

# Keys to Remembering

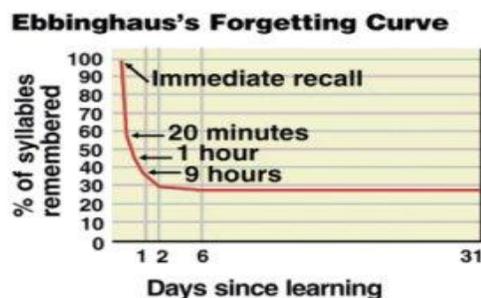
Being able to remember how to do math problems is the most fervent wish of many students who struggle with the subject. But math – like dance, football and art – can't simply be absorbed by watching it and then trying to do it. Brain research shows that when people are learning/memorizing a physical activity, they are so engaged that the movement parts of their brain are as active as if they were doing it. So a key to remembering is to get the areas of your brain that help in math as engaged as if you were up at the board.

## Important Concepts in Learning:

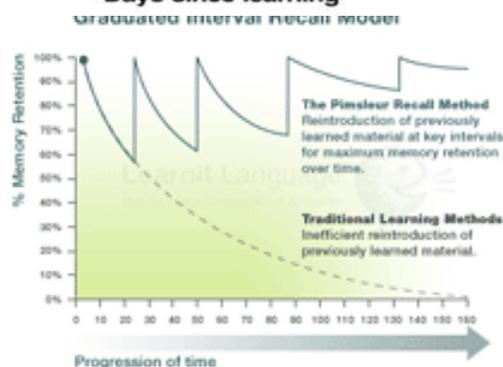
You need to take *brief* breaks about every 20 minutes. By 2 hours, I see students making errors in material they actually know! Research says you focus best on the first and last 10 minutes of presentation. But the break should be brief!! (about 5 minutes)



Information learned can be quickly forgotten. Ebbinghaus studied the amount of retention over time.



So what do we do? Don't get discouraged! Recycle – relearn. A rapid rate of forgetting happens after you first learn information. By reviewing the material in progressively longer intervals, more information is retrieved later.



## What to do?

- Get involved. Don't just sit copying the board; predict what's next. (Let a notetaker copy and rewrite those notes later!)
- Once you understand a process, accept that it may be forgotten. To retain it better, try:
  - Organize/Analyze the information. Figure out steps, patterns or ways to group information. Watch for similarities & differences to other problems, and issues to watch out for. Use Cornell Notes, Regional Maps, or Patterning Worksheets.
  - Play with what new math words remind you of and associate them. The best associations have an emotional impact: humorous, embarrassing, or gross.
  - Explain it – or even teach it – to someone else. If there's no one around then pretend there is. Imagine that you have to explain it to the class.
- Keep recycling the information. For each two sections you've moved forward, try doing 2-3 problems from previous sections, then previous chapters. Forgotten information is re-learned faster each time, and the retention is longer and stronger.