#### The Teen Brain

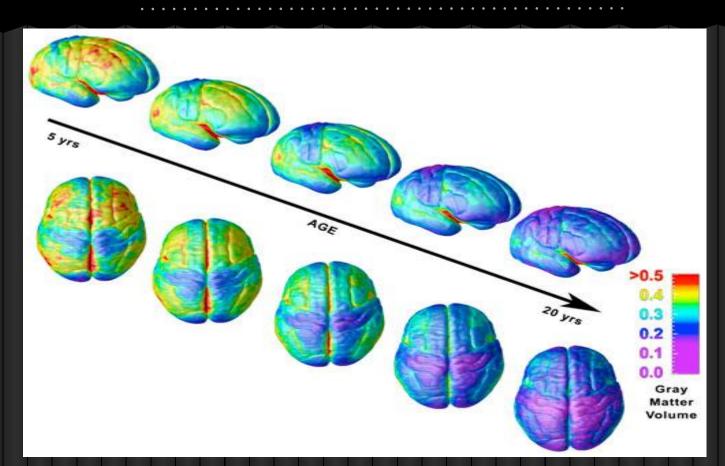
Cognitive Development of the Adolescent Brain



Traci Chudy

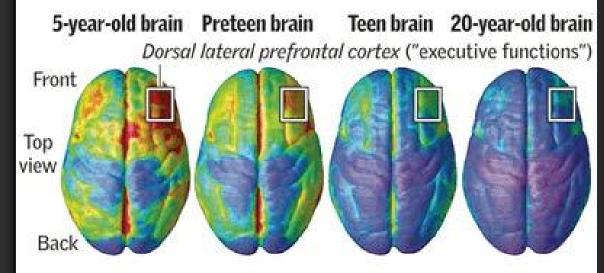


### The Adolescent Brain



#### Judgment last to develop

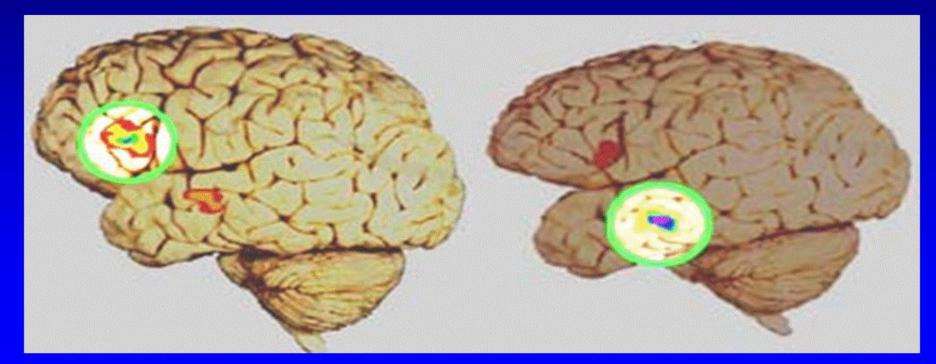
The area of the brain that controls "executive functions" — including weighing long-term consequences and controlling impulses — is among the last to fully mature. Brain development from childhood to adulthood:



Red/yellow: Parts of brain less fully mature Blue/purple: Parts of brain more fully matured

Sources: National Institute of Mental Health; Paul Thompson, Ph.D., UCLA Laboratory of Neuro Imaging Thomas McKay | The Denver Post

# When Reading Emotion... Adults Rely More on the Frontal Cortex While Teens Rely More on the Amygdala



### Pruning

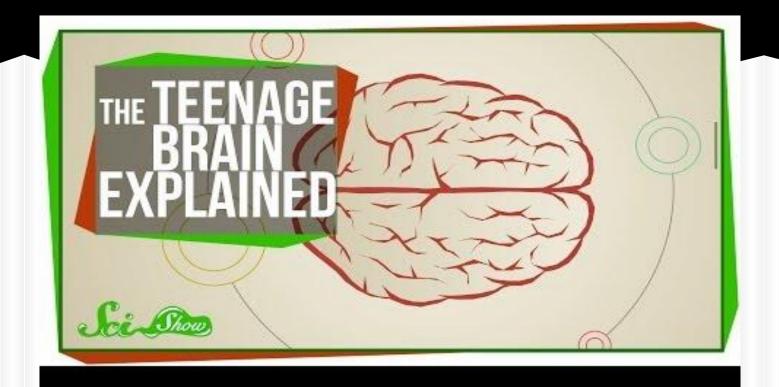
- ❖ Adolescents flooded with world's intense and overwhelming problems
  - > Digital media
  - Global access
- \* Remodeling of the brain
  - > Starts just before teen years and continues well into mid-twenties
  - ➤ PRUNING down of existing/unnecessary knowledge and creating efficiency and coordination of what is left
- Use it or lose it
  - ➤ What teens' brains are focusing on during this pruning process is what will survive (music, sports, academics, video games, couch potato)

#### Neuroscientist Sarah-Jayne Blakemore



The Neuroanatomical
Transformation of the
Teenage Brain
With
Jill Bolte Taylor





https://youtu.be/hiduiTq1ei8

#### Impact The Mind With Color

**Blue** - Studying, Thinking, Concentration

Purple - Tranquilizing, Good for Appetite Control

Pink - Restful, Calming

White — Disrupting

#### Color Continued...

Red - Creative Thinking, Short-Term Energy Boosts

Green - Productivity, Long-Term Energy

Pastels - Minimum Disruption Across All Moods/Activities

Yellow

Orange - Physical Work, Exercising, Positive Mood Coral

#### Lavender, Lemon, Peppermint... Add Aroma

Lavender - Reduces Stress

Lemon - Induces Positive Mood

Peppermint – Refreshes & Invigorates

Apple – Relaxes Brain Waves & Reduces Blood Pressure

Vanilla - Relaxes & Soothes

# THANK YOU!!!

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#### Right brain expression Left brain expression (Creative) (Academic) detail oriented — — — — — — —— 'big picture' oriented (Looks at parts) —————— — (Looks at wholes) Logical ——————— ————— Random Sequential ——————— \_\_\_\_\_ Intuitive Holistic Rational —————— -- philosophy & spiritualism math and science ---can comprehend — — can 'get it' (the meaning) \_\_\_\_ Synthesizing Analytical — — — — — \_\_\_\_\_Subjective Objective ————— \_\_\_\_ uses feeling uses logic ----facts rule — — — — -- imagination rules — symbols and images words and language --present and past -— — present and future knowing — — — \_\_\_\_ believes \_\_\_\_ appreciates acknowledges — — knows object name — knows object function reality based ———-— — fantasy based presents possibilities forms strategies -— spatial perception order/pattern perception impetuous/spontaneous practical/planned — — — safe ——————— \_\_\_\_ adventurous cautious —————— ——— carefree/risk taking Illustration by: VaXzine Written and slide design by Dr C Daniels 2008

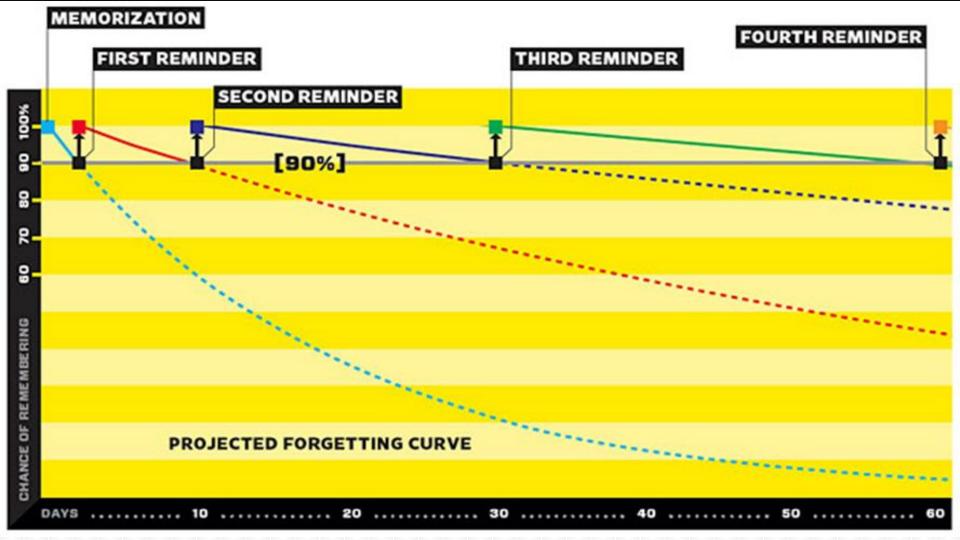
# **Working Memory** Short term memorizing "Cramming" Learned material only makes it to your "working memory" Learned material will soon be forgotten

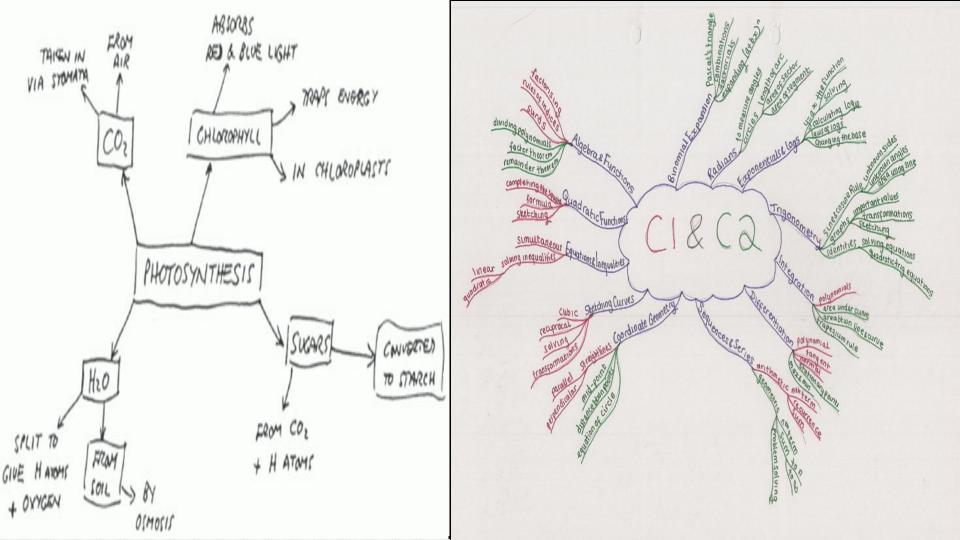
## Learned material makes it to your "long-term

memory"

Long Term memory

- Review and revisit material often
- Information should be reviewed ten minutes
   after learning and every seven days to keep in
   long-term memory





Call to order - Donner absent (2sc -34%) 31 - MAY 2513 1 JUNE 2013 TEXAY JACKSON, MOYO AguiPRE ON WATCH, I have START OF STEPHEN GEN IN 15 250 TANK AT 2363 OAK Calendar head the previous watch tog's it's per Ecolism and END OF STEURIES STOLD TELES THE AS 2305 MA found no Descrepensies, The watch is Releived, The Appro Ask 58 sal or 1500/0 To \$2 Spec a. Week -Taney on sound FOLLOWING EQUIPMENT IS CALINE "3 GEN, P/S MAIN DERTY ON THUS START OF SECURCE ! IT SHE ENGS, #1 8/5 SATEWHICK COOLING, 1/2 Ships his comps. Greek on schedule #1/2 EUMPS, " I Received incesed, " I possible, " I HOT Tops needs 2+ volunteers WHICH CIRC, " 1/2 SANITARY, MIS D, # 1/2 All AL cong's, "1 b. Month - grandions - Tops ME SALTWATER, " I HE Chill WHTER, " I PIS STEERING. ASS. ORABUTED BY BENEVES SACUED. Flo CENTRIFUGE - analyzing shares - bonner PROUBLE SHISTING AL SYSTEM DIRTY OIL THAK 1'5"= 1005 GHIS C. Pear - on track for My SOUNDERSTED ALL THINKS ALL CONTENTS HELOCULTED FOR BOD AC SYNTON TO WORLD MA CROSS not faved a Reading's, checked till Engine Fluid levels - Boeing on Agust + Sept DIS PERSONNEL FORE AND THESE MAIN ENGINESS privace his receivers, checked the Engineering Spices BIS ADDED APX 25 GAL OF SABHO MEDIL TO ROTE SEAL Cleaning / phinting in Engine Room ADDED APP 25 CAL OF SAFER MEDIC TO SAFE WENT Unfinished Bisiness Hedred MISO BOOK COll HIS CONTRACTO COVEY LIN GAME TEST our rounds & Reddings, Chieked All Engine Flord levels a. Managing case loads Ornived Hir Receivers, checked HI Engineering spaces - inthile Ms. Lawrence Thur BOIL STATISTY \$2 GEV, WATERS ! CLO THOMISTERIES 1400 GHIS TO BE SETTLING THAT FREE ME FIS DOL PROMONES IN SCHOOL THEY Carinoe Cleaning ! punting 2025 #2 665 // with # 36cm } b. Working on payment schedule - Green getting atside help 580 Rands & Rendings, Checked All Engine Fluid levels 20% MAIN CHECK COURSE SOUT TO BETCHE. actived his like ites, checked the Engineering spaces 2015 PERMITED POWA ALEXAND PRICE 0900 Lab pung owline \$10 ELECTRICES +1/2 DATE ! C. Parking & ride - share THE EAST MOUTHLY OWS THEST RUN ITUS PROTION CHEEF CONTIN - location Dountary don't forget 215 THEODIS ANT-END PAINTS TANKED 5THRY 0845-52 39 50014-68 10 WEST ONTO BY SEN TAXABLES THE SUSS, LOCKENS BOWN End 88:55 - 52 40 SOM - 68 9 WASTE The way home on 2150 #2 Gen State to . 23 of the New Yor 12 TO STATE Ilo Trimps Fever & 1200 Gal's Flo To settling THAK, From #8-1/5 2300 TRUSTEED DOG GOL OF THE TENN BY TO SETTLEME 1. New Projects b. Next years Tandem-Hold 2550 Este MEN MONO MILES SANCTO ASSESSED AND DAY WATER TO THE EXCELLAR TRANSPORT From 155,466 1059 2343 I Then the treations where you, have as designifica-THE WATER IN SELECULO THE FACOURTY LEAST OUT IS COLUMN. Carlo 65 0 SAMETARY PLANS AT BE COMPARED BY BOTH AND AND THE SAMETARY PLANS AT BE COMPARED BY BOTH AND AND THE SAMETARY AND ASSESSMENT OF THE SAMETARY . Confidentiality Conference - May 3-60 - Green, Tips, Donner PETEREN ALLW ACOUNTY STEERS ON 1800 SO STORES WAS

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#### Incorporate Humor

- Lowers Blood Pressure
- Laughing is a Release
- Reduces Anxiety
- Improves Classroom Outcomes
- Improves Test Taking

