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HEALTH SCIENCES

Cognition and MS

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Your Brain

- Billions of nerve cells
- Interconnected
- Right and Left
- Some Specialized Areas
- Controls Everything
 - Walking, talking, breathing, thinking, vision, attention, memory, personality, sensation, etc.

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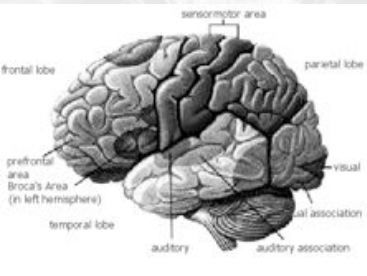
Brain is to House...

- Structure = Brain tissue
 - Construction = Development
 - Damage = Acquired Injury
- Plumbing = Vessels / Stroke
- Electrical = Seizures / Epilepsy

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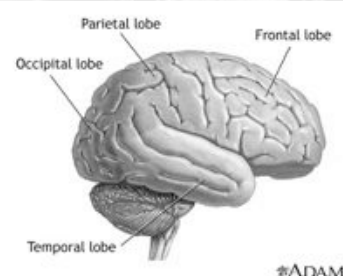
Brain Functions



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Brain Areas



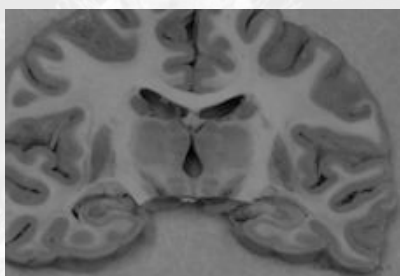
ADAM

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Outsides and Insides

- Gray Matter
- White Matter



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What White Matter Does



- Insulated wires
- Carries signals
 - Efficient and effective
- Fast
- Important for brain interconnectedness

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What is Neuropsychology



- Relationship between brain and behavior
 - Cognition
 - Memory
 - Personality / Behavior
 - Mood and Anxiety

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Make Up



- We are all different from the beginning
- We all have different strengths

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Cognition



- Language
- Perceptual - Motor
- Attention
- Personality
- Executive Functioning
 - Speed of Information Processing
 - Abstraction and Thinking Flexibility
- Learning and Memory
 - Verbal
 - Visual
 - Retention

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Executive Functioning



- Related to the Frontal Lobes
- Thinking Speed
- Attention
- Planning
- Organization

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Other Frontal Lobe Features




- Mood Stability

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Fast Thinking




- Information processing
 - Feels hard to keep up
 - Can affect memory

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MS and Memory




- Attention
- Memory
 - Verbal
 - Visual

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Memory Process




- Input
 - Attention
- Store information
- Output
 - Retrieval
 - Pulling out information

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Language




- Reception / Understanding
- Expression / Getting words out
 - Word Finding
 - Can't find right word
 - Tip of the tongue
 - Retrieval

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Other Common Problems



- Feeling Slow

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Things that Affect Thinking



<ul style="list-style-type: none"> • Disease Status • Depression • Anxiety • Sleep • Fatigue 	<ul style="list-style-type: none"> • Medications • Past Injuries • Other Medical Concerns • Normal Changes
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How Cognition Affects Life

- Family Obligations
 - Forgetting appointments
- Becoming less social
- Conflict
- Fear about the future

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Concerns

- Independence
- Driving
- Feeling Dependent
- Fear / Embarrassment

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FAQ

- Will I develop thinking or memory problems?
- Will it get worse?
- Is there a relationship to Alzheimer's Disease?
- Can my brain scan predict my thinking?

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Helpful Hints

- Conserve energy
- Write things down
- Organize
- Learning to adapt
- Use resources

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Thank you

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