

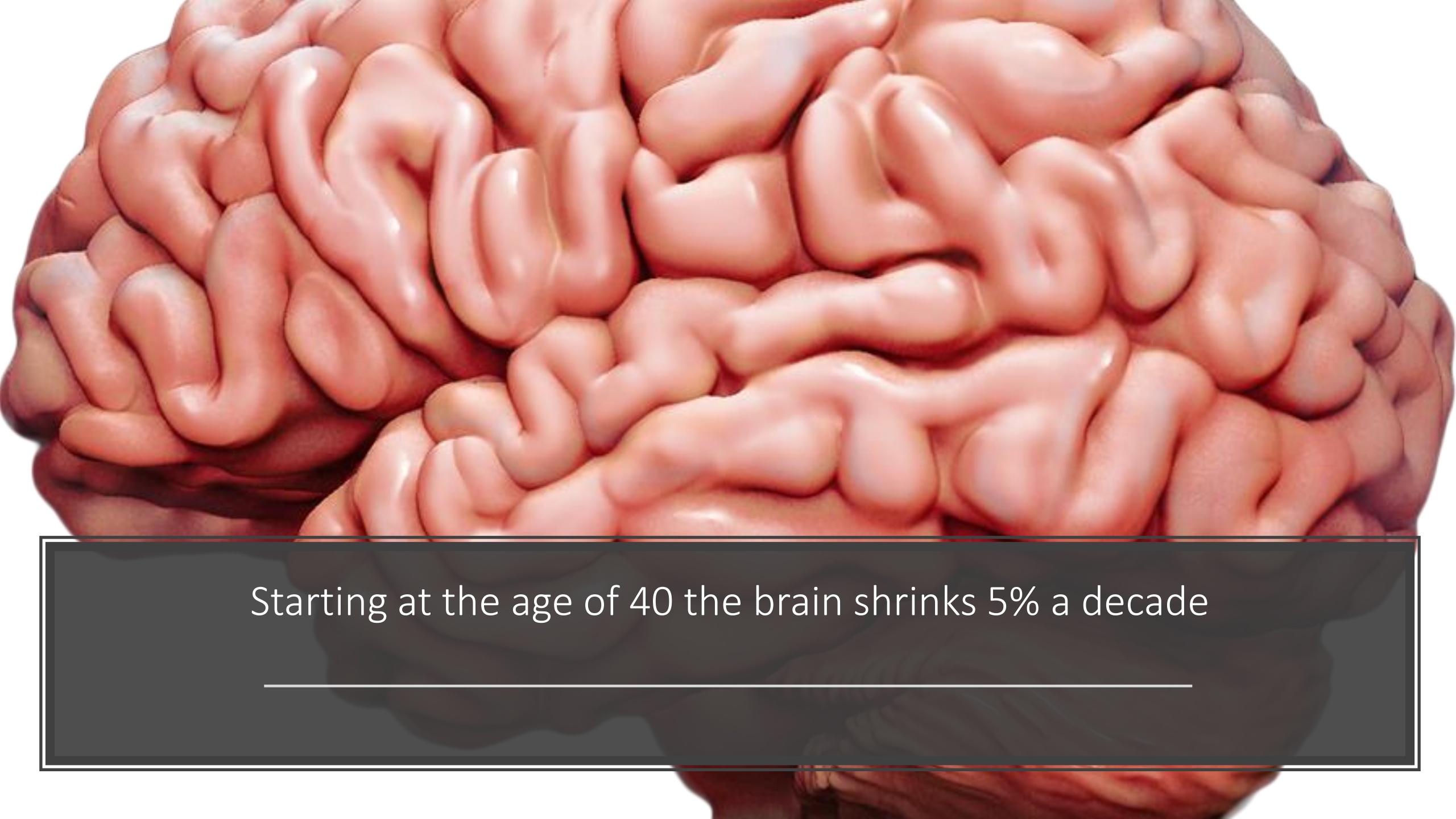
The background features a complex geometric pattern of overlapping squares and rectangles in shades of blue and light gray. A single, solid orange rectangle is positioned vertically in the upper-left quadrant. On the right side, a large white circle contains the text.

Boosting Memory

www.drmarcmilstein.com

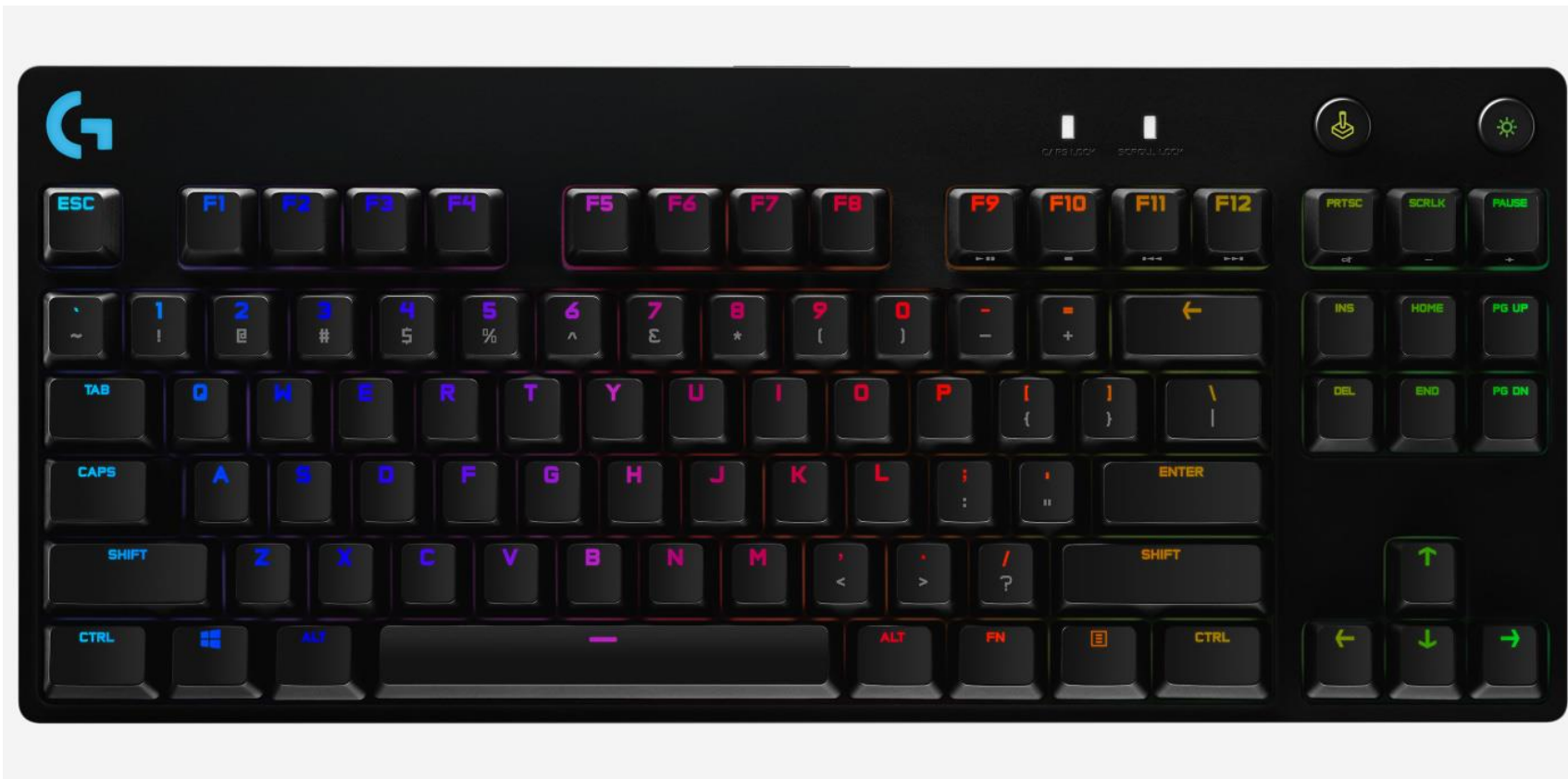


Good or Bad Memory?



Starting at the age of 40 the brain shrinks 5% a decade

Your Amazing Memory





Singing To The Radio

But Can't Remember....

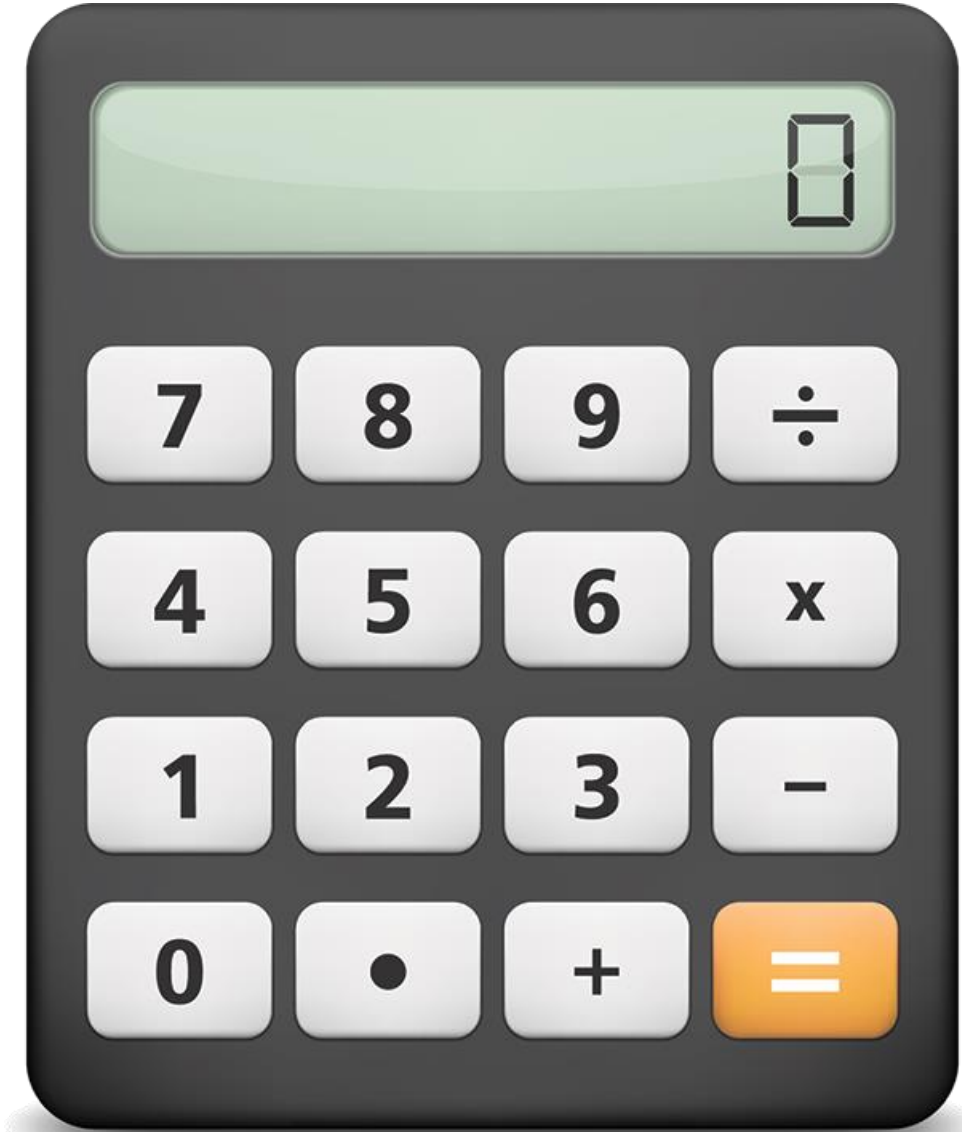






Memory Tricks

Dementia
Calculator?



Pop Quiz!

- 1. Coffee Mug
- 2. Orange
- 3. Plant
- 4. Bread
- 5. Necklace

The Three Key Steps to Remembering



3 Steps To Mastering Memory

1. Focus

2. Short Term Memory

3. Long Term Memory

The image features a background of out-of-focus, glowing yellow and orange light circles (bokeh) against a dark blue and purple gradient. A horizontal white bar with thin dark borders is positioned in the lower third of the frame.

Focus

Many Issues With
Memory Are Really
Issues With Focus



Memory and Focus Test

The control group performed the 50-minute task without breaks or diversions.

Two brief breaks from their main task

What Does
This Have
To Do With
Focus?



Brief Diversions Vastly Improve Focus

- The brain gradually stops registering a sight, sound or feeling if that stimulus remains constant over time.
- Prolonged attention to a single task actually hinders performance.
- The brain is built to detect and respond to change.
- Deactivating and reactivating your goals allows you to stay focused.

Use a Timer

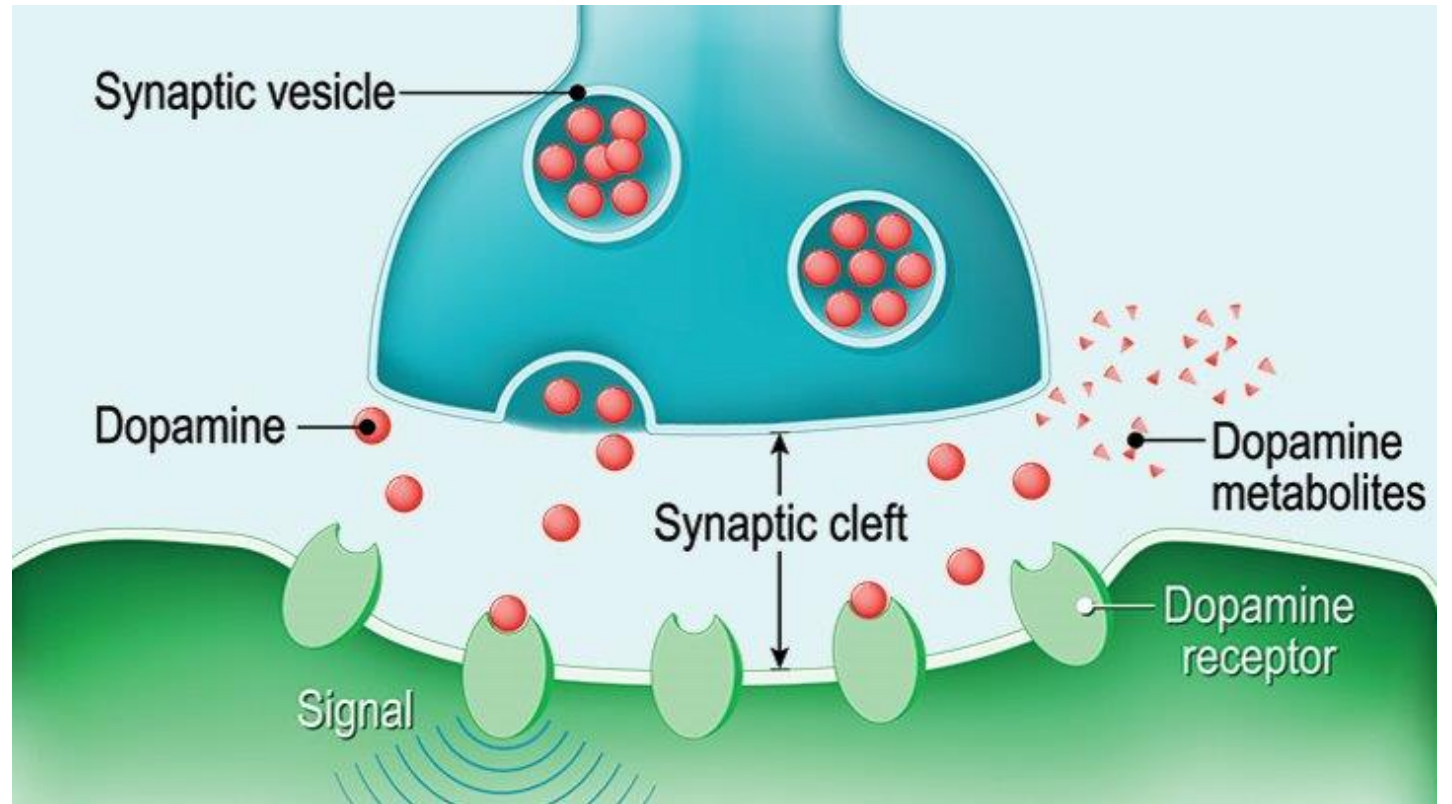




Phone Timer???

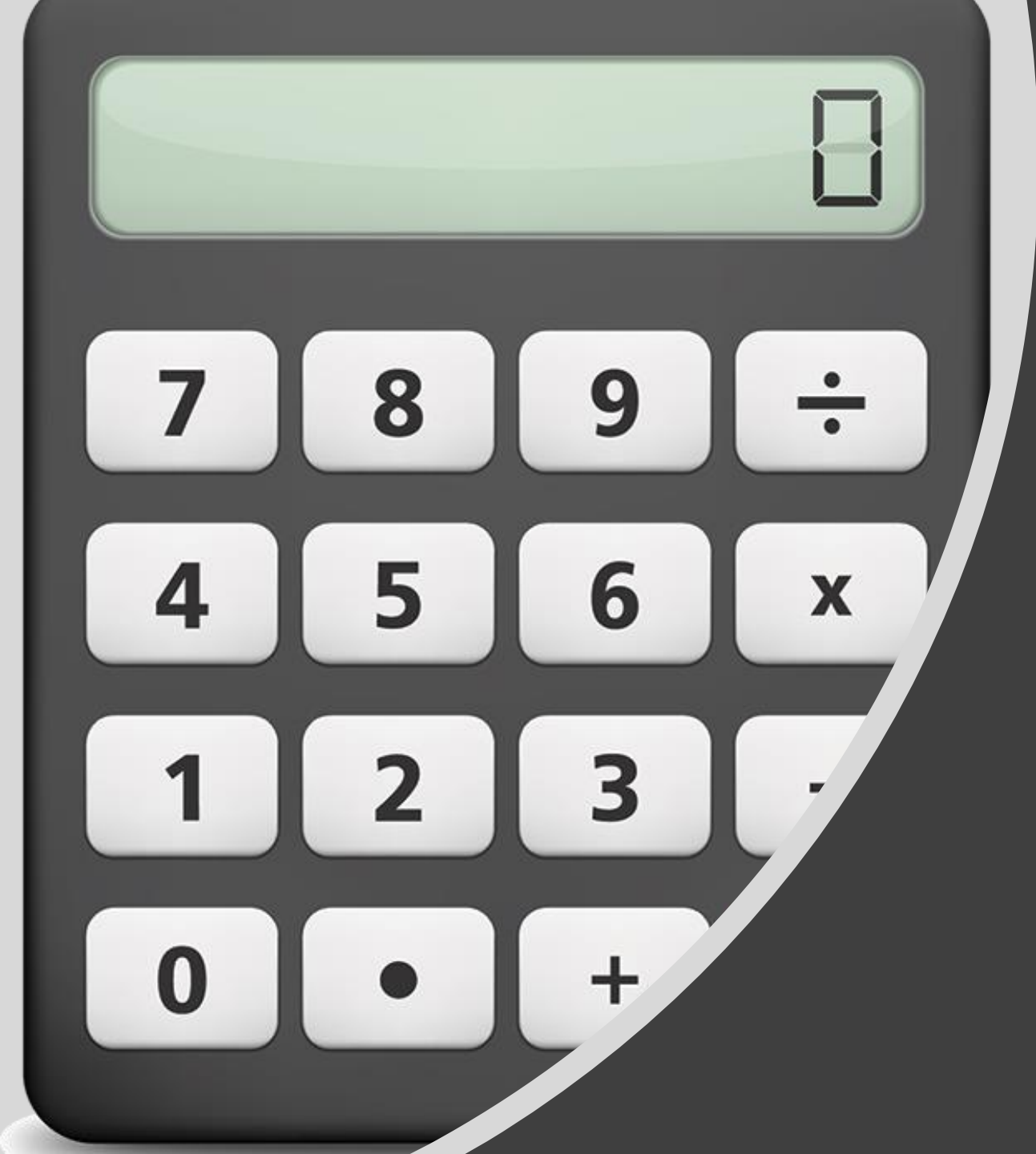


Dopamine and
Focus:
How To Give It A
Boost? Think of
your ancestors:



Brain Needs
“Newness”





Factors For Healthy Memory on Dementia Calculator

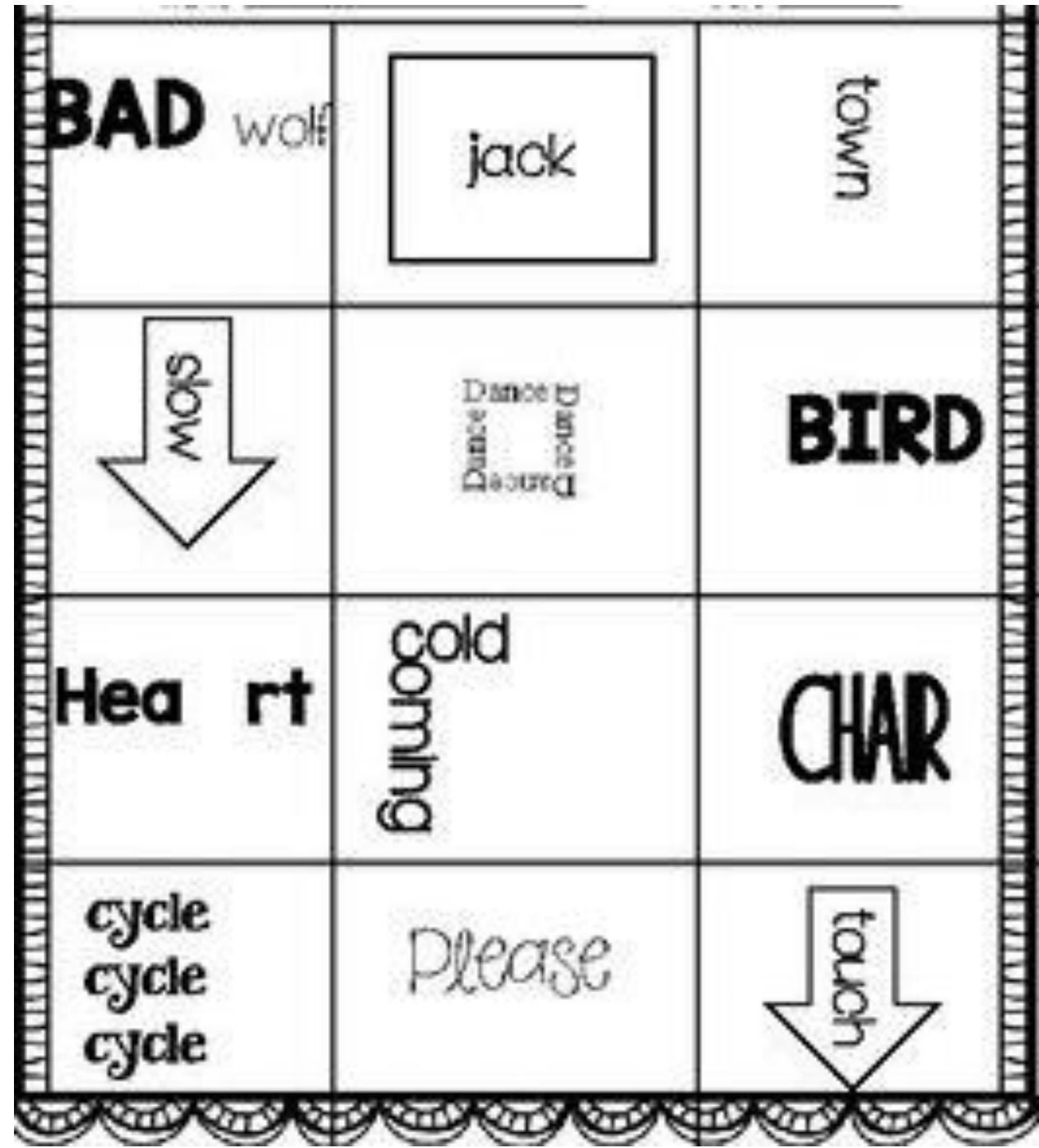
- 1. **Engage in learning new things (Second language, new subject, musical instrument, new sport)**
- 2.
- 3.
- 4.
- 5.

Education Early In Life



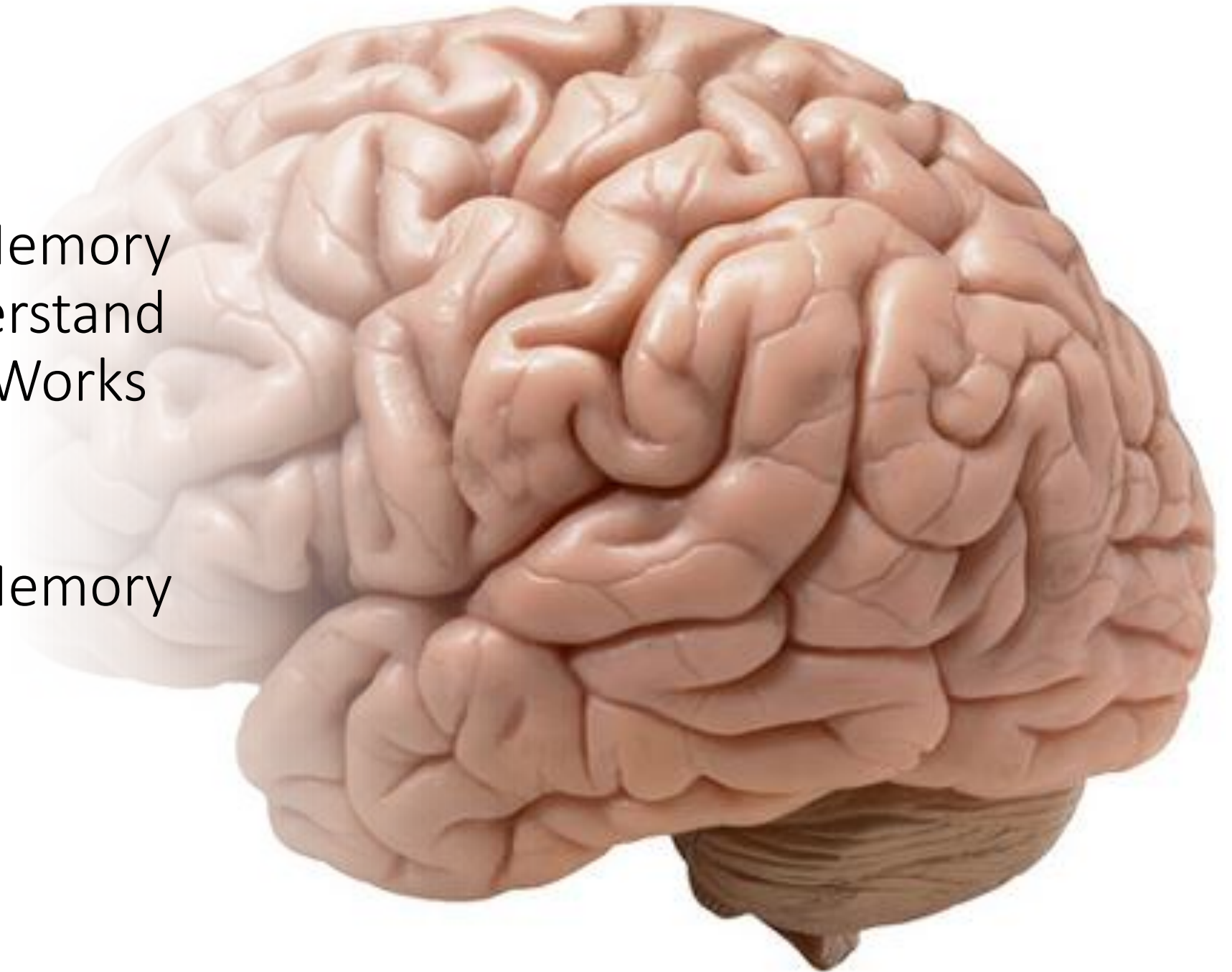
Does It Have To Be Early Education?

- Among individuals with low education, those who engaged in reading, writing, attending lectures, doing word games or puzzles once or week or more had memory scores similar to people with more education.

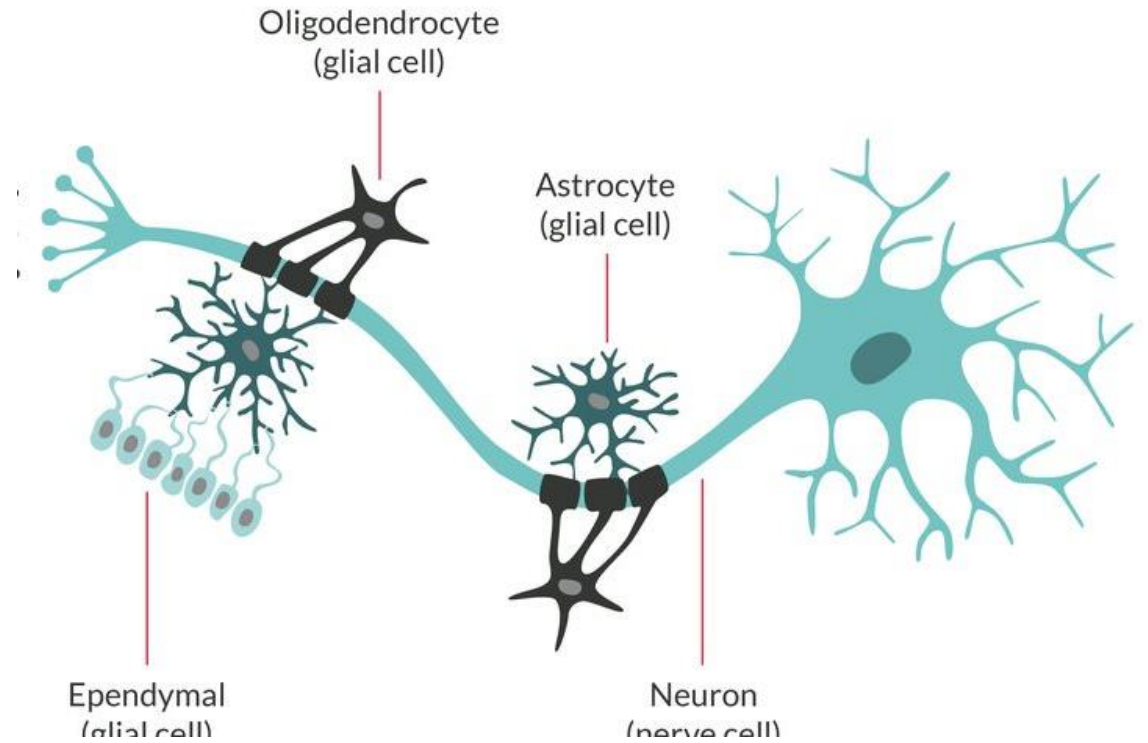
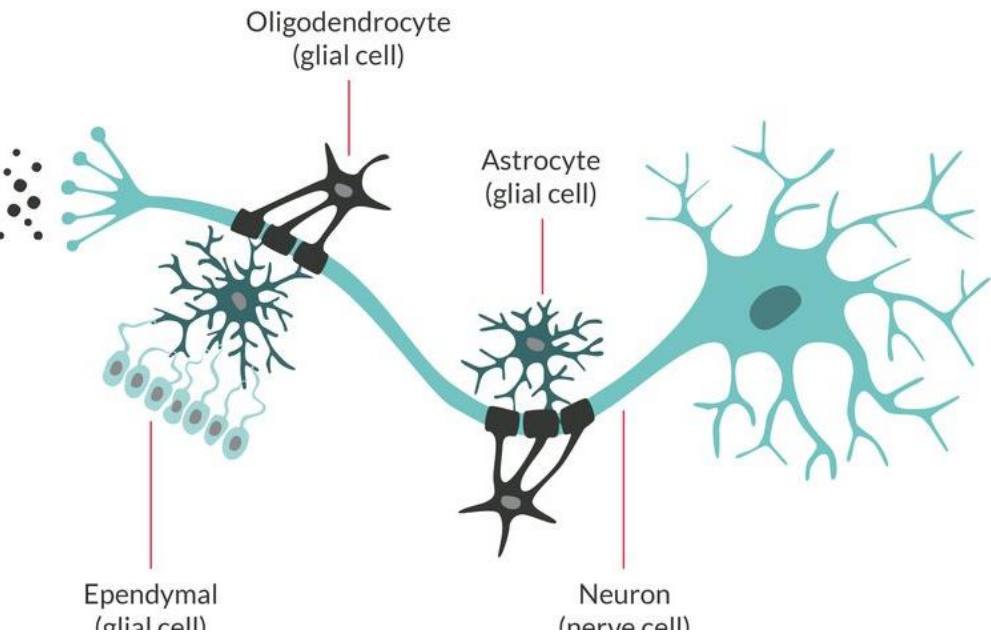


To Maximize Memory
We Must Understand
How Memory Works
In The Brain

Let's Make a Memory

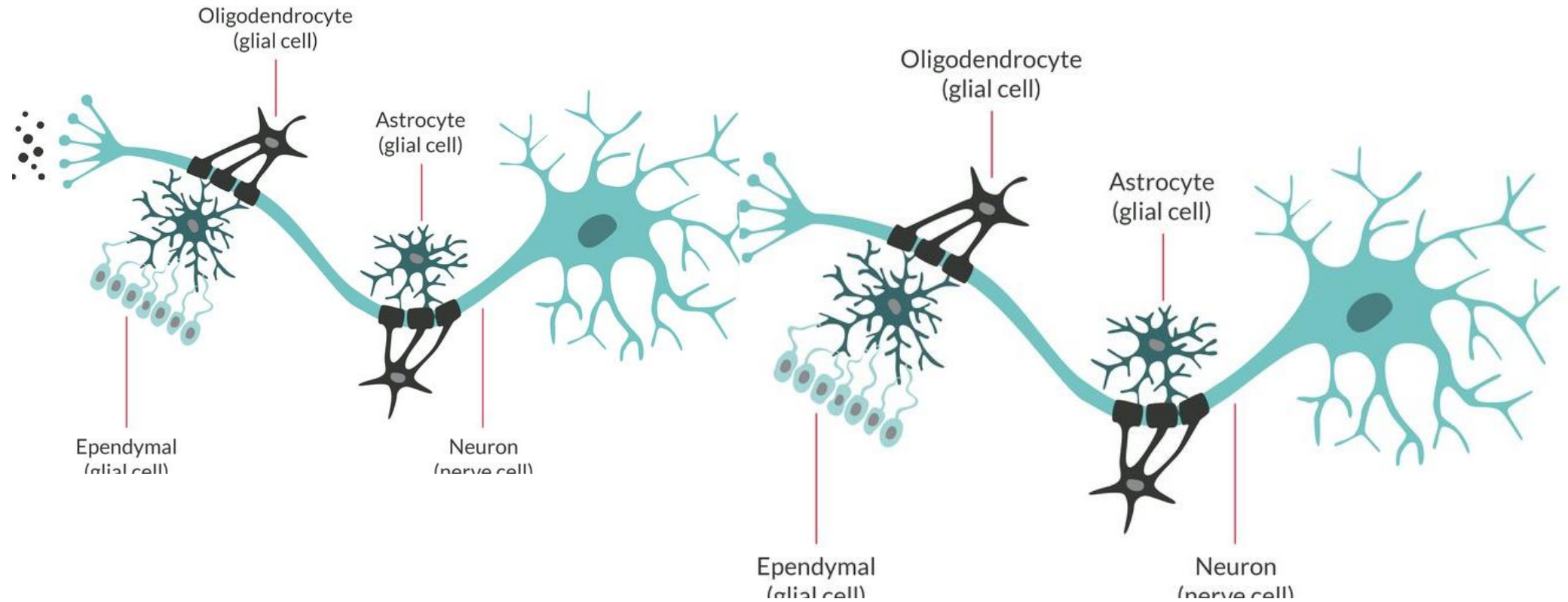


What Was Happening In Your Brain?



Review vs. Rusty? Cognitive Reserve Theory

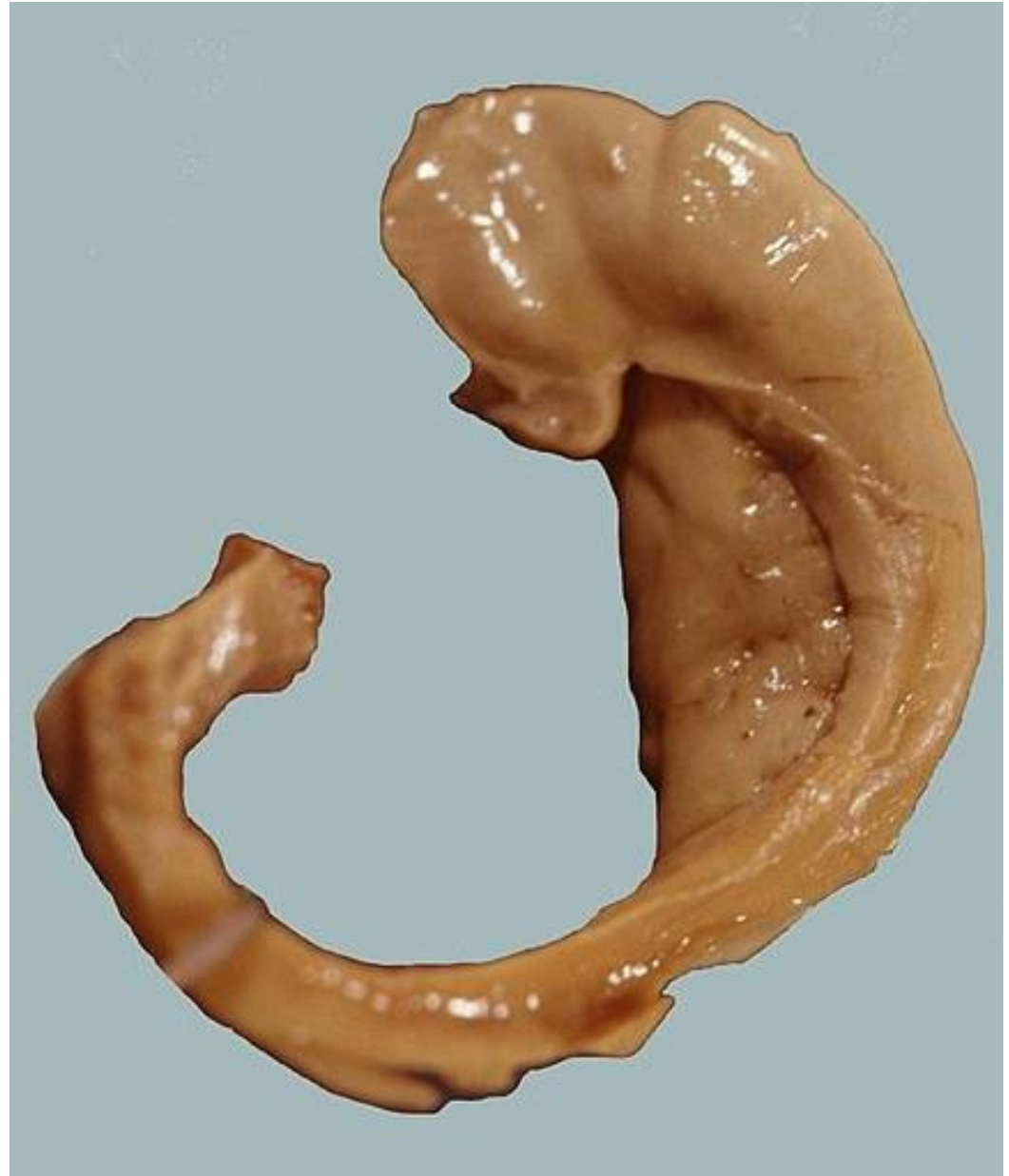
How Many Brain Cells and Connections?



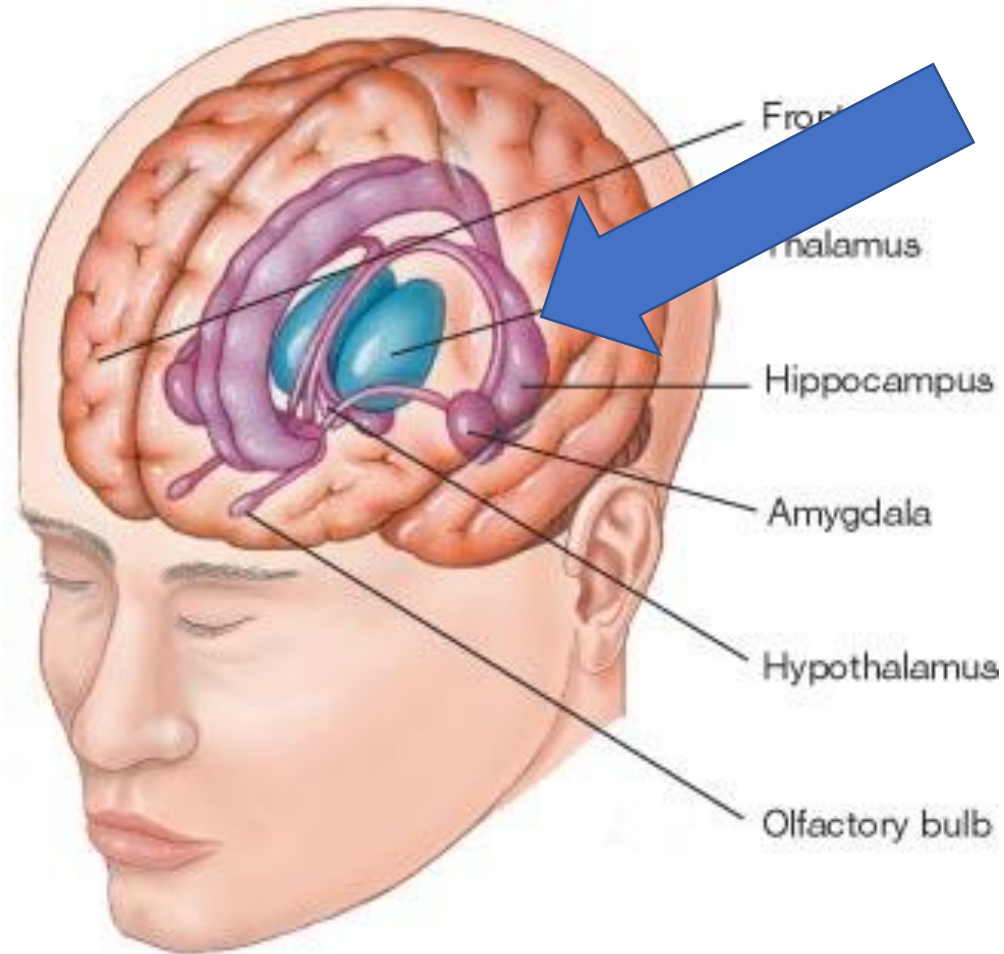


The Most Famous
Patient In
Neuroscience. H.M.'s
Story....

Short Term Memory



Right Now Your Hippocampus Is Making A Decision



Your Hippocampus and

Where did I park my car?

Where did I put my keys?

What was that person's name?

What was I just doing?

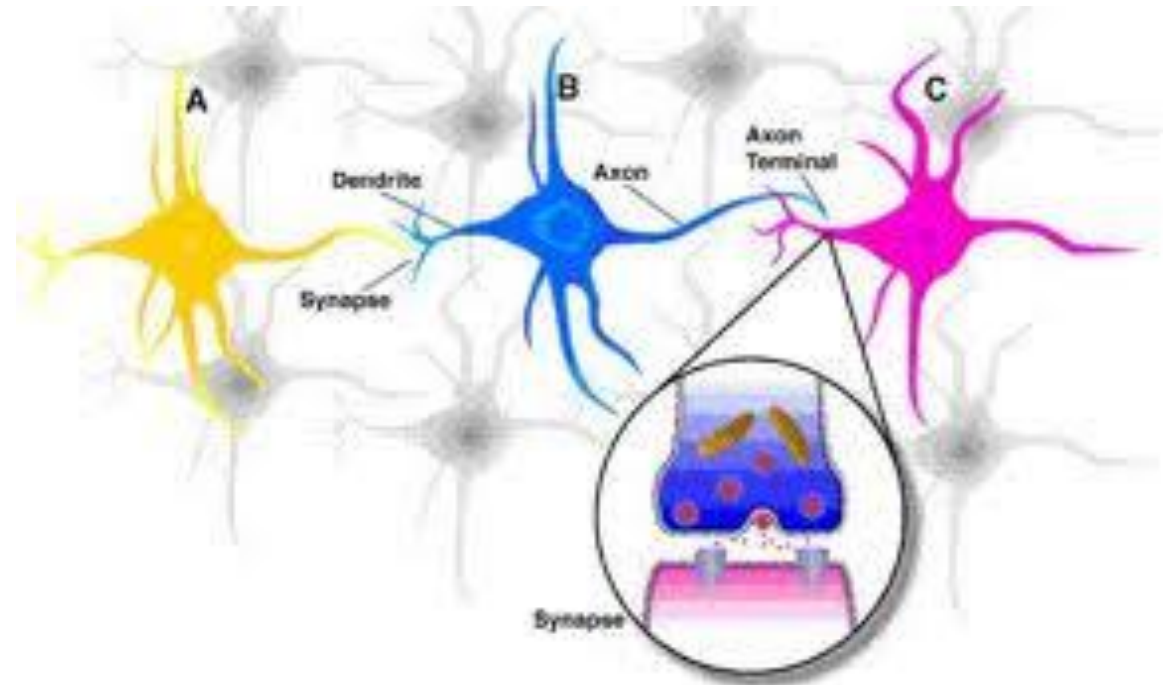
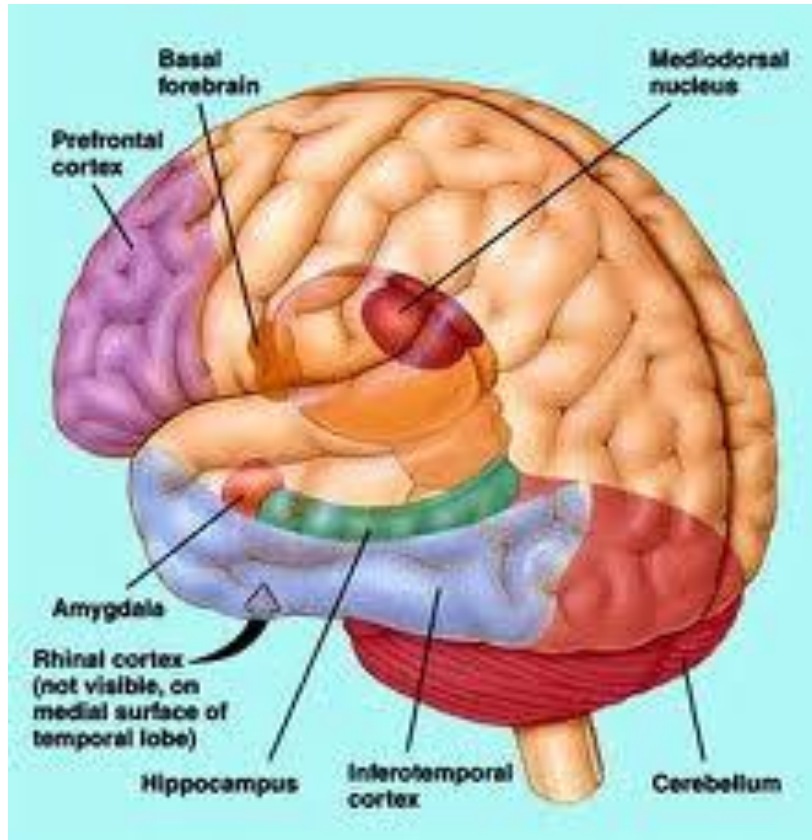
Can't
Remember?



Where Do You Store Your Memories?



If It's Worth Remembering You Are Encoding This Information In Your Brain: Where?

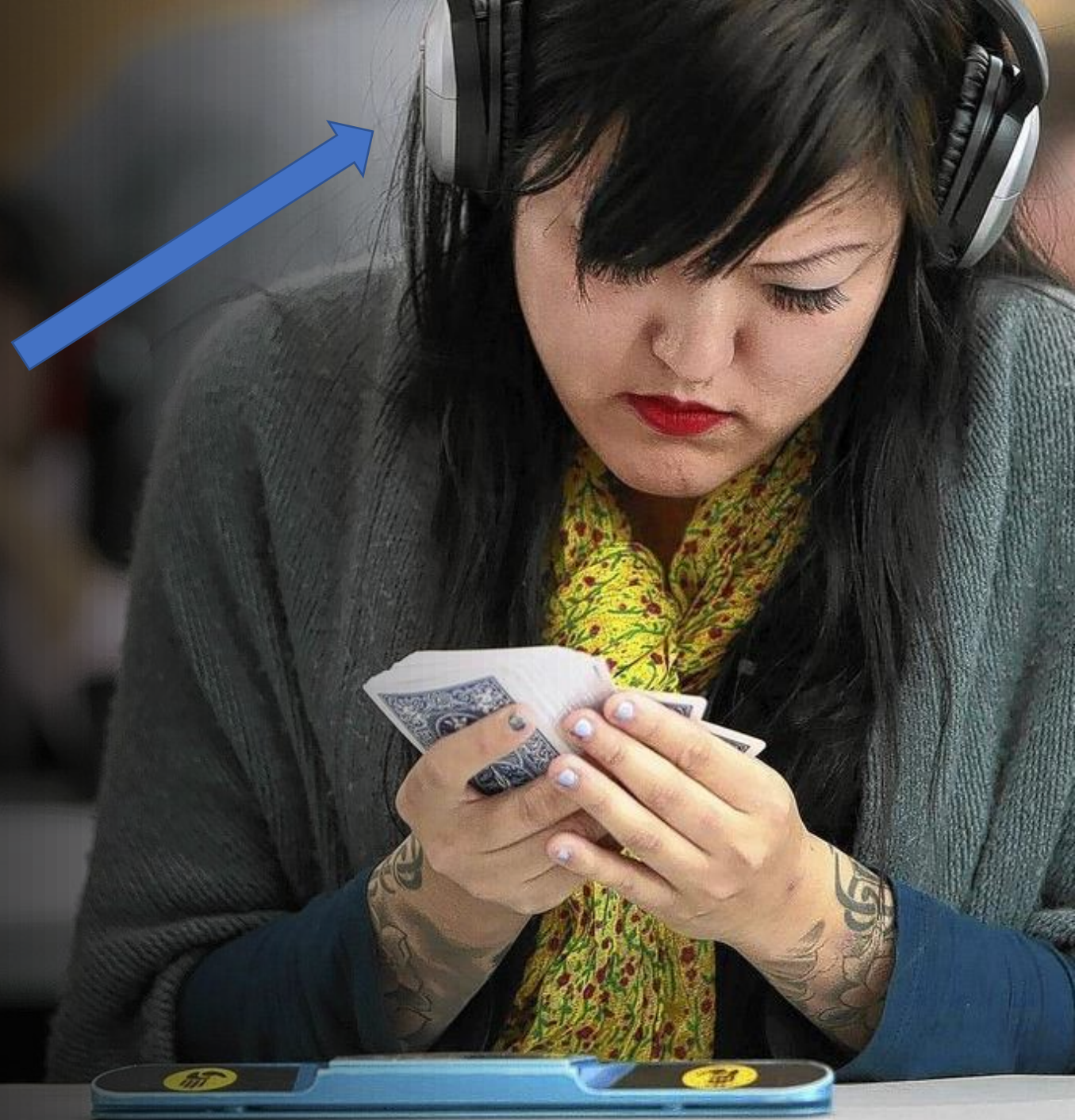


This is Neuroplasticity
We can learn and change



How To Improve
Memory:

The Secrets of Memory
Champions and Those
With Incredible Memory



How To Remember More of What You Are Reading?



The study tested four methods for learning written information:

1

Reading silently

2

Hearing
someone else
read

3

Listening to a
recording of
oneself reading

4

Reading aloud
in real time

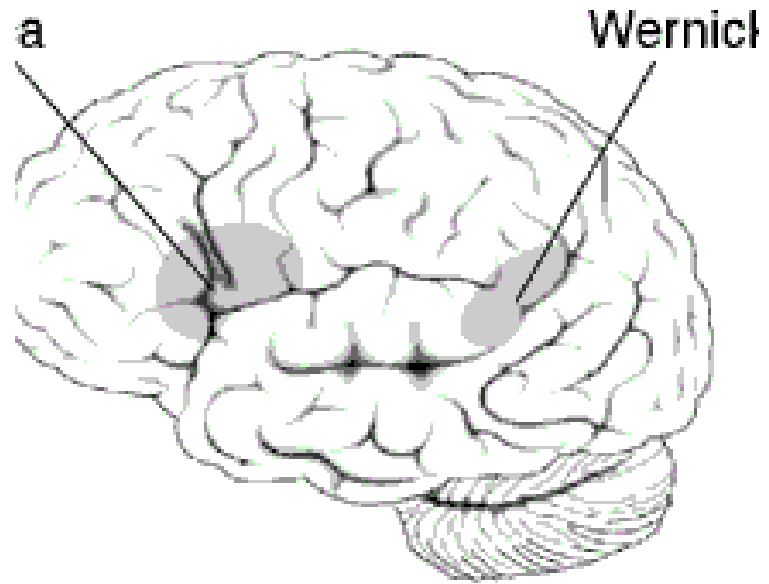
Read It Out Loud

Study found that speaking text aloud helps to get words into long-term memory.

The **most beneficial impact on memory.**

Learning and memory benefit from active involvement



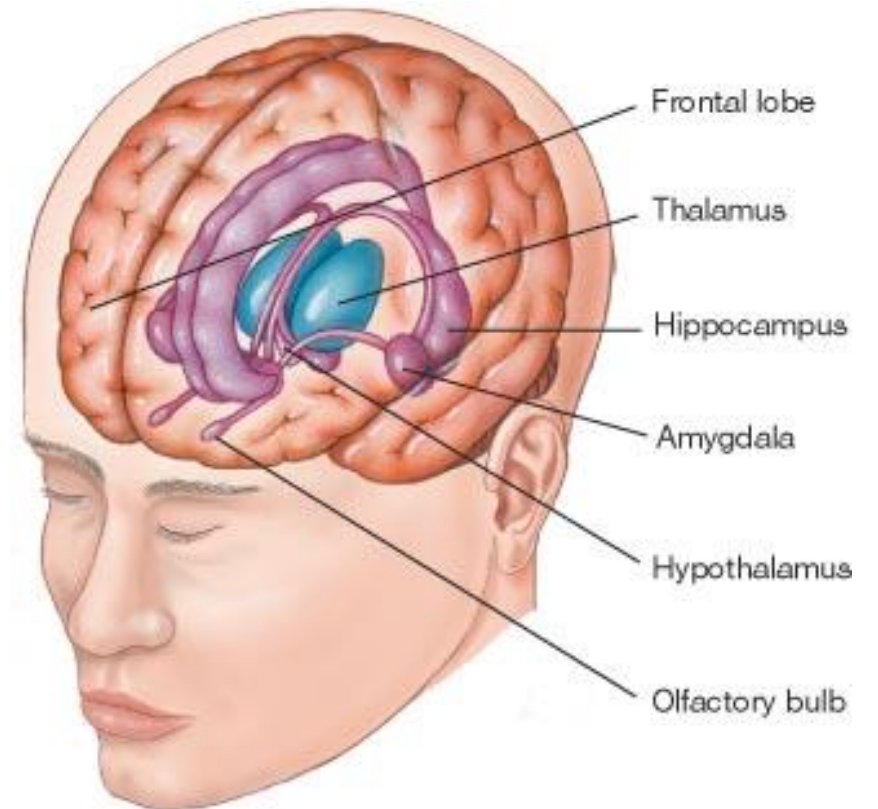


Stop and Say It Out Loud:
Actively Recruit Multiple Parts Of
Your Brain

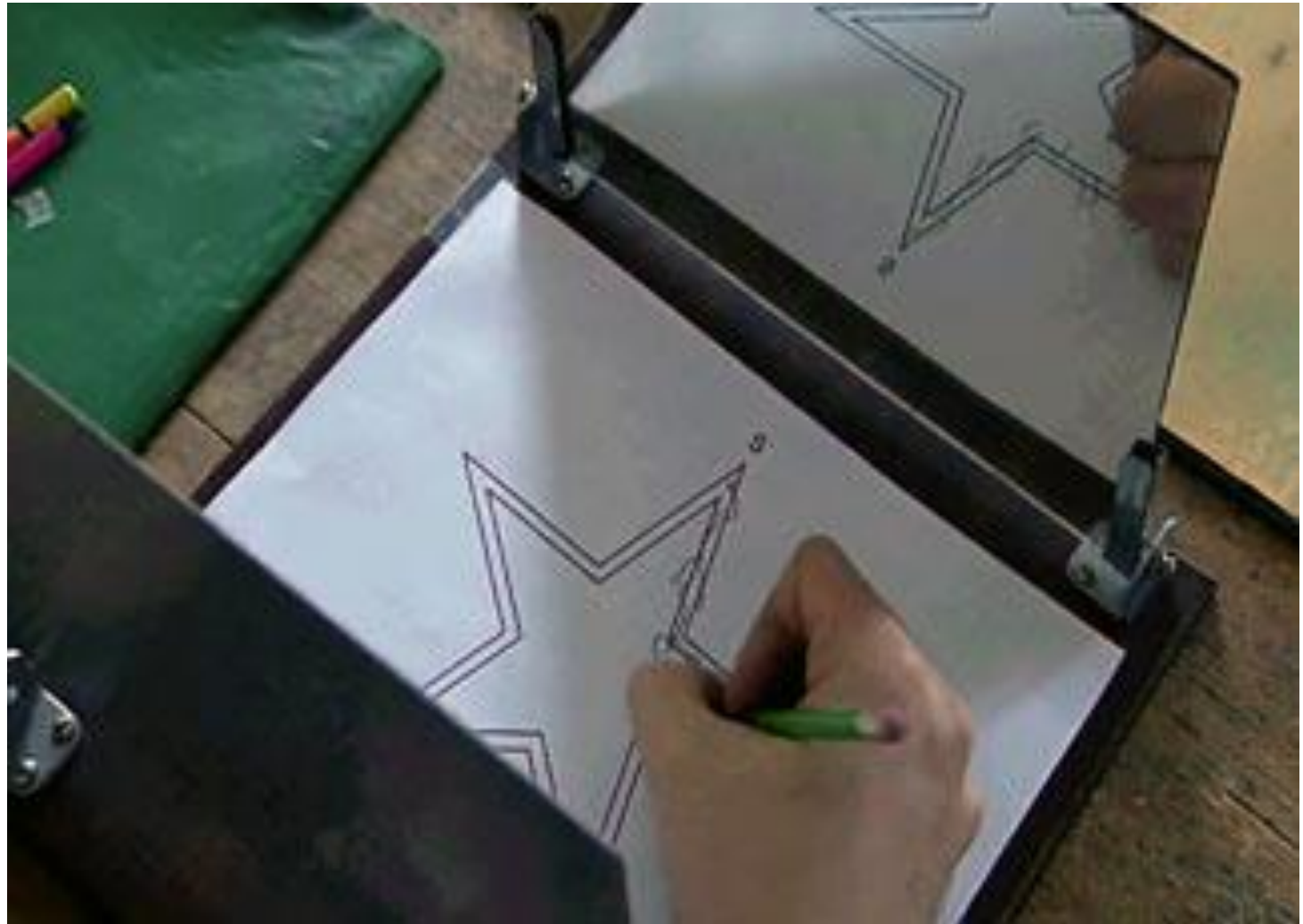


Take It A Step Further?

Back To H.M. (Removed Hippocampus)



Landmark
Study with
HM

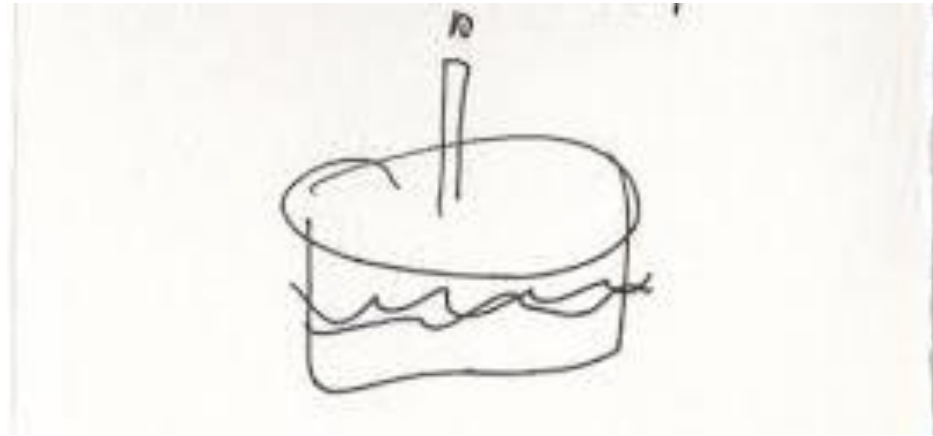




2nd Form of Memory Discovered

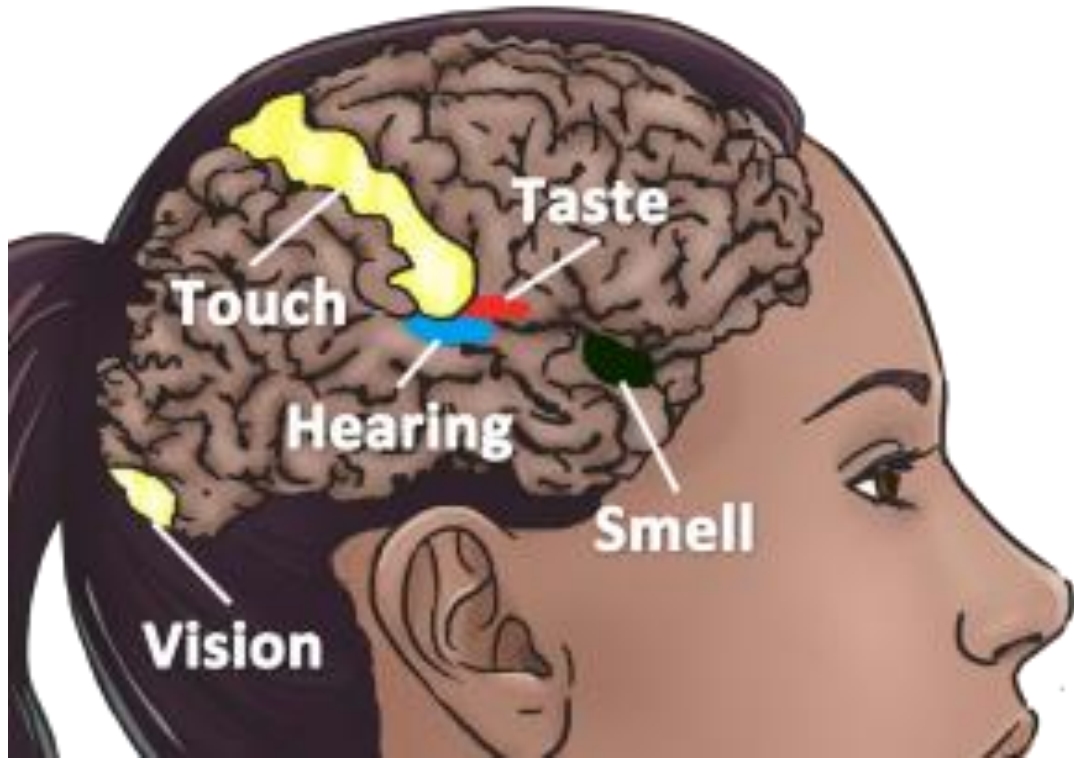
Draw It: Dual Coding

Cake



Study from University of Waterloo: Representing images and pictures, are mostly intact in normal aging, and in dementia. Drawing is particularly relevant for people with dementia because it makes better use of brain regions that are still preserved, and could help people experiencing cognitive impairment with memory function.

Being investigated as a therapy option for those with dementia to hold onto memories



SYNESTHESIA

0123456789

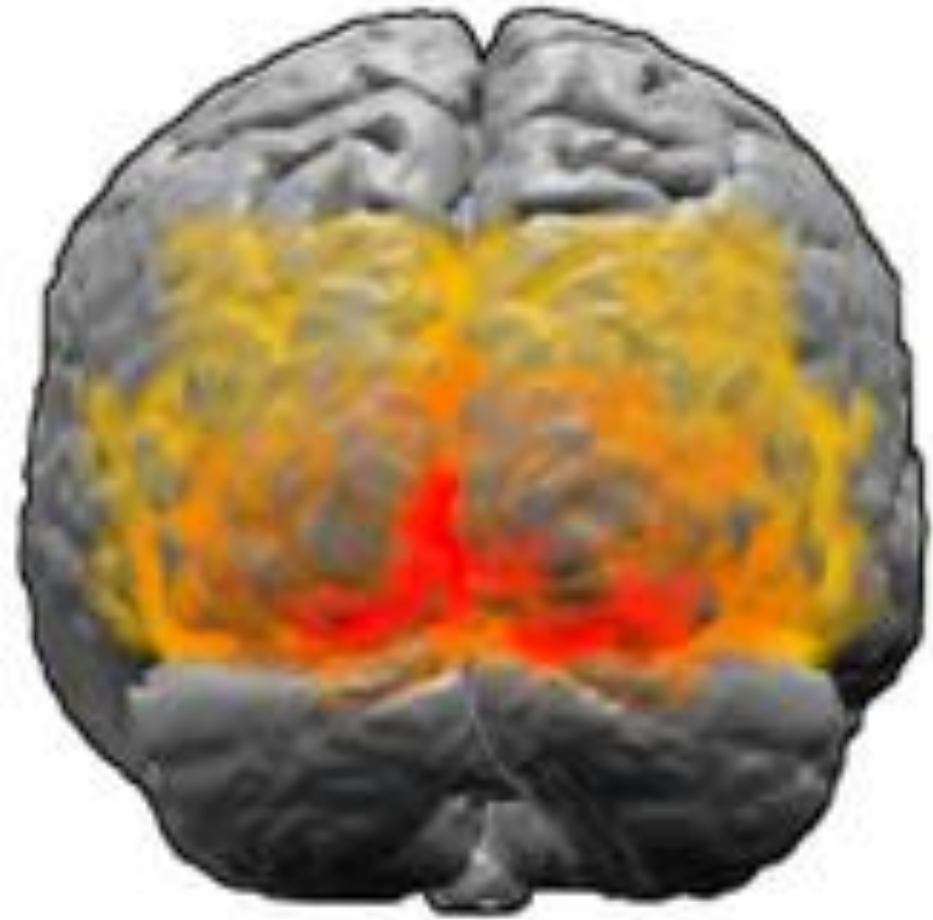


- What's happening in the brain?

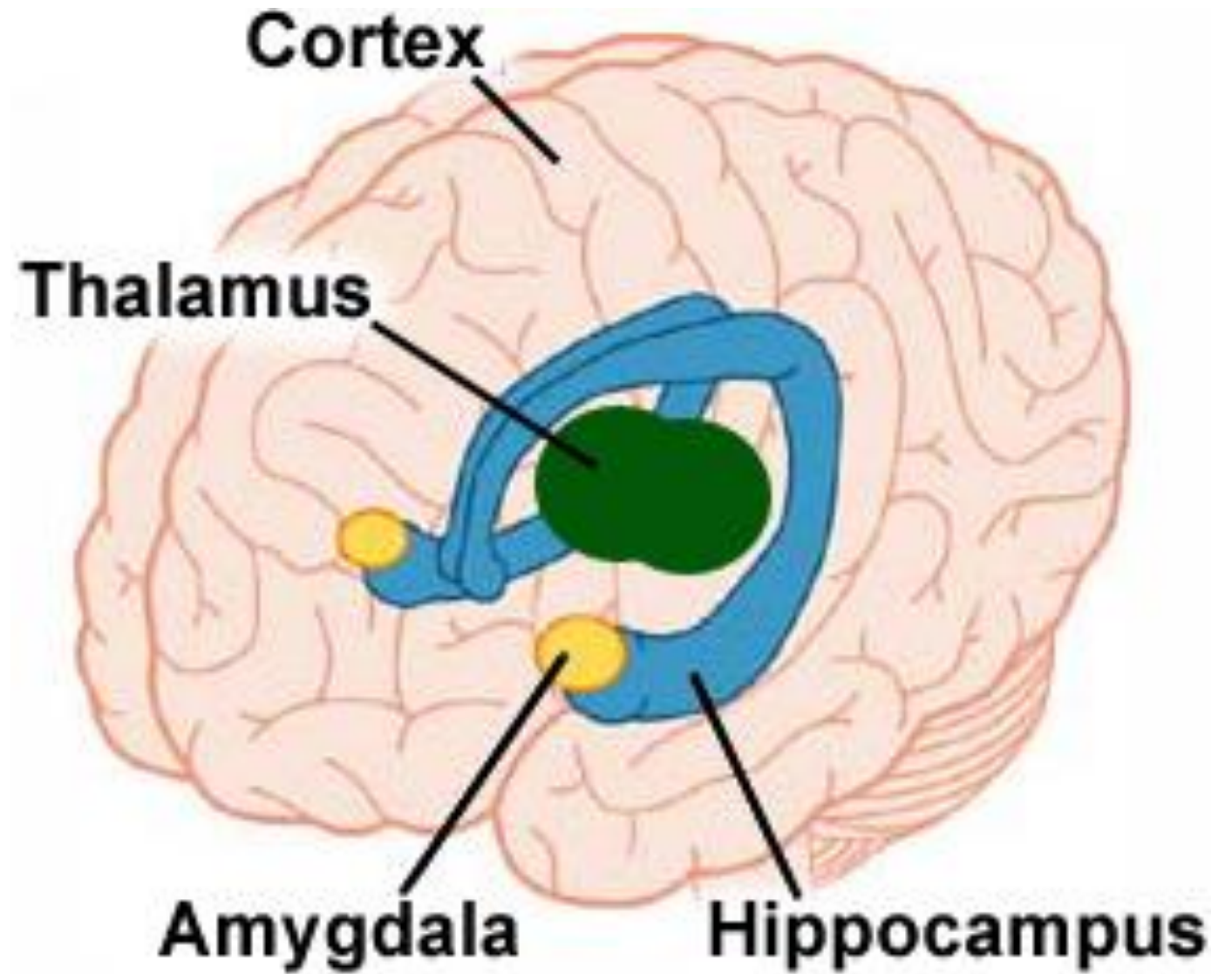
2. Associate it

Super Agers Study Published July 6, 2021

3. Visualize It
(Location Based)
Think of
Memory of Loci



4. Make It Emotional

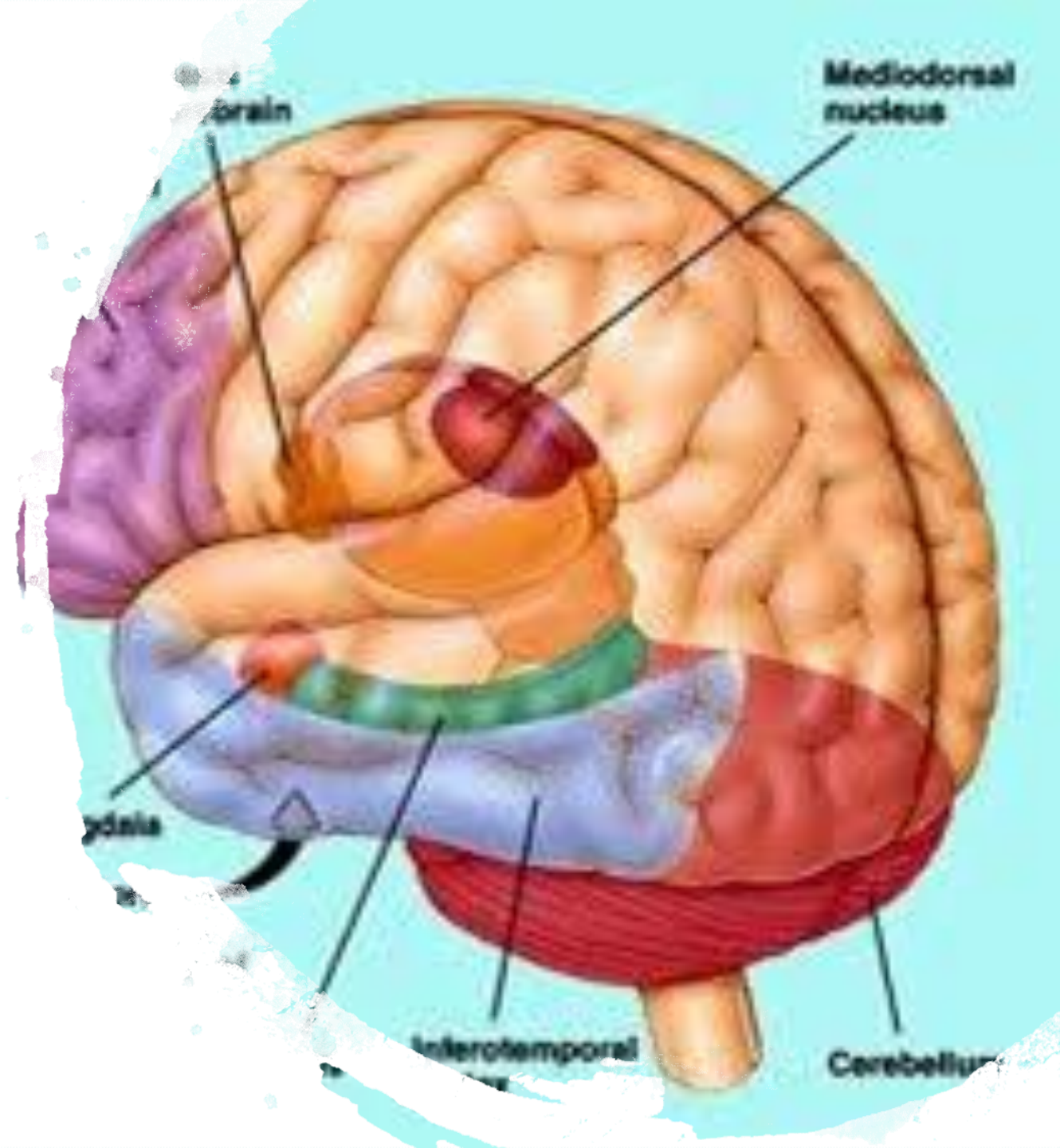


Your Brain Is
Not Designed
To Remember
Your
Password!



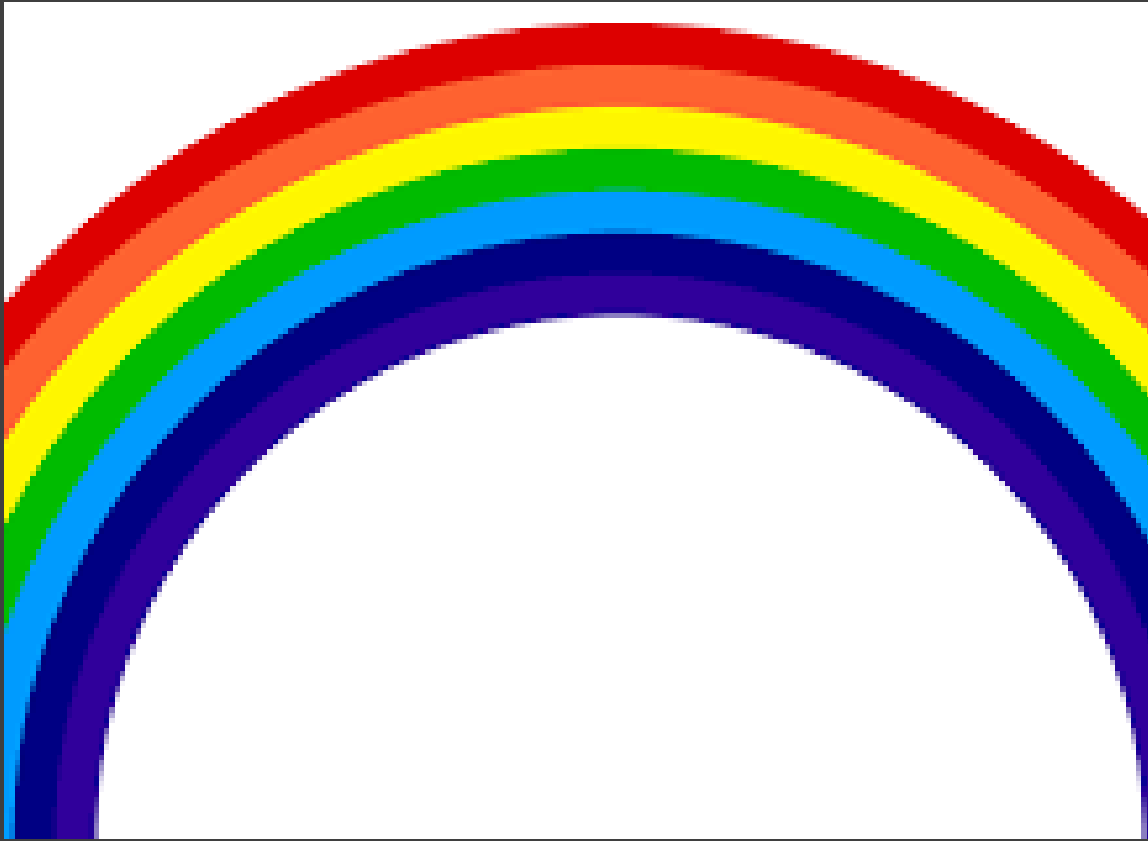
Password Memory Tips

- Make it emotional

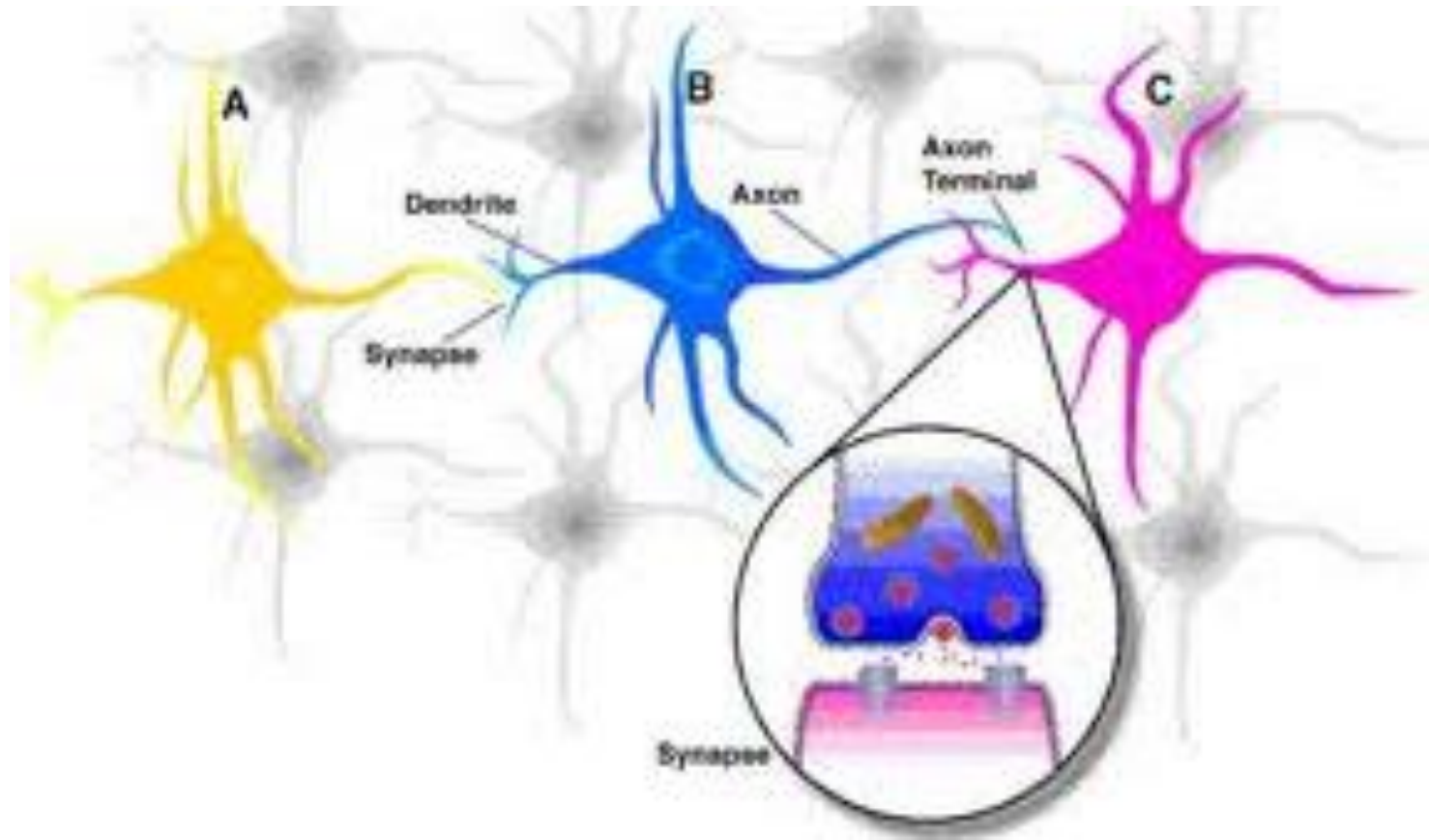


Make Silly Mnemonics so it's **SAVED**

- **S**ay It Out loud
- **A**ssociate it
- **V**isualize it
- **E**mootional
- **D**raw it



SHO ME or Roy G Biv



Review It



Say it out loud



Associate It



Visualize



Emotional



Draw it

Use distributive practice

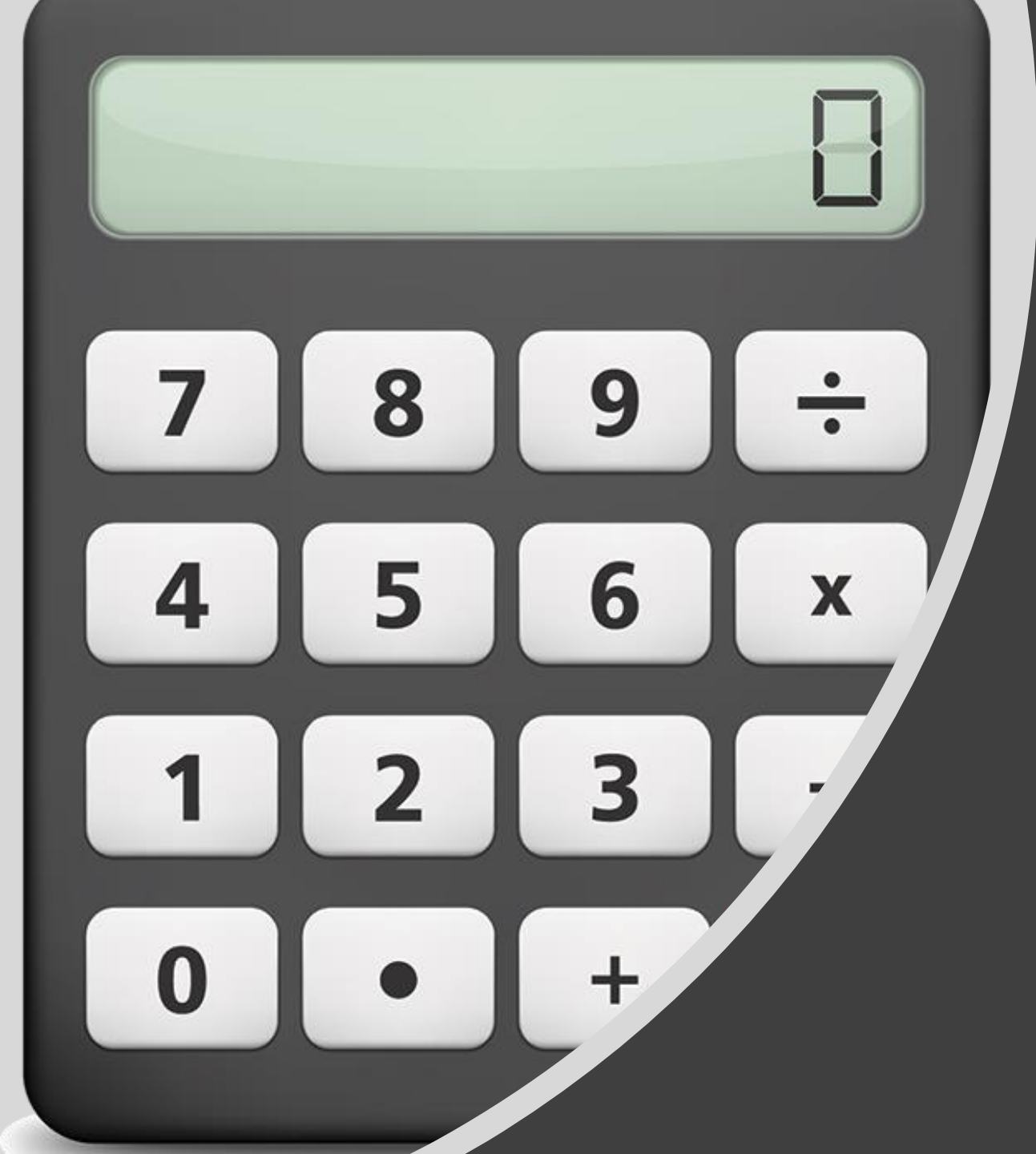
For a concept to move from your temporary working memory to your long-term memory, two things need to happen:

The concept should be ***memorable*** and it should be ***repeated***.



Think About Five Ways of Learning

- 1. Say It Out Loud
- 2. Write It Down
- 3. Discuss It and Listen
- 4. Re-write a summary
- 5. Review with flash cards



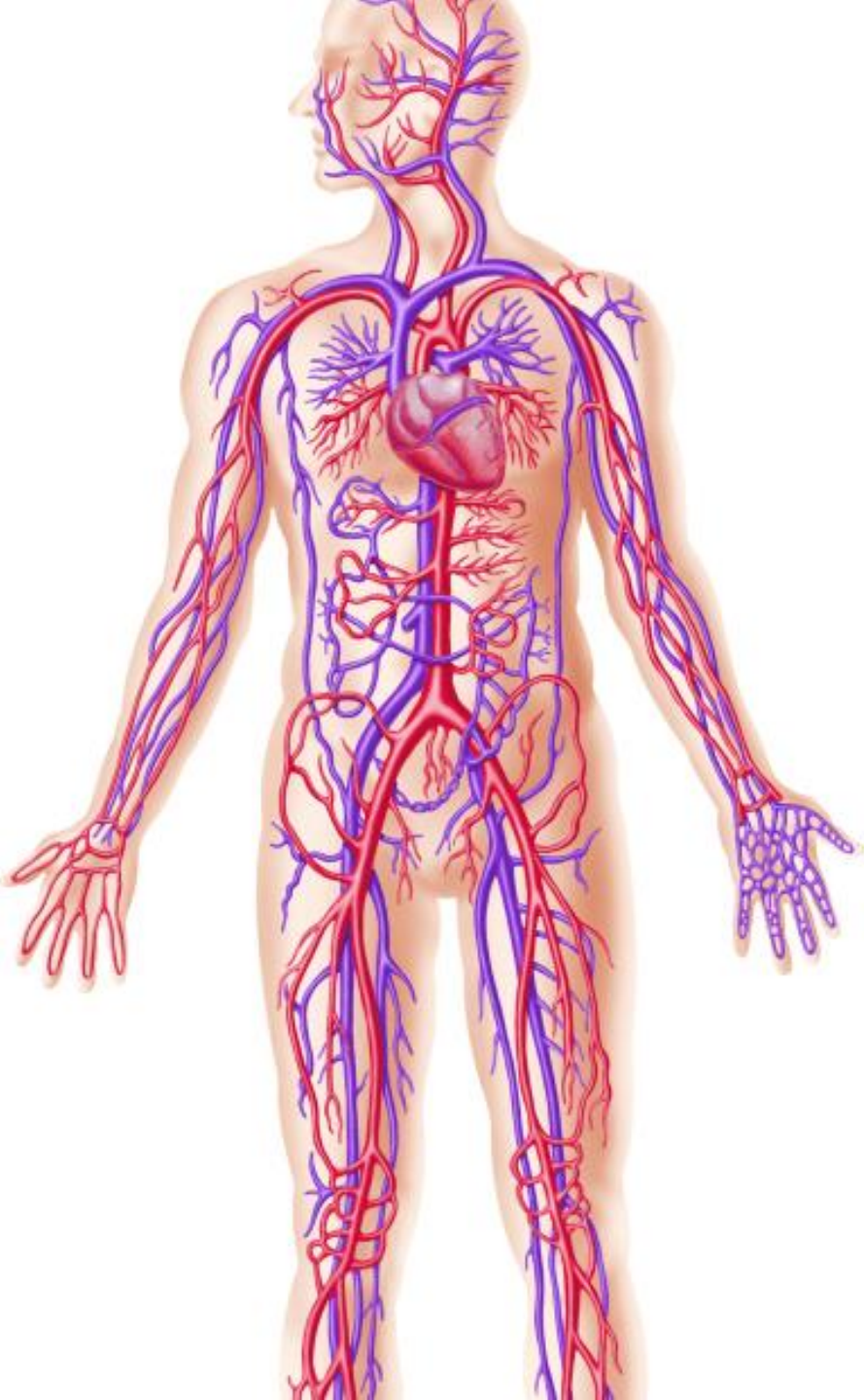
2021 Tips

Factors For Healthy Memory on Dementia Calculator

- 1. Engage in learning new things (Second language, new subject, musical instrument, new sport)
- 2.
- 3.
- 4.
- 5.

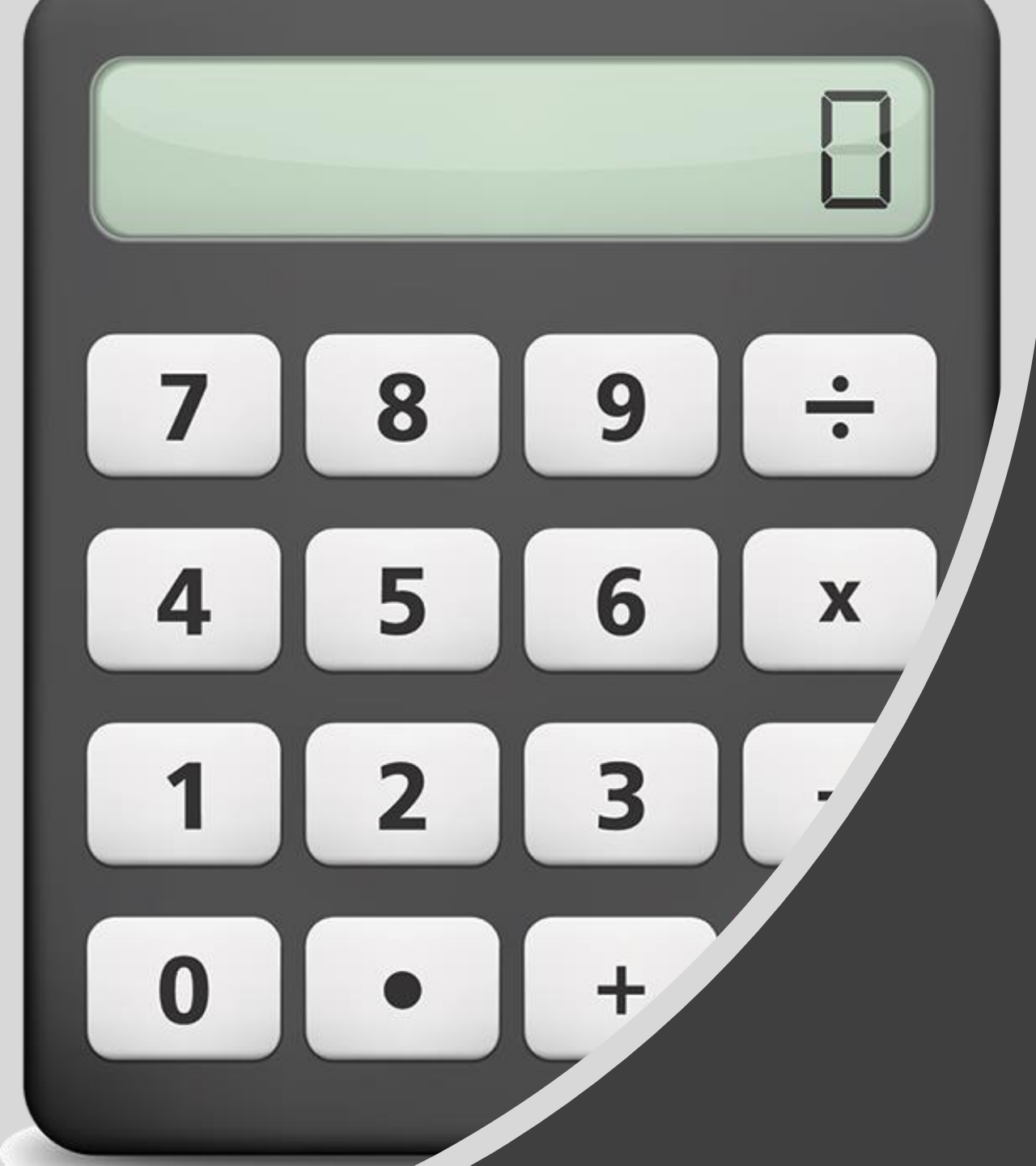


Blood Pressure



Blood Pressure and Memory

- In the US, 65% of adults over age 50 have above-normal blood pressure -- putting them at greater risk of heart attack, stroke and **dementia**
- Fewer than 40% meet recommended aerobic exercise guidelines.
- Lots of strategies. Take time and effort. Interesting new study...



2021 Tips

Factors For Healthy Memory on Dementia Calculator

- 1. **Engage in learning new things (Second language, new subject, musical instrument, new sport)**
- 2. Blood Pressure
- 3.
- 4.
- 5.



Food

Eating processed meat could increase dementia risk by 44%

- Data from 500,000 people
- Consuming a 25g serving of processed meat a day, the equivalent to 3 to 4 pieces of bacon



What About Unprocessed Meat?

- Eating some unprocessed red meat, such as beef or pork, could be protective, as people who consumed 50g a day were 19% less likely to develop dementia.
- Choline?



20 Year Study: These Foods Lowered Risk of Dementia By Two to Four Times....



More berries, apples and tea have protective benefits due to Flavonols

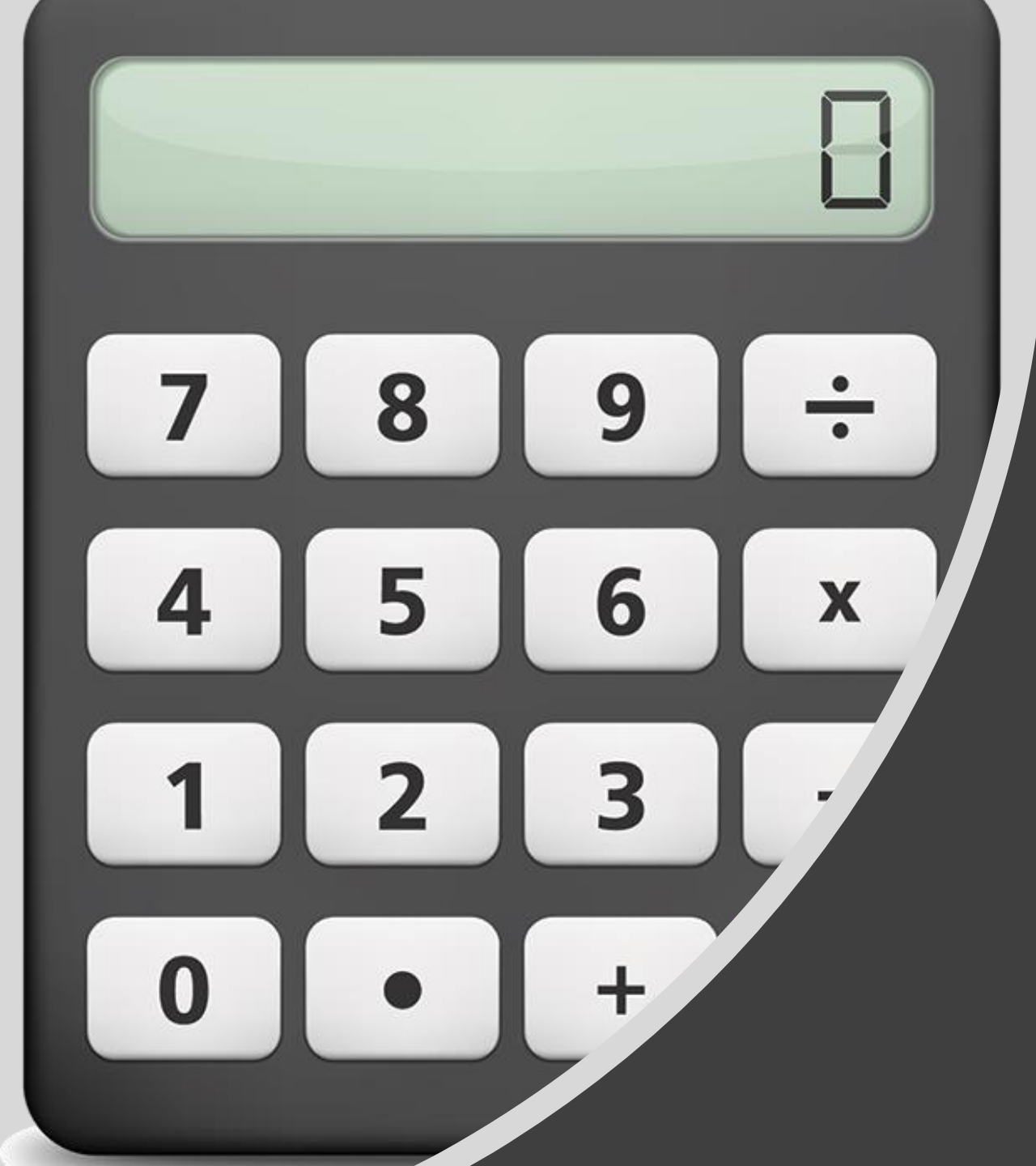


Low intake:

- no berries per month
- roughly one-and-a-half apples per month
- no tea

High intake:

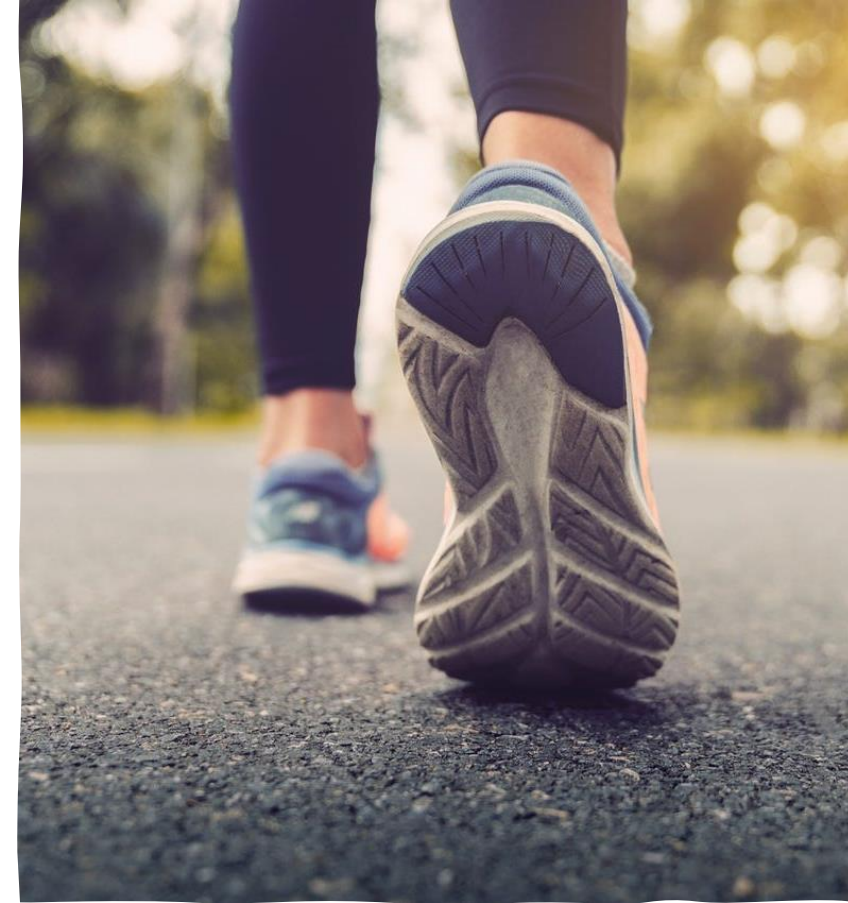
- roughly 7.5 cups of blueberries or strawberries per month
- 8 apples and pears per month
- 19 cups of tea per month



2021 Tips

Factors For Healthy Memory on Dementia Calculator

- 1. **Engage in learning new things (Second language, new subject, musical instrument, new sport)**
- 2. Blood Pressure
- 3. Food
- 4.
- 5.



What Type of Exercise Improves Memory Most In Those Ages 60 to 88?

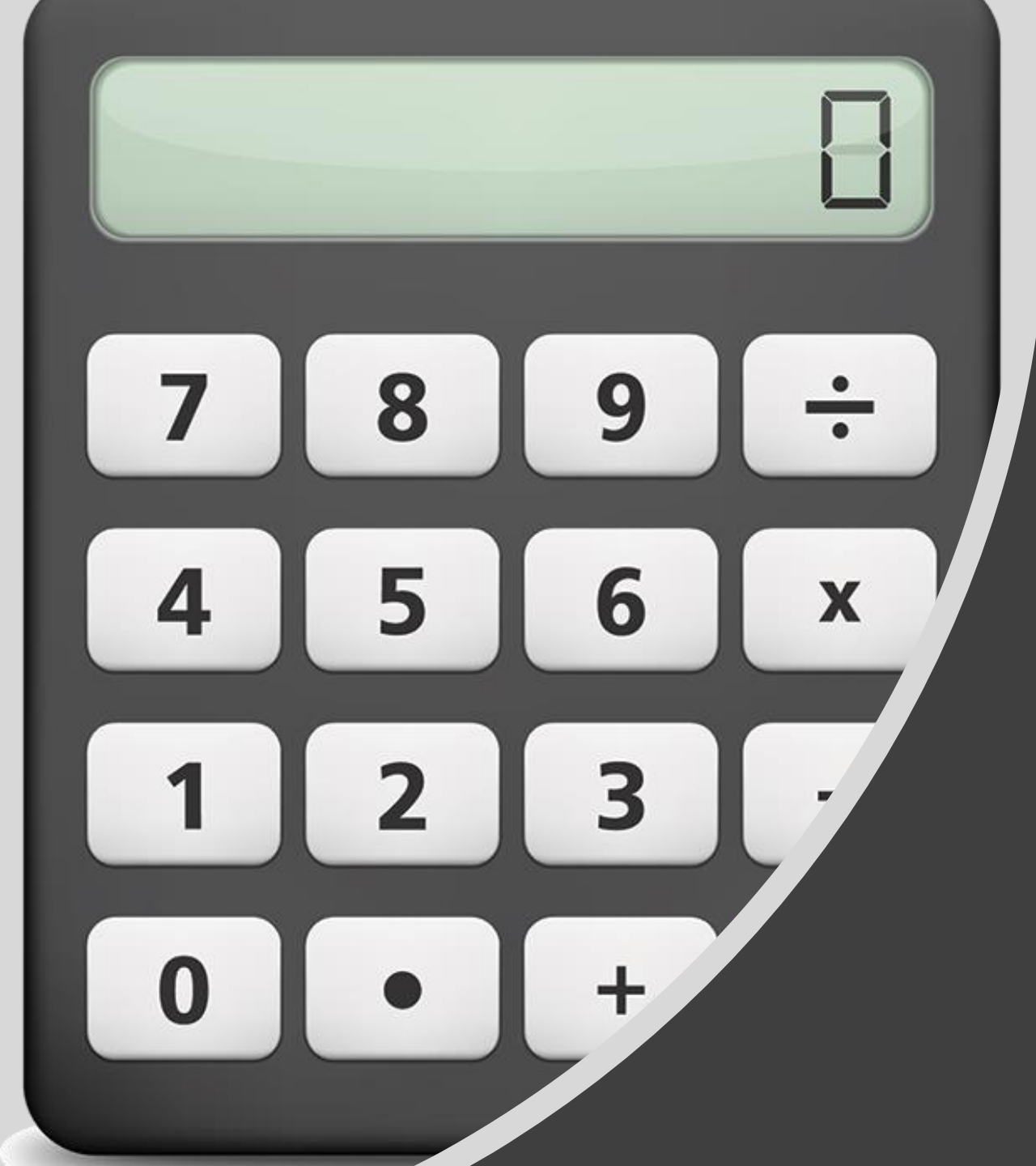
- Monitored over a 12-week period and participated in three sessions per week and tested memory.

Seniors who exercised
using short, bursts of
activity saw an
improvement of up to
30% in memory
performance while
participants who worked
out moderately saw no
improvement, on
average





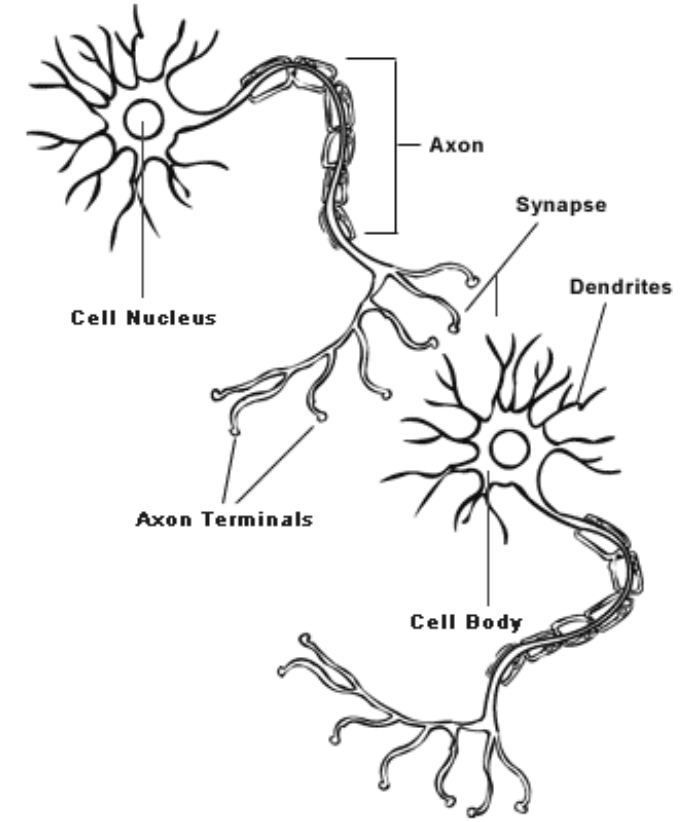
10,000 Steps?



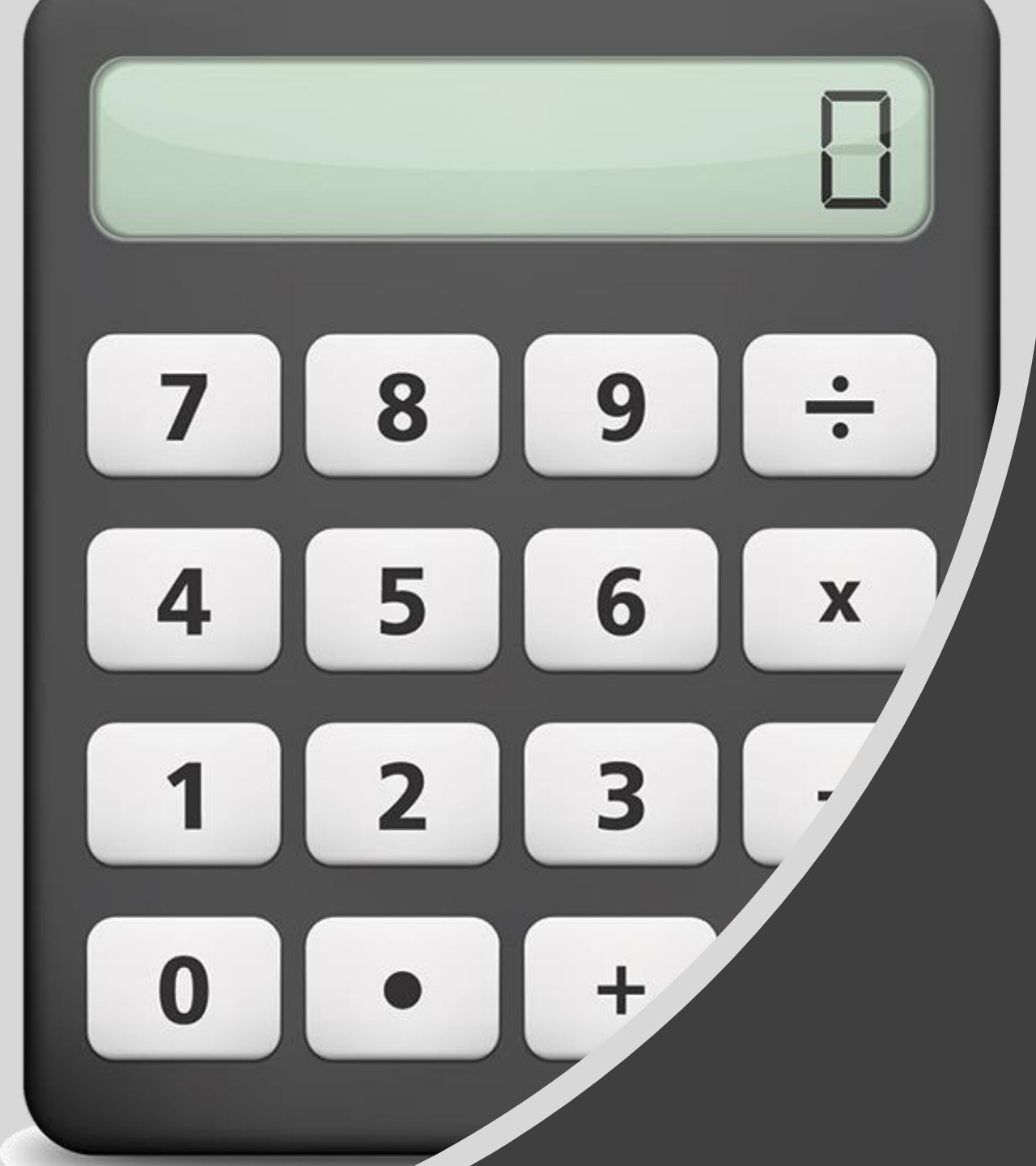
2021 Tips

Factors For Healthy Memory on Dementia Calculator

- **1. Engage in learning new things (Second language, new subject, musical instrument, new sport)**
- 2. Blood Pressure
- 3. Food
- 4. Faster Gait
- 5.



What Happens In Your Brain When You Learn Something
During The Day and Night.....



2021 Tips

Factors For Healthy Memory on Dementia Calculator

- 1. **Engage in learning new things (Second language, new subject, musical instrument, new sport)**
- 2. Blood Pressure
- 3. Food
- 4. Faster Gait
- 5. Sleep

Surprising Insight....

Cigna found this factor has the same impact on mortality as smoking 15 cigarettes a day....

Making it even more dangerous than obesity

Journal of Gerontology: Psychological Sciences found that this same factor increases the risk of dementia by a startling 40 percent.

Loneliness and Isolation



Genes



Have Fun!

Socially active 60-year-olds face lower dementia risk

- Being more socially active in your 50s and 60s predicts a lower risk of developing dementia later on,
- The analysis showed that someone who saw friends almost daily at age 60 was 12% less likely to develop dementia than someone who only saw one or two friends every few months.
- Social contact at any age may well have a similar impact on reducing dementia risk.



Why?



Thanks!

Boost Memory

- **S**ay It Out loud
- **A**ssociate it
- **V**isualize it
- **E**mootional
- **D**raw it

1. **Learn New Things:** (Second language, new subject, musical instrument, new sport)
2. **Blood Pressure**
3. **Food**
4. **Faster gait**
5. **Sleep**
6. **Loneliness/Isolation: The importance of fun**