STARS: S T A R S MEMORY

About Memory:

Students often think that they need to have a "photographic" memory in order to do well in college. Some people referred to as "savants" can store and retrieve images in a pure form in the hippocampus area of the brain in spite of a very low IQ. Short-term memories are temporarily stored in the hippocampus. When and if it becomes a long-term memory it goes to the outer cortex areas of the brain. Students trying to learn important concepts have less need for short-term memories than they do for contextual memories that are passed through the "thinking" part of the brain and are stored long-term.

Long-term memory can be *implicit* or *explicit*. Implicit memory is when you do something without thinking about the steps it takes to do it, like playing a musical instrument, remembering a face, or riding a bike. Explicit long-term memory allows you to categorize and recall facts and information and includes those powerful episodic memories that connect with events in your life and are tied to emotions. Your long-term memory is like a record keeper; continually updating and expanding the record when new information is available. Why do we forget? The biological explanation is that the memory decays over time. Another explanation is that new memories interfere with old ones. (From: Van der Meer and Dudink, The Brain Pack, Running Press, 1996.)

Ways to Improve Your Memory:

↳ Pay attention to titles and subtitles in your textbooks.

Information tends to be understood best when learned from the general to the specific. Your textbook is usually organized with general titles and subtitles followed by sections with more specific details. Keep these categories in mind when you are trying to learn the material. If you highlight separate details and try to memorize them out of their general context, it will be harder to remember them. Try to attach new information to things you've already learned by clustering related concepts together.

↳ Put information in a visual, more memorable form; map it out.

On a large sheet of butcher paper, put the chapter title in the middle and draw one line radiating from it for each section of the chapter. Divide each section up into smaller parts and then list the details, definitions, formulas, or equations that belong in that subsection. Draw pictures and use as many acronyms as you can. You will then have a chapter map that goes from the general to the specific. Create key word diagrams and charts that compile and organize material into a more memorable form that shows the whole and its parts. (See the STARS sheet on "Mapping" for more details.)

↳ Connect it to something you already know.

Take a room, or a road or place that you know very well. Attach items that you want to remember on your mental image of that space. This is particularly helpful if you have a sequence of things that you have to memorize in order. One student put the entire Western Civilization chronology on objects going from left to right around his residence hall room. Even more important, try to connect complex theories to examples that you can relate to. For example, take the theory of supply and demand and connect it with something happening in markets today like the recent "Beanie Baby" craze.

- Make it funny, make it rhyme, get emotional.

  Create funny images when you are trying to learn serious material (the more risqué and bizarre the image the more it will stick in your memory). Since emotion is tied to the retrieval of information and details, try to get emotional or passionate about what you are learning. Challenge yourself to find something interesting in what you are reading. Create a rhyme, limerick, or rap song to remember otherwise uninteresting facts. (These tips will also help you concentrate on dull material.)

- Use the SQ3R method of studying to improve your memory.

  Information will not be retained if you don't use it. The recitation and reviewing suggested by the SQ3R method increase learning and memory. (See the STARS sheet on Reading for more details.)

- Recognizing information and understanding what you are reading is not the same as learning for recall.

  Recognizing the right answer on a test is easier than coming up with the right answer by yourself. When learning vocabulary in a foreign language, be sure to translate in both directions. For example, translate the French word to English, then write the English word in French, then use the word in a sentence.

- Be aware of "retroactive inhibition".

  This is when information you already learned is interfered with by new information that is similar. You have to find something that separates the two items and pay close attention to it.

- Be an active learner.

  We remember more of what we "do" than what we see or hear, so try to be more interactive with the material. Challenge yourself to look for geologic formations on your next bike ride to the mountains; look for economic principles in the news; or check out your residence hall section for examples of abnormal psychology!

- Make flashcards.

  If you are a visual learner, the flash card method of memorizing may be the best method for you. Put a question on one side and the answer on the other. Review the cards, then test yourself. Repeat this until you have no mistakes; then shuffle the cards and try it again. Overlearn the material if you want to retrieve the answer quickly on a timed test.