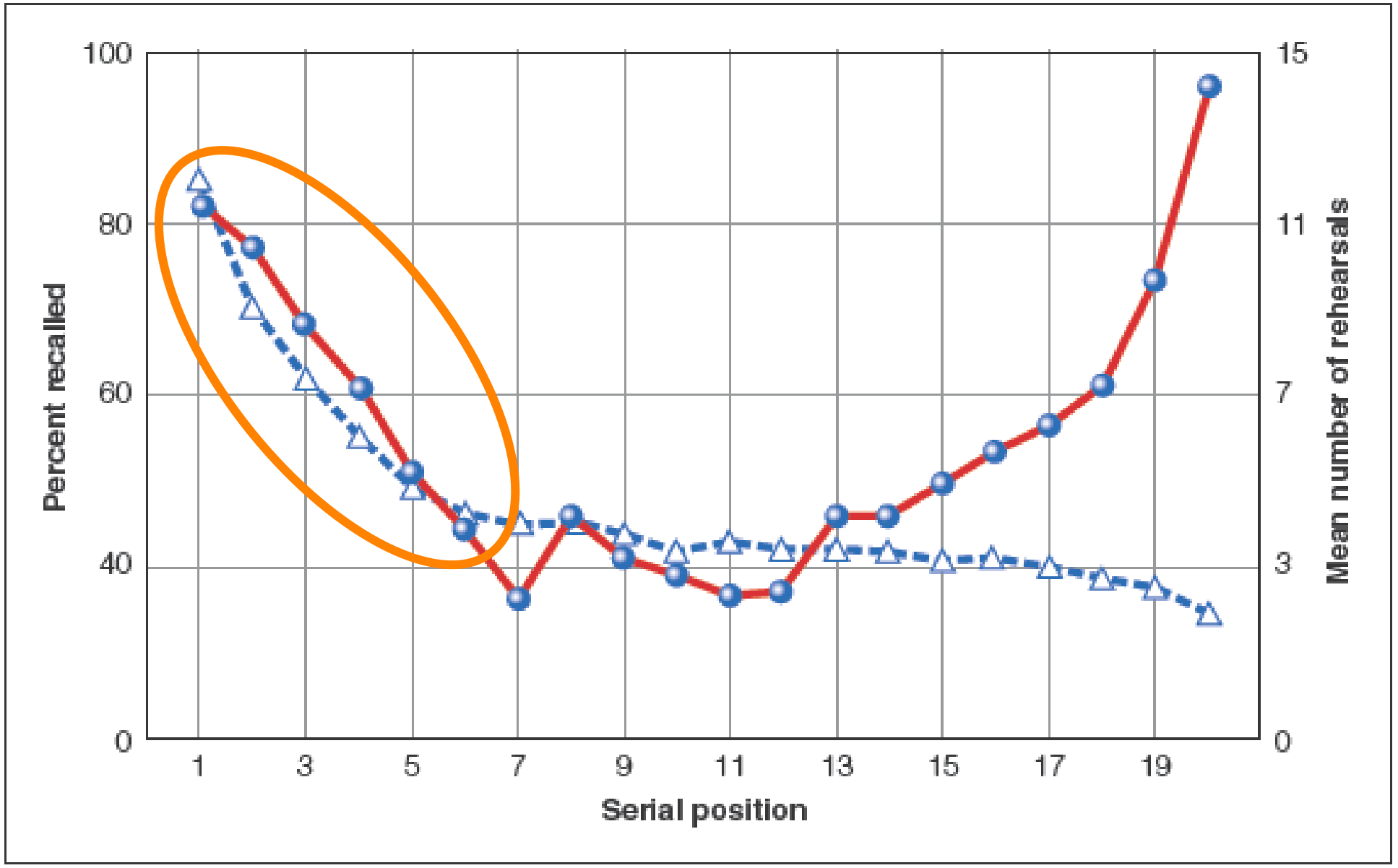
The serial position curve demonstrates encoding



The primacy effect comes from rehearsal



Red line = Percent Recalled

Blue line = Number of rehearsals possible

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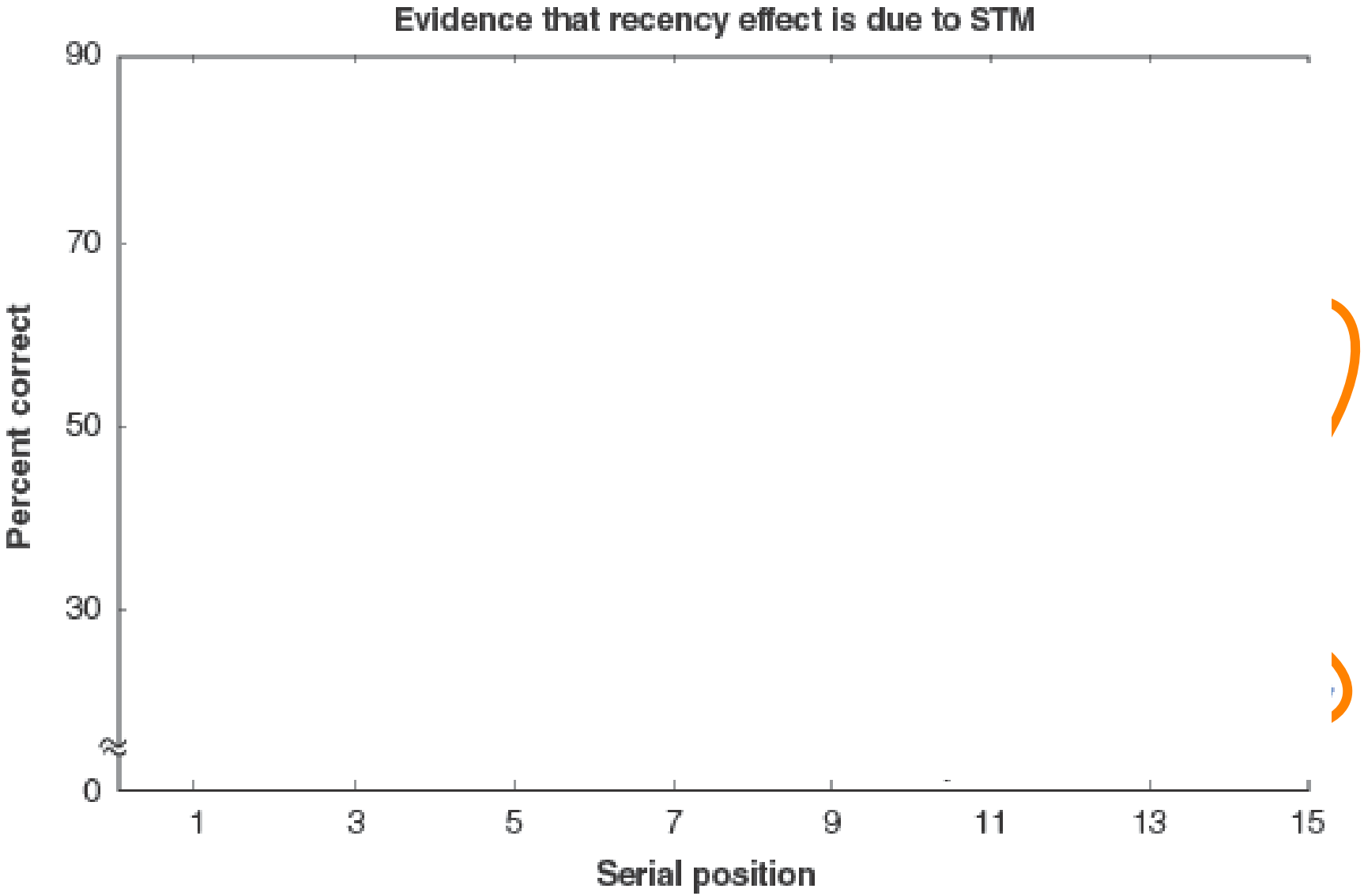
The recency effect comes from the limits of short-term memory



Red line = Percent recalled after no delay

Blue line = Percent recalled after 30s delay

If there is a delay between encoding and retrieval, the most recent items decay while the early items continue to be rehearsed (sometimes rehearsal is subconscious!)

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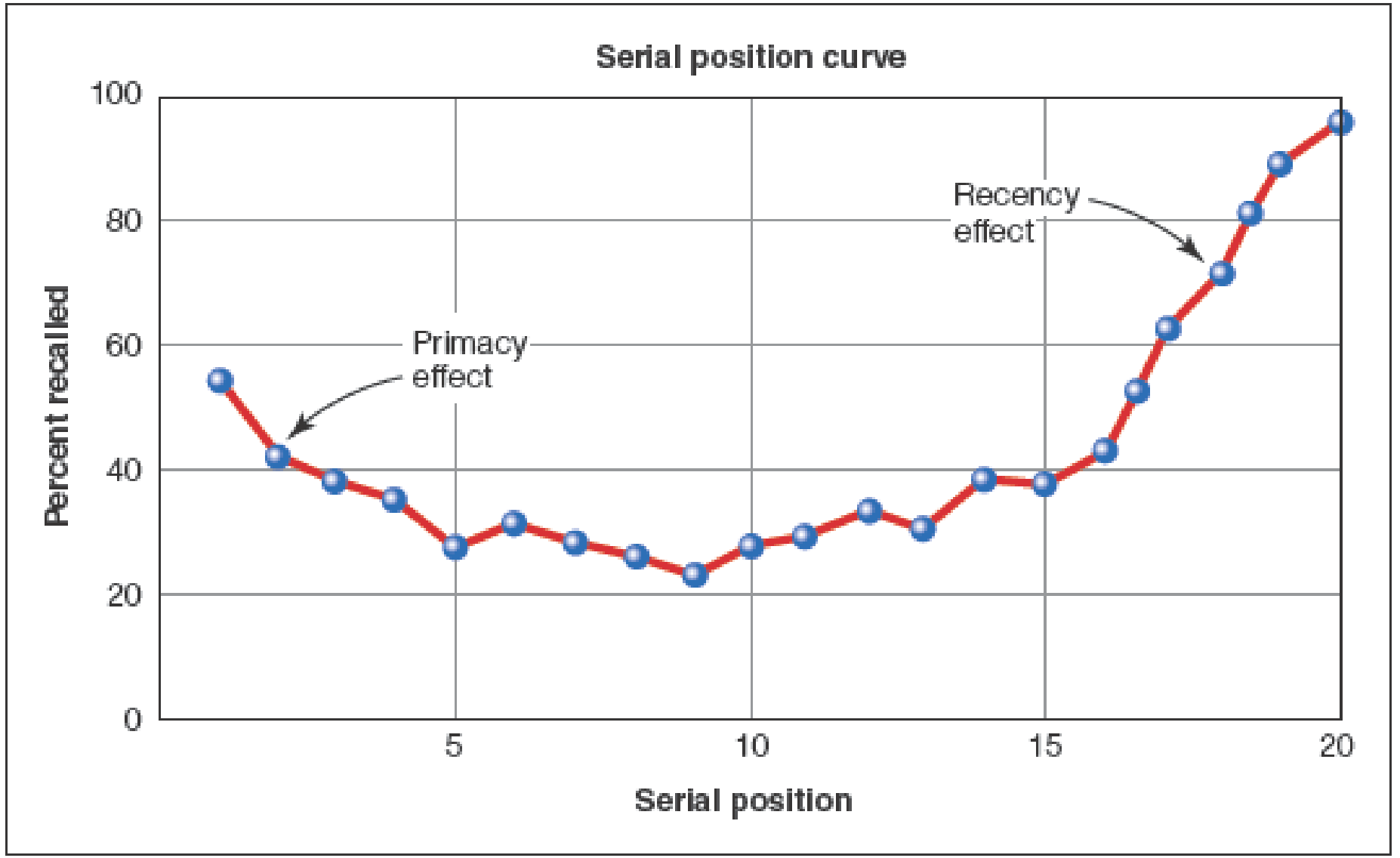
We remember items at the beginning and end of lists better than the middle



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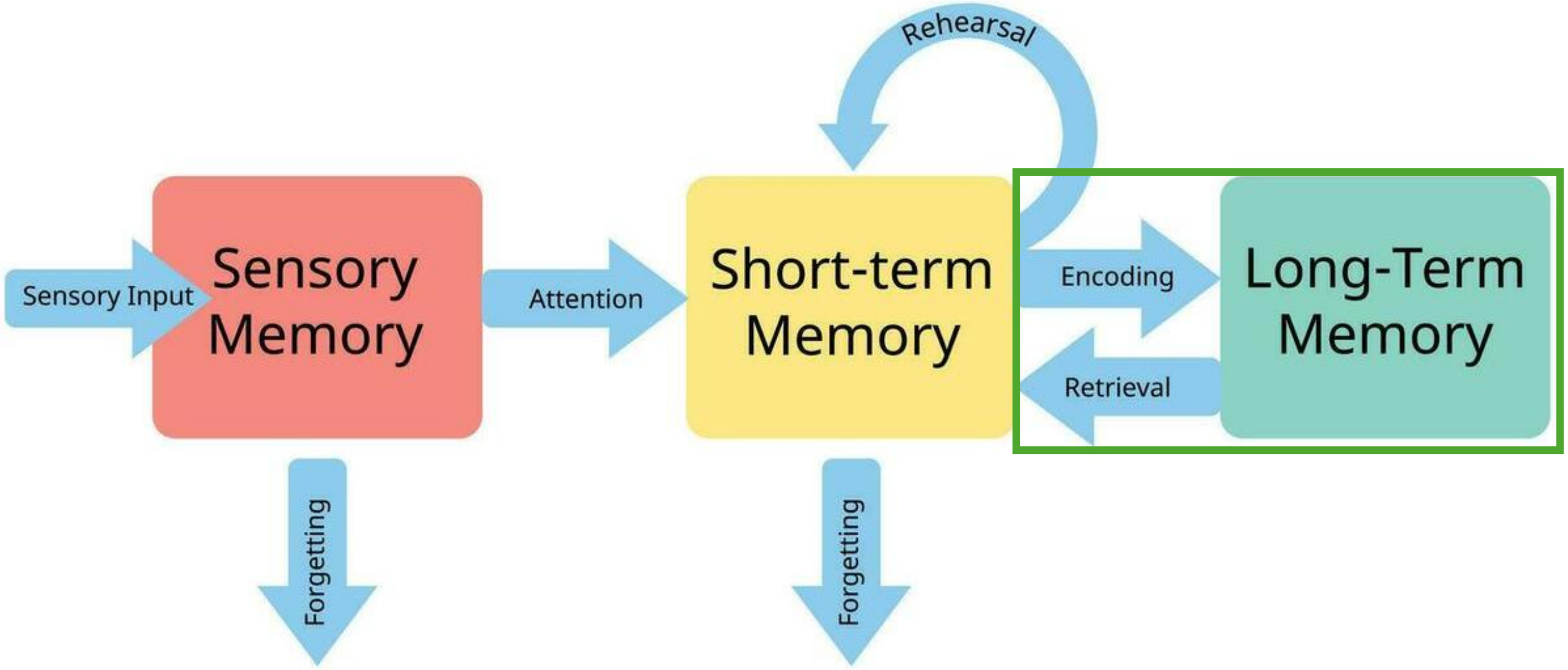
The most accepted model of memory has three tiers



Long-term memory is seemingly endless

Involves any memory stored for longer than 30s

No known capacity

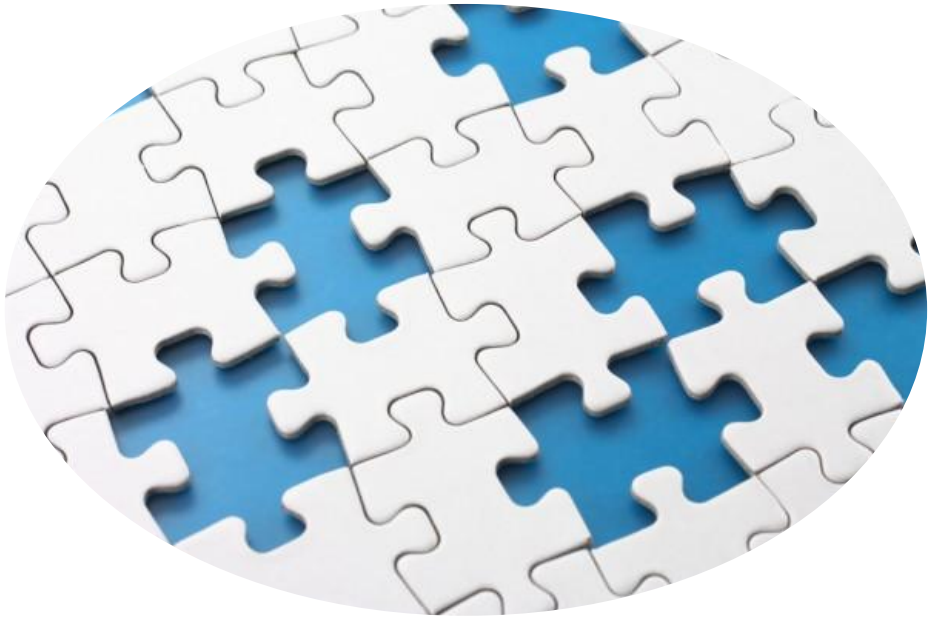
Duration unknown (likely forever?)

https://youtu.be/_IOT2p_FCvA?t=51

Tommy Boy (4/10) Best Movie Quote - Star Wars Happy Time (1995) (youtube.com)

BUT, long-term memory is prone to errors

Memory is reconstructive



When retrieving information from memory, we fill in the blanks of information we can't actually recall, which is top down processing!

It's impossible for us to tell what aspects of memory are actually real or not, unless they're validated externally

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Our memories are prone to errors

Take This Test and Experience How False Memories Are Made (youtube.com)

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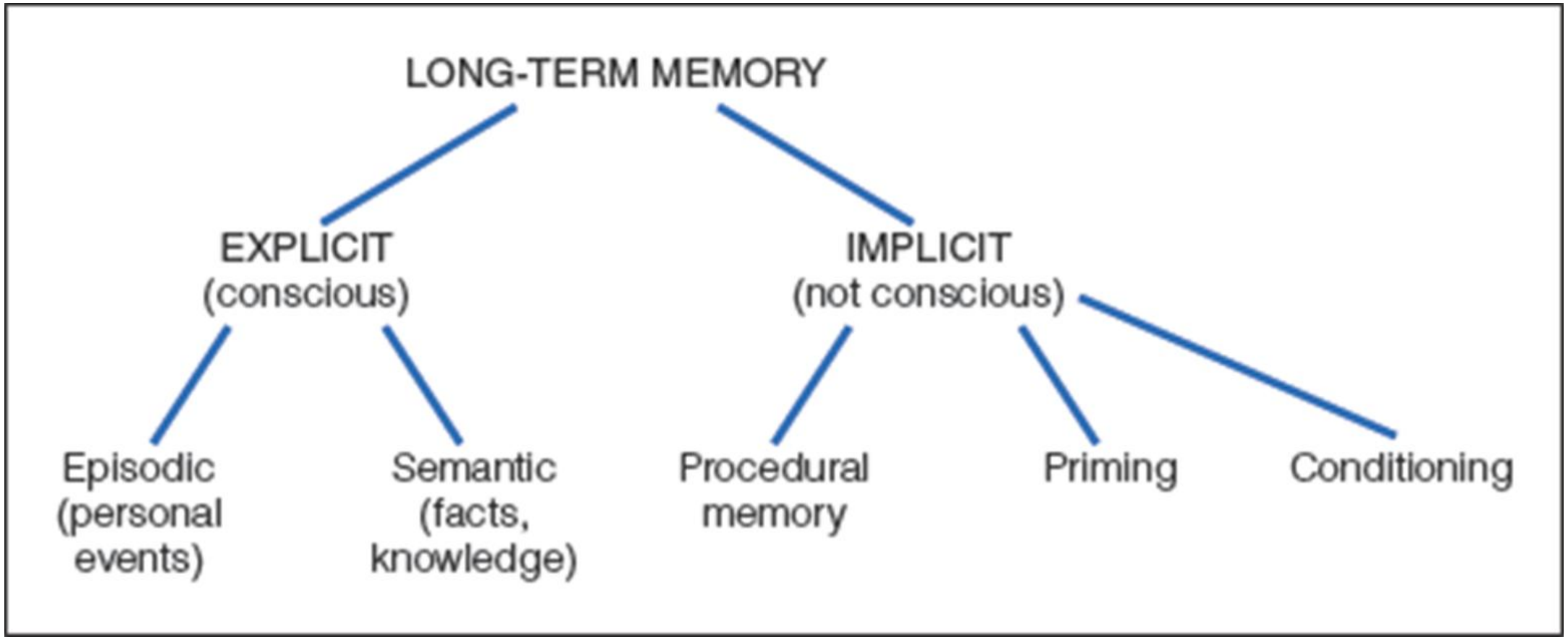
Explicit and implicit memory influence our behavior



Explicit memory is what we consciously remember

Semantic Memory
Memory of facts without personal meaning;
Objective information

Who was the first President?

Episodic Memory
Memory of past events;
Subjective information

How did you learn Washington was the first President?

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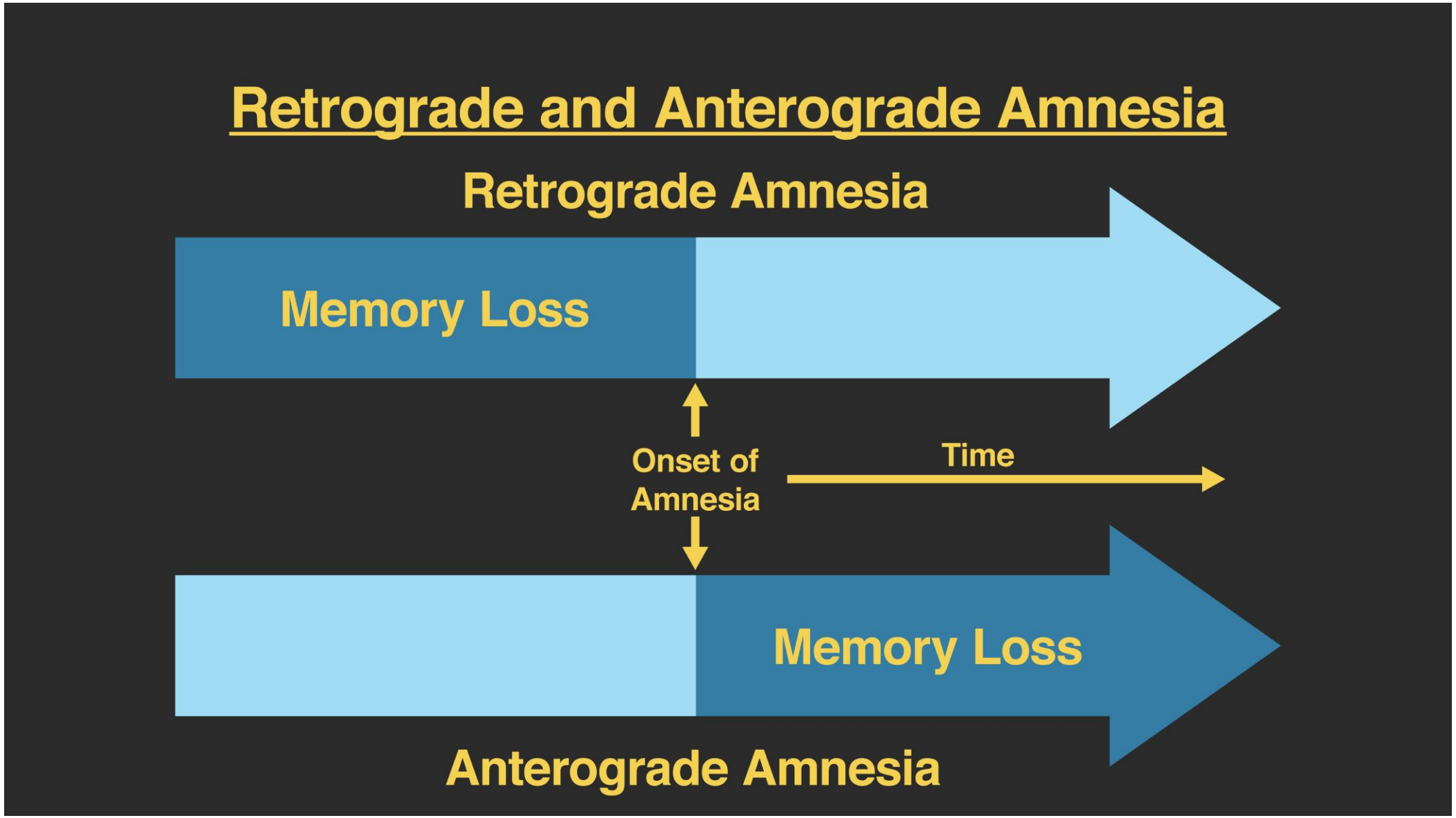
Memory encoding can be inhibited



Implicit memory is automatic: “Muscle Memory”

Procedural Memory

Memory of how to do things; Automatic skills

The curious case of LSJ:

- Skilled violinist with hippocampus damage
- Hippocampus damage caused anterograde amnesia
- Wouldn’t remember practicing a piece, but practicing still improved performance
- Conclusion: Amnesia affects Explicit Memory, not Implicit

92-Year-Old Woman With Dementia Performs Moonlight Sonata - YouTube

Implicit memory is automatic: “Muscle Memory”

Expert-Induced Amnesia

When well-learned procedural memories become completely implicit (i.e., when you ask the person how they perform their skill, they have difficulty explaining)

Who here considers themselves to have expertise in something?

Can you explain a basic component of your expertise?

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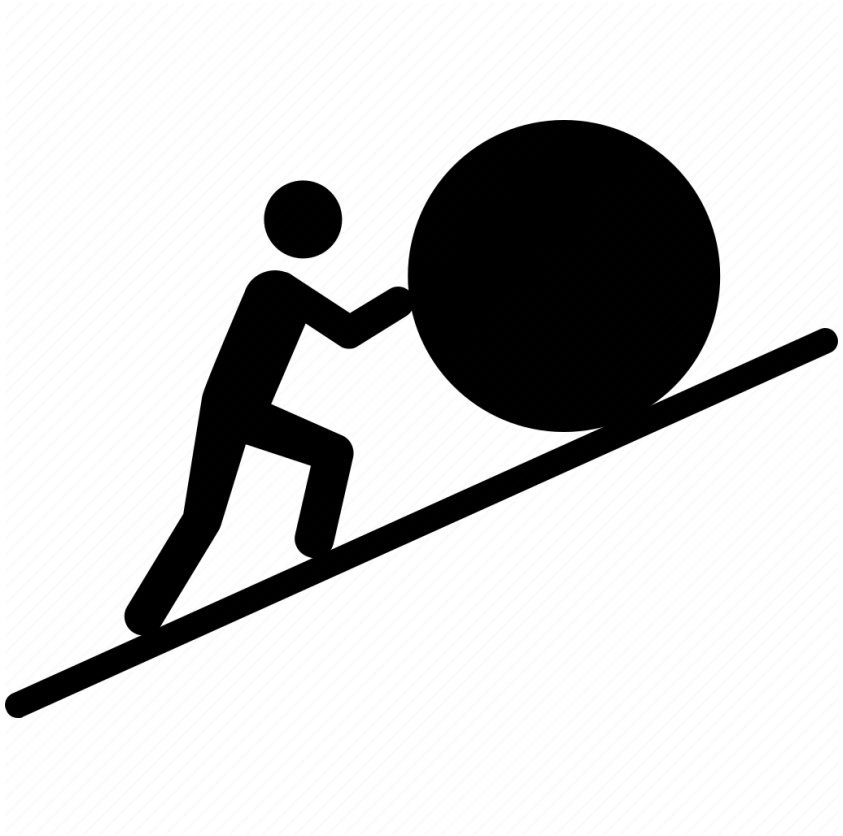
Learning is all about improving long-term memory



Effort

$\propto$

(Proportionate to)

Learning
(or strength of LTM)

We can make things “Stick” through strategies

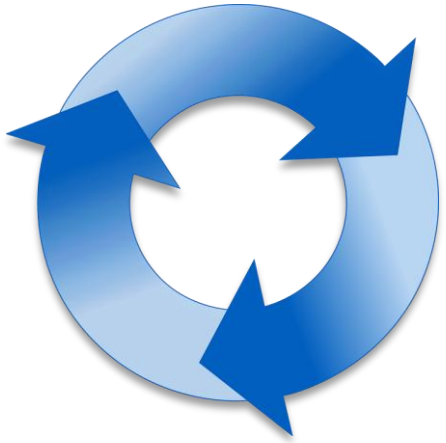
Study Hack 1:

Generation

Elaboration = Putting information in your own words

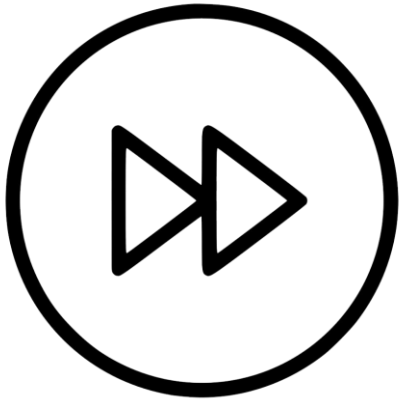
Create your own ways to test your knowledge

Rehearsal influences how information is stored



Maintenance Rehearsal
Repeating information over and over

- Best for short-term memory
- Repetition without contextualization
- Often leads to forgetting after a short time



Elaborative Rehearsal
Understanding and engaging with information

- Best for long-term memory
- Contextualizes information for better storage and retrieval
- Examples include chunking, rhymes/puns, mnemonics, mind mapping, and self-testing

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Self-testing is a research-supported elaborative rehearsal method

With your notes open, write practice questions

Try to focus on *application*: apply the concept to something familiar

After you've made practice questions for everything you want to study, leave it for a while (and study in whatever way you'd like)

Come back and do your own practice questions *without* your notes

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Self-testing is a research-supported elaborative rehearsal method

Recall >>>> Recognition

Make short-answer questions, not multiple-choice

Recognition is easy and less effortful

The less cues needed to retrieve, the stronger the memory

Recall practice improves Recognition performance, but not vice versa

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Self-testing is a research-supported elaborative rehearsal method

<u>Delayed feedback</u> strengthens retention

When self-testing, avoid looking at the answer after every question—
do a few then review

Our brain is bad at determining what's important to remember

Study Hack 2:

Encoding Specificity / Context-Dependent Memory

When our brain encodes a memory, it encodes *everything happening* regardless of what's actually important to remember

But Trenton, what do you mean by the brain encodes *everything?*

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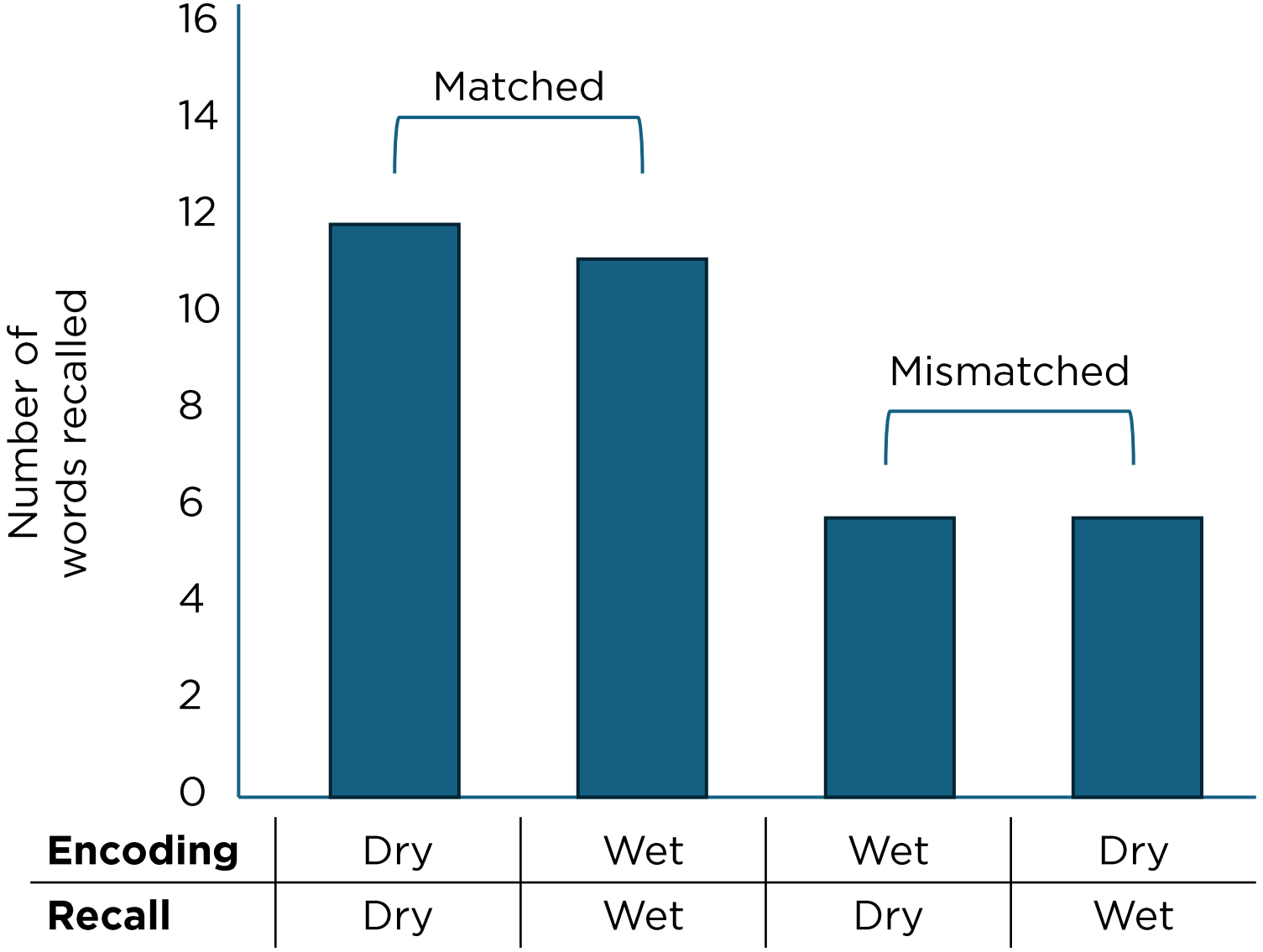
Our brains encode context with information



Scuba-Diver Experiment

Participants learned a list of words while in the water or on dry land, then recalled them in each environment

Could recall words learned in same environment better than alternate environment

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Take advantage of your brain!

Study Hack 2:

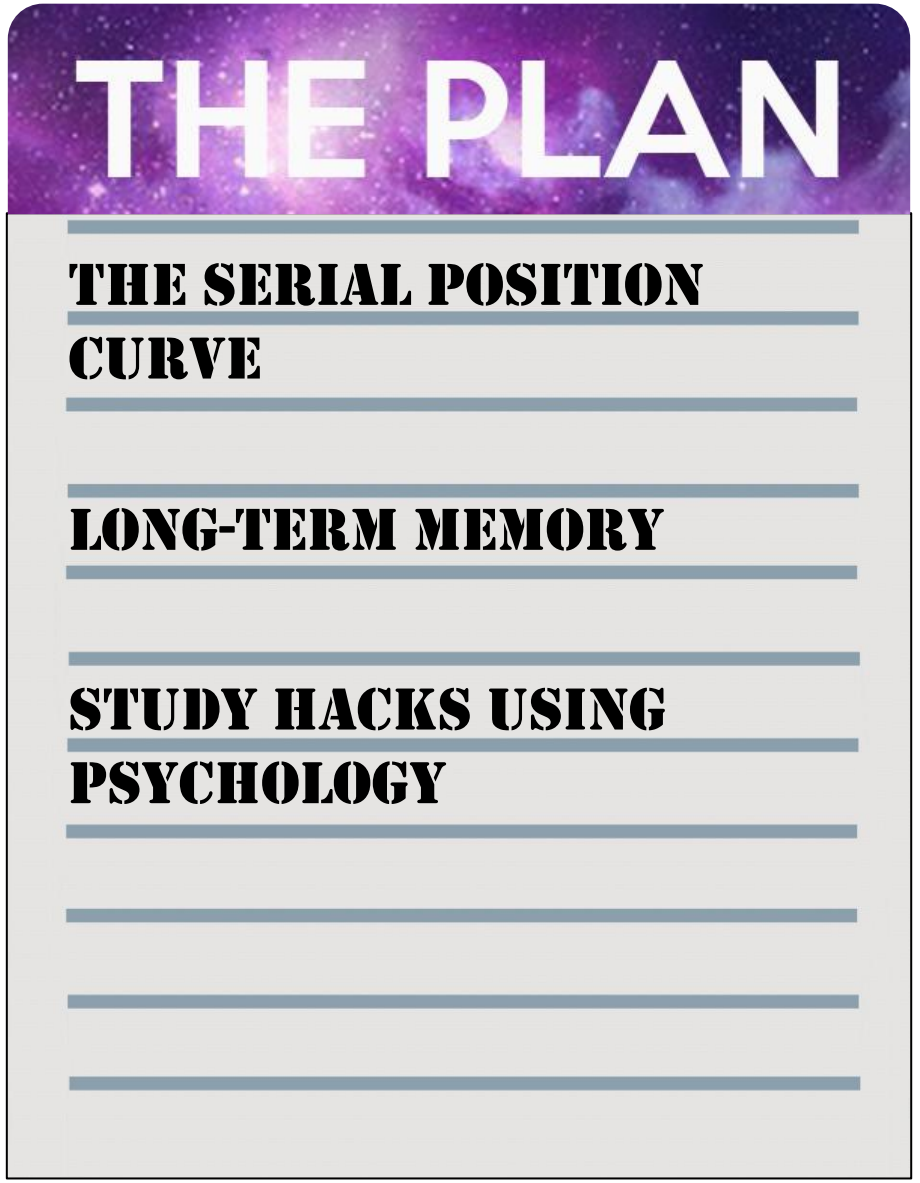
Encoding Specificity / Context-Dependent Memory

Retrieval during testing can be improved by replicating the encoding (study) environment

For example:

- Wear the same clothes
- Chew the same gum
- Use the same pen/pencil
- Study in the same room as the test

What should we get out of today?



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How did we do?

For y'all:

Friday Quiz **on March 7**

InQuizitive **due March 9**

Reflection Journal **due March 9**

Collab Project groups **due March 14**

Friday QuizTerm **is March 1 4**

Remember to get your SONA credits done!