

# Midterms/Finals Study Tips

## Evidenced-Based Solutions

# Midterms/Finals Study Tips

- Why do we have midterms/finals?
- What are ineffective strategies?
- What works?
  - Why?
  - How to implement it?

Why do we have midterms/finals?

# Why do we have midterms/finals?

- **Assessment**

- What are we trying to assess?

# Why do we have midterms/finals?

- **Assessment**

- What are we trying to assess?

- **Learning**

- What does it mean to have learned something?

# Why do we have midterms/finals?

- To determine what will happen **in the future**
  - Will you remember important content knowledge?
  - Can you apply these topics?
  - Have you learned how to think?

# What are Ineffective Strategies?

- Re-reading
- Re-copying notes
- Underlining/Highlighting
- Encoding Cues
- Cramming

# What are Ineffective Strategies?

- Re-reading (66%)
- Re-copying notes (33%)
- Underlining/Highlighting (72%)
- Encoding Cues (41%)
- Cramming (66%)



Is Cramming That Bad?

What are Effective Strategies?

# What are Effective Strategies?

- Spacing
- Retrieval Practice
- Criterion Learning
- Transfer Appropriate Learning
- Successive Re-Learning

# Spacing

- Cramming
  - 12 hours of study in 1 day
- Spacing
  - 3 hours of studying across 4 days

# Spacing

Retention interval	% Correct		
	Massed	Spaced	<i>SE</i>
1–59 s	41.2	50.1	1.7
1 min–less than 10 min	33.8	44.8	1.5
10 min–less than 1 day	40.6	47.9	8.1
1 day	32.9	43.0	6.0
2–7 days	31.1	45.4	7.3
8–30 days	32.8	62.2	8.8
31 days or more	17.0	39.0	
All retention intervals	36.7	47.3	1.1

# Spacing

- How to implement it?
  - Plan ahead!
  - Create a schedule

Date	Topic	Hours
Nov. 30	Biology	4
Dec. 1	Psychology	4
Dec. 2	History	4
Dec. 3	Biology	3
Dec. 4	Psychology	3
Dec. 5	History	3
Dec. 6	Biology	2
Dec. 7	Psychology	2
Dec. 8	History	2
Dec. 9	FRIDAY BREAK!	
Dec. 10	Biology	2
Dec. 11	Psychology	2
Dec. 12	History	2

# Spacing

- How to implement it?
  - Plan ahead!
  - Create a schedule
- Let's be realistic...

Date	Topic	Hours
Nov. 30	Biology	1
Dec. 1	Psychology	1
Dec. 2	History	1
Dec. 3		
Dec. 4	Biology	2
Dec. 5	Psychology	2
Dec. 6		
Dec. 7	History	2
Dec. 8		
Dec. 9		
Dec. 10	Biology	4
Dec. 11	Psychology	4
Dec. 12	History	4

# Spacing

Date	Topic	Hours
Nov. 30	Biology	1
Dec. 1	Psychology	1
Dec. 2	History	1
Dec. 3		
Dec. 4	Biology	2
Dec. 5	Psychology	2
Dec. 6		
Dec. 7	History	2
Dec. 8		
Dec. 9		
Dec. 10	Biology	4
Dec. 11	Psychology	4
Dec. 12	History	4

# Cramming

Date	Topic	Hours
Nov. 30		
Dec. 1		
Dec. 2		
Dec. 3		
Dec. 4		
Dec. 5		
Dec. 6		
Dec. 7		
Dec. 8		
Dec. 9		
Dec. 10	Biology	10
Dec. 11	Psychology	10
Dec. 12	History	10



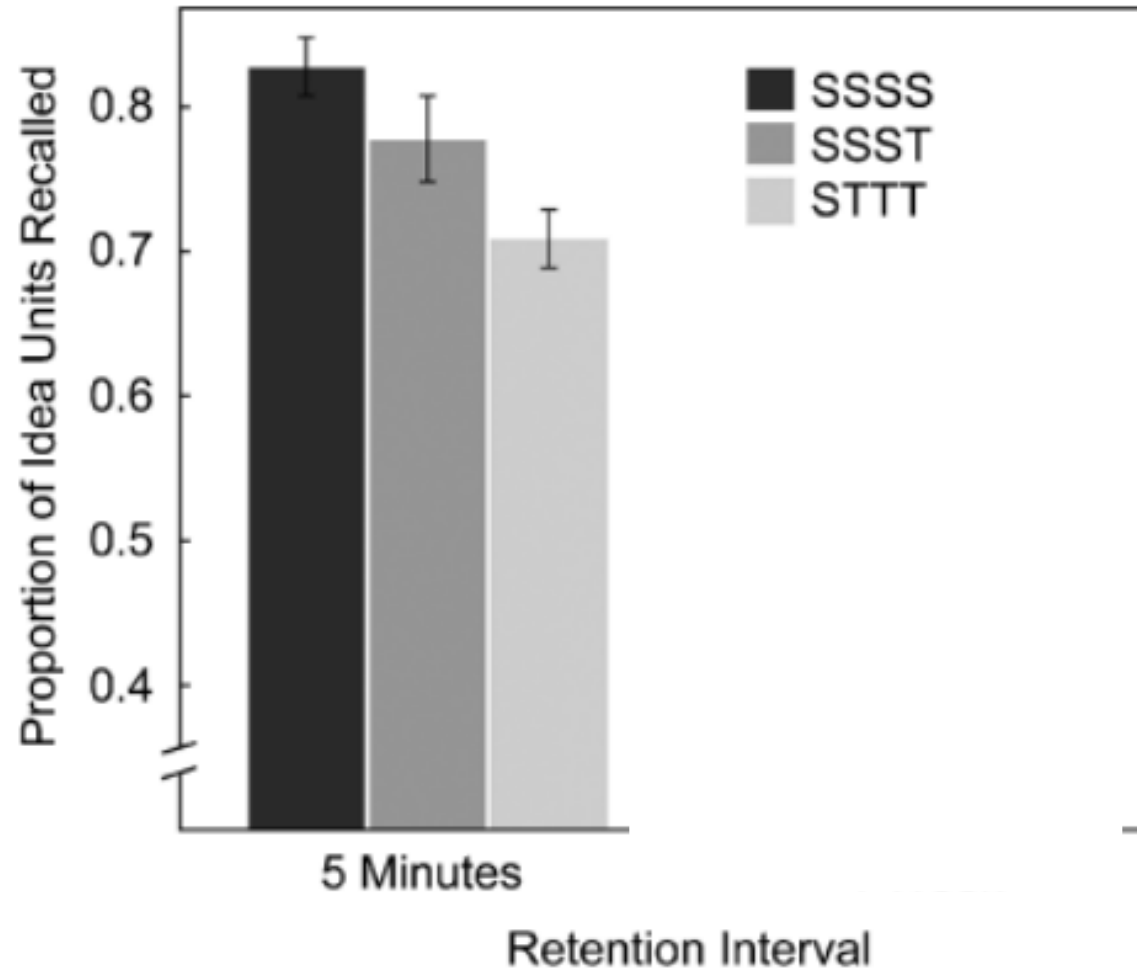
# Retrieval Practice

- You have two choices for how to study for your final:
  - Option A
    - Study for 1 hour
    - Study for 1 hour
    - Study for 1 hour
    - Study for 1 hour
  - FINAL

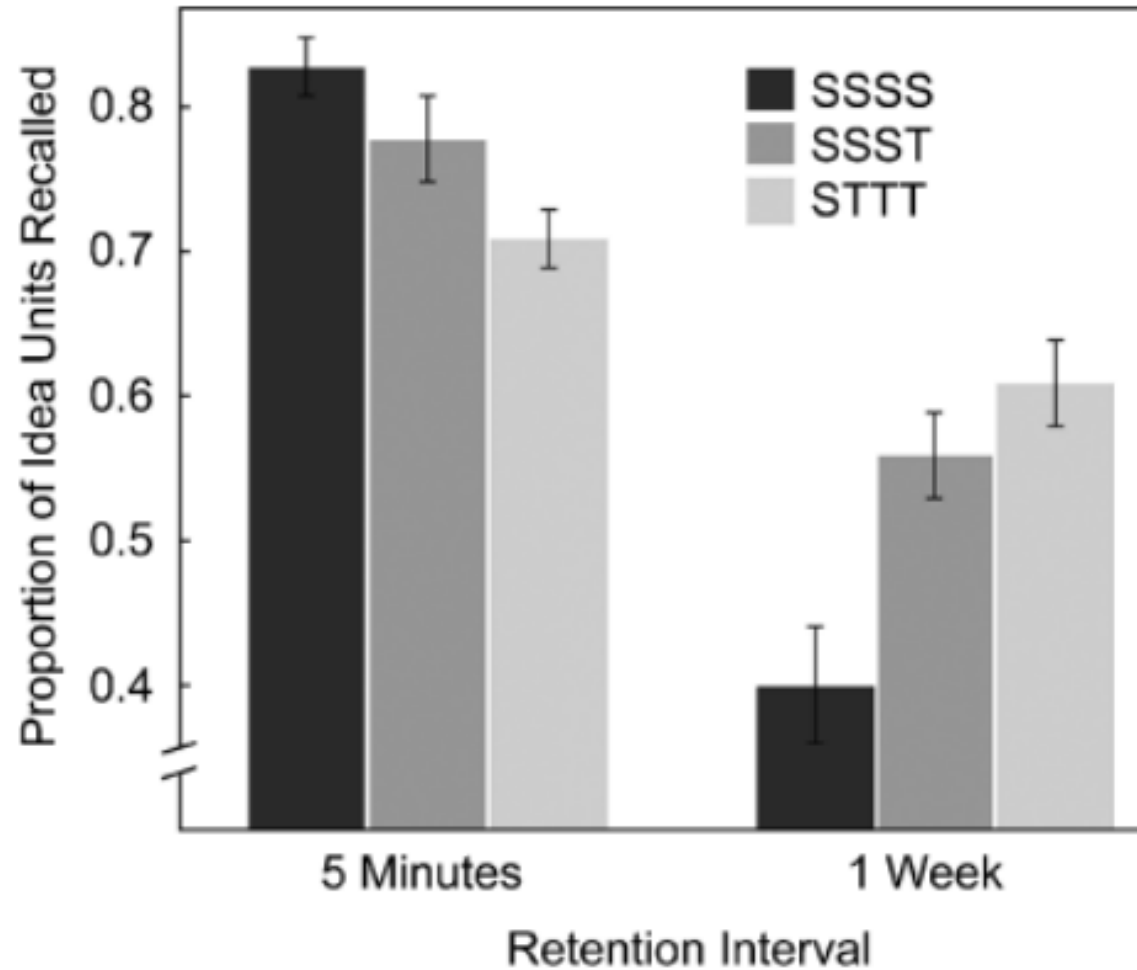
# Retrieval Practice

- You have two choices for how to study for your final:
  - Option B
    - Study for 1 hour
    - Take a test
    - Take a test
    - Take a test
  - FINAL

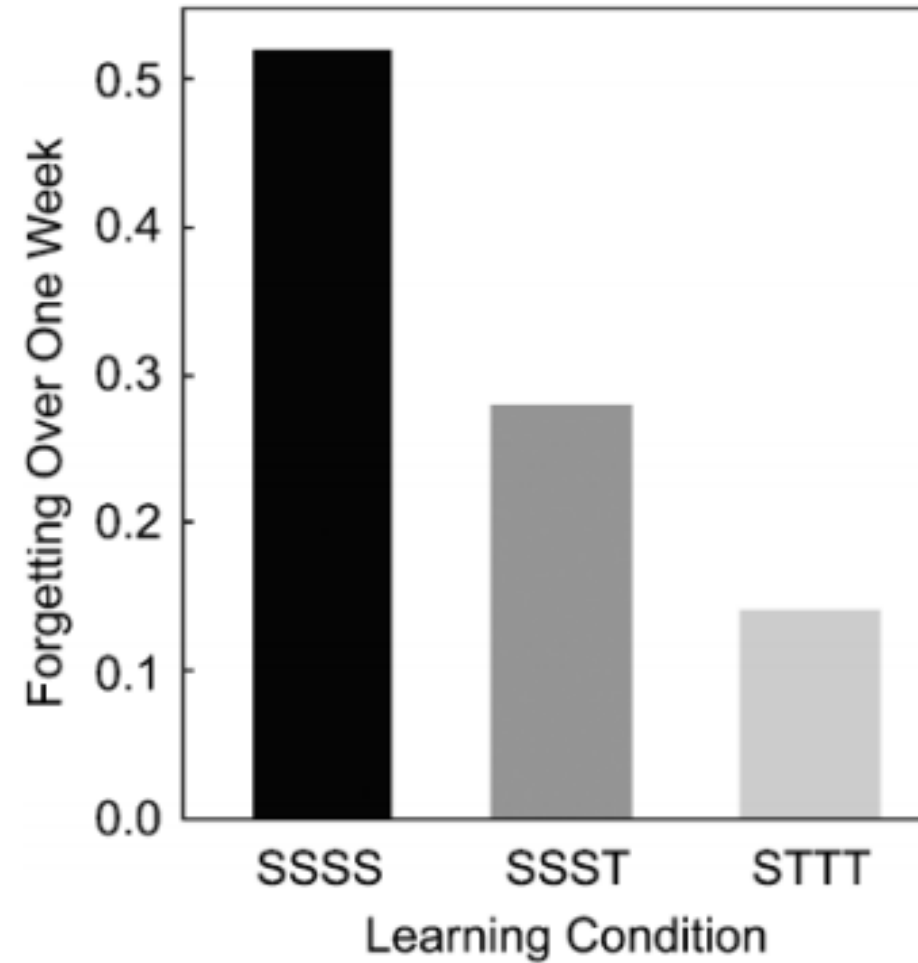
# Retrieval Practice



# Retrieval Practice



# Retrieval Practice



# Retrieval Practice

- Whyyyyyy???
- Encoding
- Retrieval

# Retrieval Practice

- How to implement it?
  - Flashcards
    - Do NOT turn over and read
    - PRACTICE RETRIEVAL!
  - Practice Tests
    - Ask your professor
    - Make your own

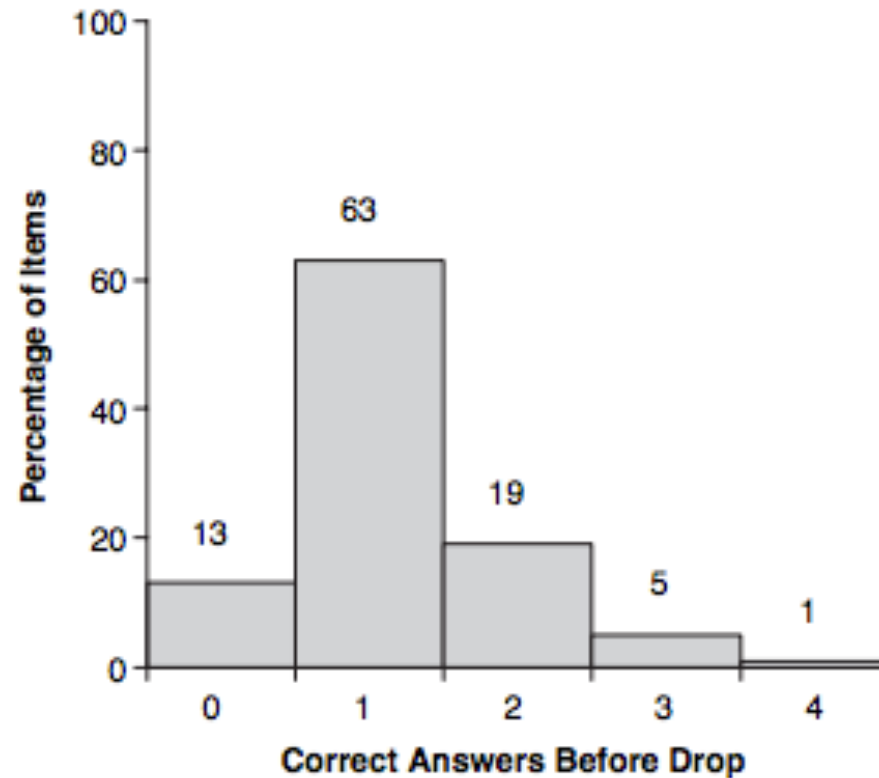
# Criterion Learning

- What do you do with flashcards after you answer them?



# Criterion Learning

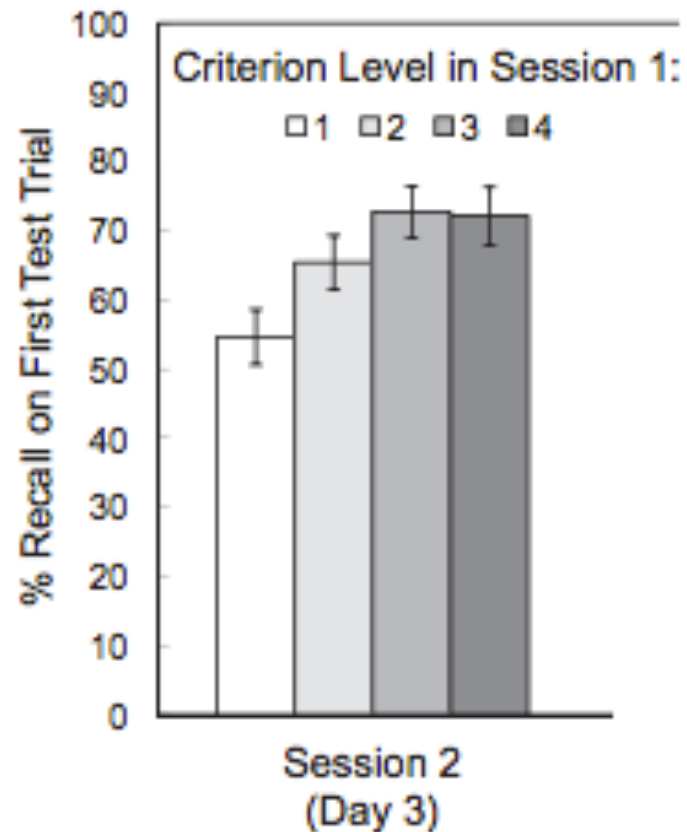
- What do you do with flashcards after you answer them?



Kornell & Bjork, 2008

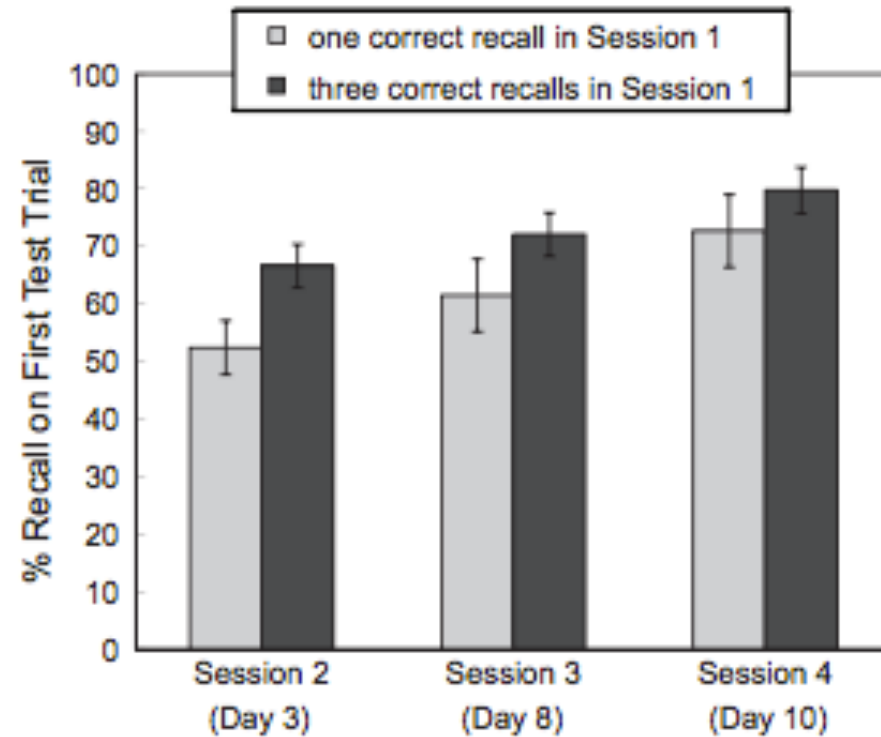
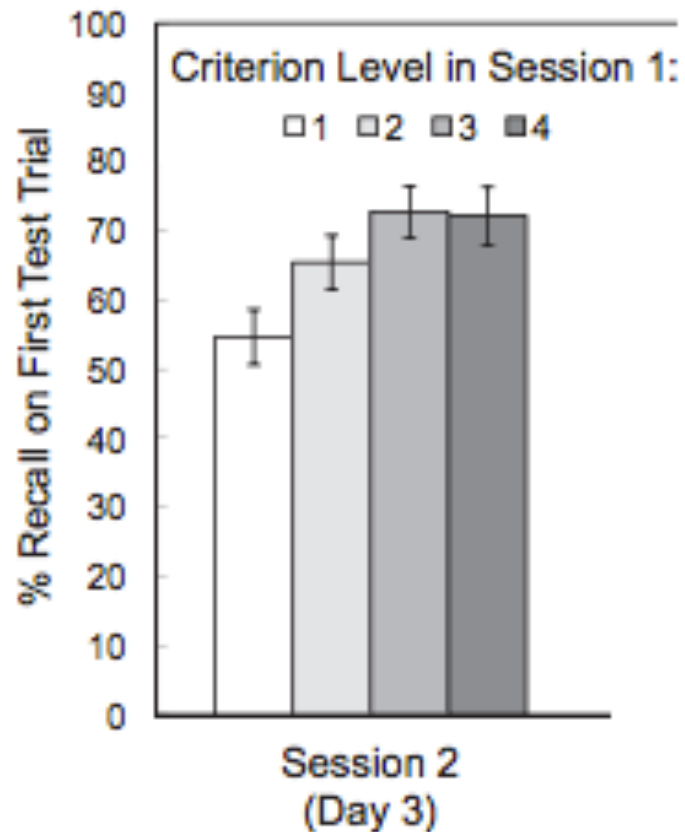
# Criterion Learning

- What *should* you do with flashcards after you answer them?



# Criterion Learning

- What *should* you do with flashcards after you answer them?



Kornell & Bjork, 2008

# Criterion Learning

- How to implement it?
- Metacognition
- Flashcards
  - Keep track of correct answers
  - Make a mark on the card

# Transfer Appropriate Processing

- Are flashcards always the best?

# Transfer Appropriate Processing

- Are flashcards always the best?
- It depends on the type of test!
- TAP
  - Study consistent with test format

# Transfer Appropriate Processing

- Are flashcards always the best?
- Multiple Choice Test
  - Give yourself options on flash cards
- Short Answer Test
  - Write out short answers
- Essay Test
  - Don't use flashcards

# Successive Relearning

- Combines all methods
  - Spaced retrieval practice to set criterion
- How should you study?
  - Space out studying across X days
  - Practice retrieving information each time
  - Retrieve it at least once, but preferably thrice
  - Use the appropriate format



# Basics

- External factors influence your memory
  - Sleep
    - Memory consolidation
  - Stress
    - Glucocorticoids
  - Food
    - Neuronal function/connection/learning = protein formation
  - Relaxation
    - Attention Restoration Theory

Questions?