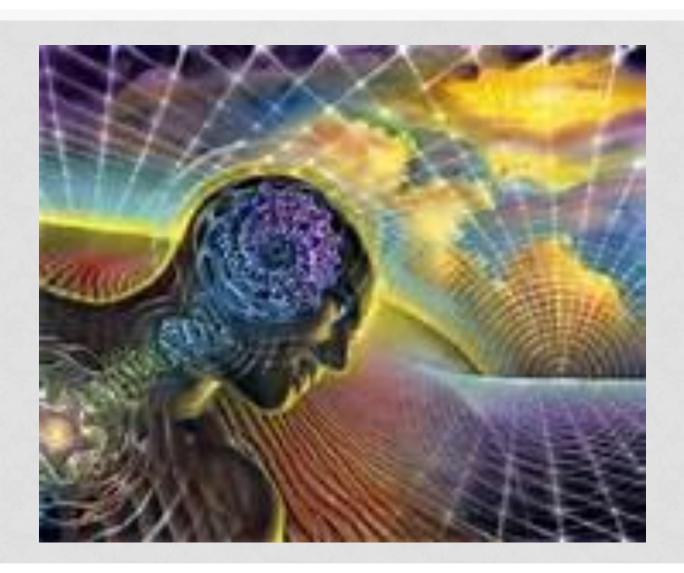
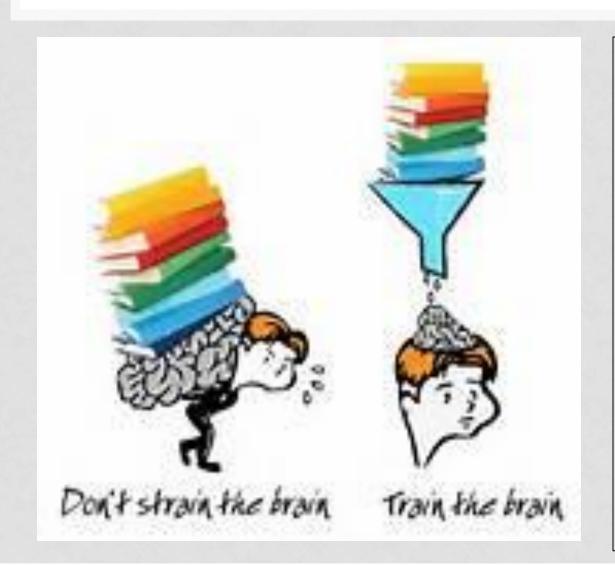
# MAKING MEANING UNIQUELY

NATURAL NEURONS

## IN THIS SESSION WE DISCUSS NEUROLOGY! THIS GIVES MUCH NEEDED INSIGHT INTO HOW THE BRAIN WORKS AND HOW WE LEARN.



#### TRAIN THE BRAIN



if we work with our brain than we can train our brain if we understand how the brain works we can do things that help it to work better faster and stronger. Similar to training in a gym

#### HOW THE BRAIN WORKS

New Brain-based research tells us firstly that learning is individual and unique. Genetics, development, individual experience and culture play a large role in this UNIQUENESS

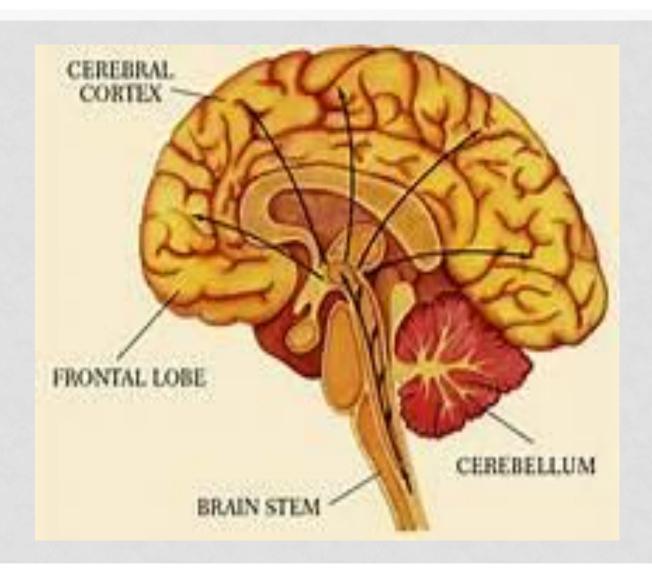


#### HOW THE BRAIN WORKS

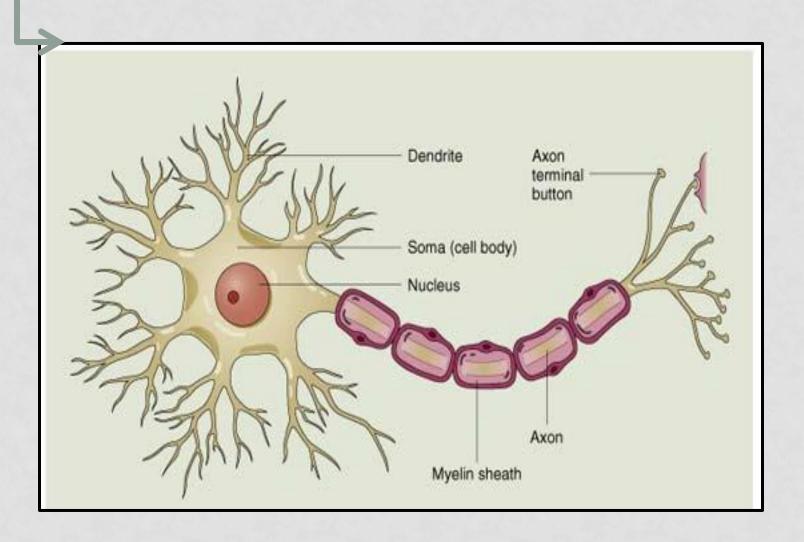
Secondly and most surprisingly the brain cells themselves are plastic: always growing and changing.



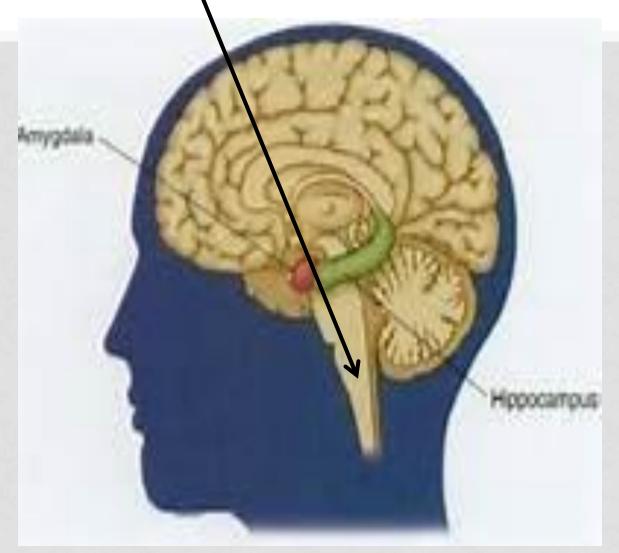
### **BRAIN PHYSIOLOGY**



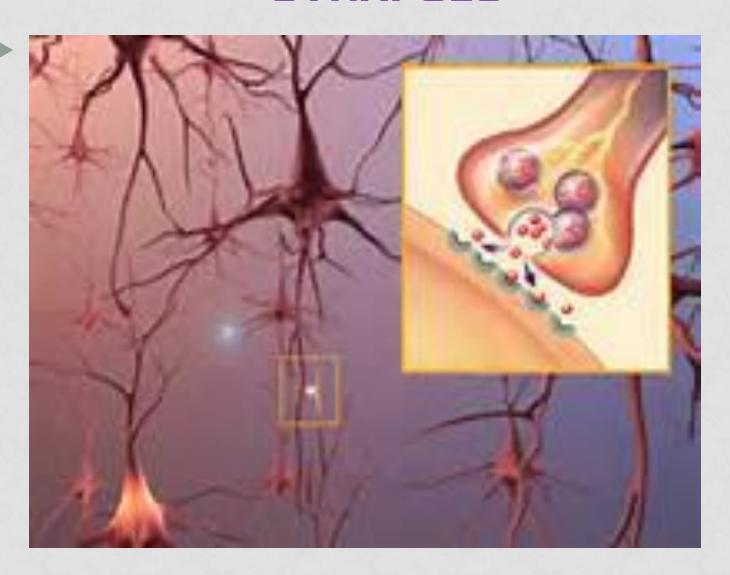
### NEURONS



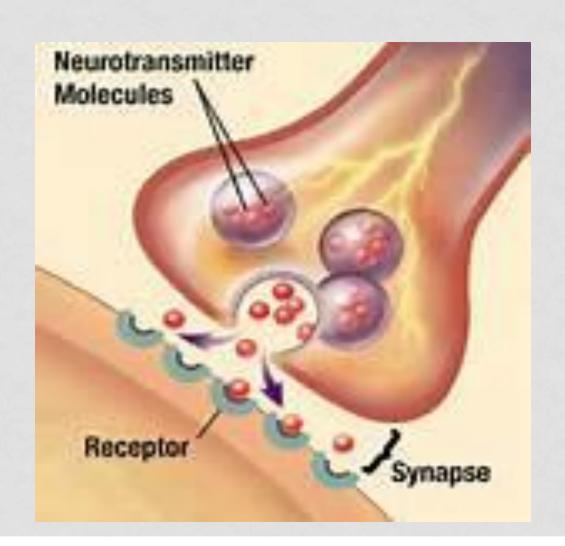
### REPTILIAN BRAIN/ BRAIN STEM



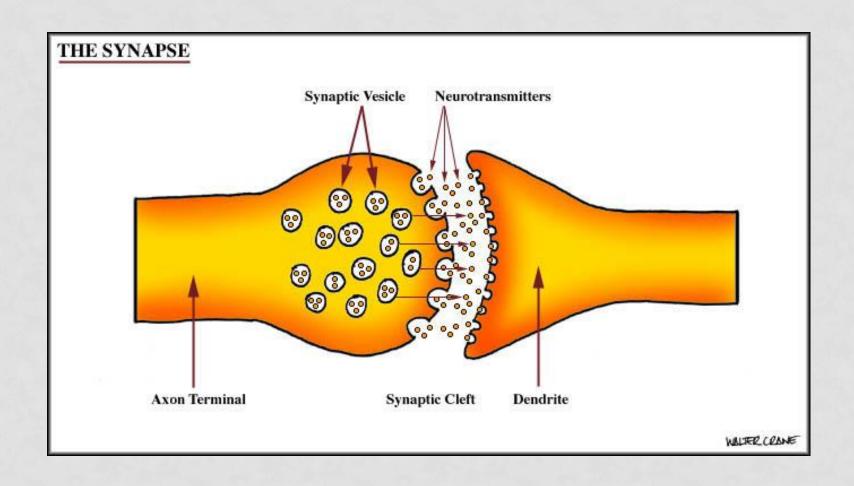
### SYNAPSES



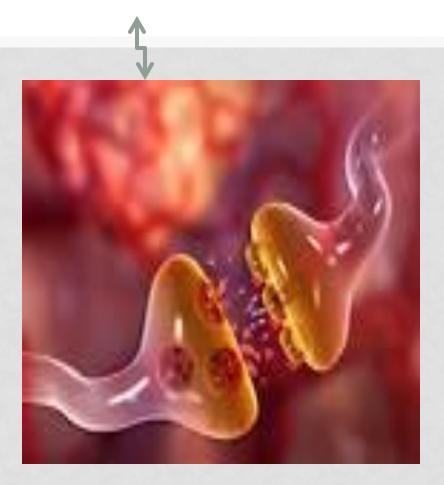
## THE "PLASTIC" SYNAPSE AND MEMORY



#### FORMATION OF MEMORY

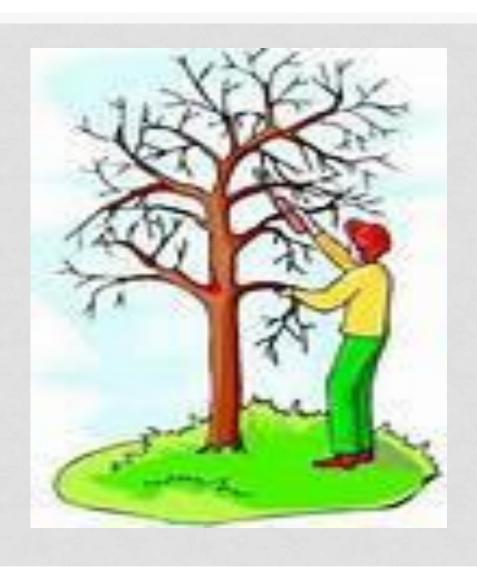


## FORMATION OF MEMORY THROUGHOUT LIFE!!!



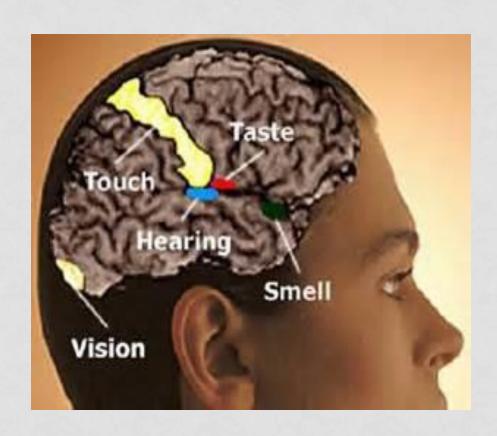
This fact means that any learner can increase their intelligence !!!

#### **USE THEM OR LOSE THEM**



### HOW DOES THE BRAIN LEARN: PERCEPTION

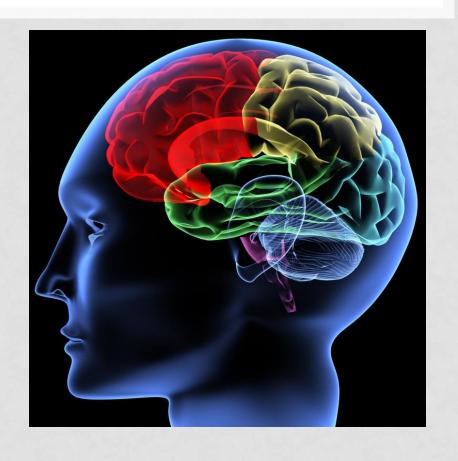




BRAIN BASED LEARNING IS LEARNING IN THE WAY THAT THE BRAIN IS NATURALLY DESIGNED TO LEARN.

## HOW DOES THE BRAIN LEARN: 1.PROCESSING

- Chunking: putting similar things together
- Encoding : assigning symbols
- Give meaning: relating to your own experience



Processing, describes how we deal with the sensory impulses we perceive

### HOW DOES THE BRAIN LEARN: ASSIMILATION

This is the process of taking in and making new knowledge your own. Context plays a critical role in assimilation

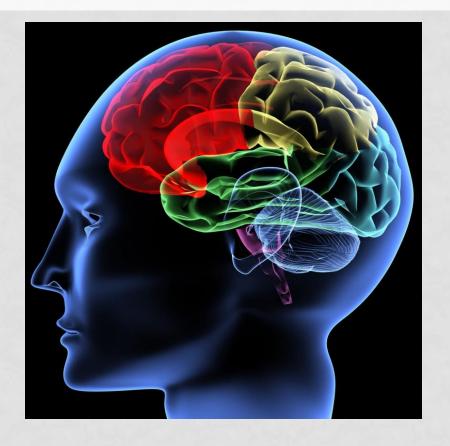
### **Context Means**

- Your own values
- How and where you are learning



## HOW DOES THE BRAIN LEARN: ACCOMMODATION

linking the new knowledge to our prior experiences and beliefs.

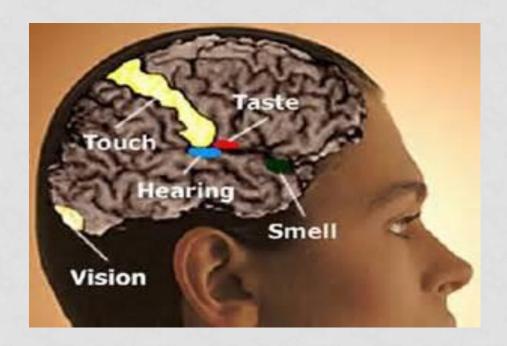


This is where connection and changes of neurons take place.
Strong bridges are built creating long term memory

### TIPS ON HOW TO IMPROVE MOVEMENT FROM SHORT TERM MEMORY TO LONG TERM MEMORY



### Use all sensory inputs



### TIPS ON HOW TO IMPROVE MOVEMENT FROM SHORT TERM MEMORY TO LONG TERM MEMORY



### Make it meaningful



### TIPS ON HOW TO IMPROVE MOVEMENT FROM SHORT TERM MEMORY TO LONG TERM MEMORY

Elaborate and Engage

Repeat



#### V.A.K. LEARNING STYLES

#### visual-auditory-kinesthetic learning styles

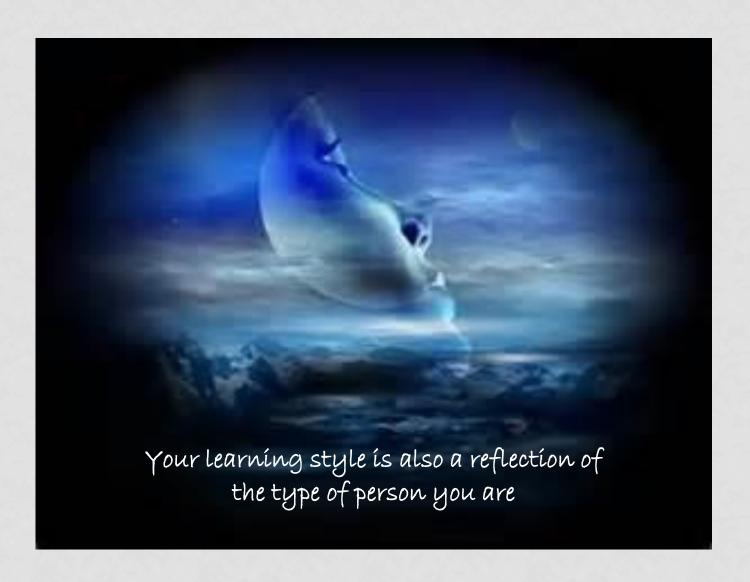
Aim is to determine which learner you are and than design a learning method that matches that style.

**Visual** learning style involves the use of **seen** things, including **pictures**, **diagrams**, **demonstrations**, **displays**, **handouts**, **films**, **flip-chart**, **etc**.

**Auditory** learning style involves the transfer of information through listening: to the spoken word, of self or others, of sounds and noises.

Kinesthetic learning involves physical experience - touching, feeling, holding, doing, practical hands-on experiences.

Kinesthetic learning describes a learning style which involves the stimulation of nerves in the body's muscles, joints and tendons.









# THE VISION, AUDITORY, KINESTHETIC (V.A.K)

LEARNING STYLE TEST