

# PRACTICE:

We all want to make the most of our study time. In order to be most effective AND efficient, consider the following strategies to commit information to memory, and to learn material until you can't get it wrong. Learning something once won't be enough. You must practice the material in different ways to make it stick.

## DRAW AND RE-DRAW DIAGRAMS

- Reconstruct images/information to capture ideas graphically/spatially
- Redraw graphs and images from memory
- Replace words with symbols or drawings
- Write out the steps or create diagram of how to solve math or science problems
- Draw diagrams and charts from memory
- Take notes using mind-map to see in a broader picture how concepts relate

## MAKE YOUR OWN PRACTICE TEST QUESTIONS

- Write out example exam questions to practice
- Take practice exams in an environment similar to the exam
- Practice multiple choice questions
- Compare and contrast major theories or concepts
- Practice changing the details of the problem and see if you can still solve it
- Reflect on what skills the professor wants you to perform to build practice questions
- Can you justify why you think you're right? Can you explain why another answer is wrong?

## PROVIDE EXPLANATION/SUMMARY

- Discuss topics with others to validate understanding (peers, professors, others)
- Explain ideas to someone else using real life examples
- Describe the information to someone who wasn't there
- Teach the material to someone else as if you were lecturing
- Ask others to hear your understanding of a topic
- Explain your notes or a concept from class to another person
- Imagine yourself talking through the concept and remember aurally
- Speak your answers aloud (quietly) or inside your head
- Explain aloud the answers to flash cards, reading questions, or test questions
- Recite the main points at the end of each section; explain concepts aloud.
- Summarize your notes/the concepts from the textbook on an audio file

## WRITE AND RE-WRITE IDEAS

- Write out words multiple times on a white board
- Create a written study guide
- Create reference sheets for easy access while studying
- Summarize ideas and concepts in your own words
- Write paragraphs formulating the ideas from your notes
- Analyze diagrams, graphs and turn them into statements, descriptions
- Write songs, poems or rhymes to remember better.
- Make up puzzles or games to learn information

**MAKE IT STICK**

**FUN-DAMENTALS**



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Adapted from Oregon State University

MAKE CONNECTIONS

- Generate or listen for examples of principles, real life examples
- Think of applications for the information
- Seek out exhibits, samples, photographs, collections, solutions
- Explore case studies as examples of concepts
- Connect your lecture notes with the notes you took from the book
- Arrange information into lists, words into hierarchies
- Recall learning/concepts from experiments, field trips, or other classes
- Participate in study groups & review sessions
- Practice recalling your notes/reading pages and where things are
- Use notecards to quiz yourself on concepts
- Make up puzzles or games to learn information

PRACTICE:

THREE PRACTICE STRATEGIES I'M GOING TO TRY ARE:

(Really do write these down. Doing so is a strategy of its own. When we write something down, we're taking an idea from in our head and turning it into a commitment. Take it a step further and tell a friend or classmate or professor you're going to try these, too.)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

HERE'S HOW I'M GOING TO USE THOSE STRATEGIES

For \_\_\_\_\_ I'm going to try \_\_\_\_\_  
(class/course) (strategy)

For \_\_\_\_\_ I'm going to try \_\_\_\_\_  
(class/course) (strategy)

For \_\_\_\_\_ I'm going to try \_\_\_\_\_  
(class/course) (strategy)

PRO TIP: SPREAD YOUR PRACTICE OUT

Now that you know your three new strategies you'll try, and you know the class(es) you'll try them in, think about how you'll spread your study out, or *distribute* your practice. Not sure what this means? Check out the example below. Basically, instead of a couple long study sessions, you're breaking that same time up into shorter, more frequent sessions. It's a [research proven strategy!](#) Make this approach work for you!

EXAMPLE

3 hrs: summarize lect, read 20 pp, notes!	ZZ	3 hrs: redraw figs, teach concepts	ZZ	3 hrs: connect material from lects	ZZ	3 hrs: create study guide & test Qs	ZZ	3 hrs: answer my test Qs + practice test	YES	
7.5 hrs					7.5 hrs					NO

