1. Memory
   1. Photographic Memory
      1. Incredibly rare
      2. Children more commonly have a photographic memory but lose it after puberty.
   2. Short Term Memory
      1. Capacity of STM
         1. Very limited, you can only hold so many pieces in your STM.
         2. 7 +/- 2 capacity defines STM storage
         3. We can hold between 5 and 9 items in our STM
         4. Once our STM is filled it’s pushed out
         5. By chunking individual items into larger meaningful units you can process an even greater amount of information. This allows you to get beyond the limit of 7 +/- 2.
         6. Chunking
            1. S.F.

College undergrad at Carnegie Mellon University

After a two-year training period he was able to increase his digit count from 7 to 80.

He was a long distance runner so he would chunk the numbers into meaningful stuff. He would memories 5291 as 5min 29.1 seconds

He used ages, dates, times, etc

He was only recalling 8 or so chunks but the numbers were chunked so he was able to memorize more.

When he was given a series of letters or words he went back to 7.

His ability to chunk numbers increased, nothing else increased.

* + - * 1. The Value of Chunking

Researchers setup a chess board as if pieces were already in a game.

Shown to chess and non chess players

They had to reproduce the location of all of the piece

It turned out the better the chess player the better they were.

The chess players would just chunk the pieces together whereas non-chess players saw nothing but gibberish.

* + 1. Duration
       1. Brown-Peterson technique
          1. An attempt to measure how long information will stay in STM if *rehearsal is prevented*.
       2. STM fades after 15-30 seconds
       3. Rehearsal Prevention Task
          1. Ie asking someone to count down by 3 at a time from 100. 100,97,94,91,etc
    2. Serial Position Effects
       1. Primacy
          1. First few words receive greater attention
          2. Transferred to LTM
       2. Recency
          1. Item at the end of the list are still in STM
  1. Long Term Memory
     1. Encoding
        1. Levels of processing effect
           1. Shallow processing

Ie reading a textbook, highlighting, underlining.

* + - * 1. Deep processing

The deeper the processing the better your memory

* + - 1. Two types of rehearsal
         1. Maintenance rehearsal

Repeating something

All you’re doing is rehearsing the sound features of the word, no meaning. That’s fine for STM/ST retention

Not good for long term, once stopped rehearsing it is gone.

* + - * 1. Elaborative rehearsal

Focus on the meaning

Encode the information in a new form

Relate the material to yourself

* + - 1. Implications for study habits
         1. Elaborative rehearsal

Relate material to yourself

Write notes in your own words

* + - * 1. Organization
        2. Spacing effect

Massed vs. distributed practice

* + - * 1. Generation effect
        2. Overlearning