# **Locations of Stroke:** Front or Back, Left or Right

# Differences & Commonalities in Stroke

#### Why is my stroke so different from others?

Why do I feel the same as others after my stroke?



### FRONT = ANTERIOR

#### 75-80% of all strokes

- FAST picks up on strokes in front part of brain
  - FACE Facial droop
  - ARMS One sided weakness
  - SPEECH Issues with speaking or understanding

### BACK = POSTERIOR

#### 20-25% of all strokes

- BE-FAST the "BE" picks up on strokes in back part of brain
  - BALANCE Balance issues
  - EYES Vision problems

# Left or Right

#### LEFT

- Left side strokes reported to be more common
  - Is more readily recognized
- Weakness will be on right side
- Speech is often affected

#### RIGHT

- Right side strokes reported to be less common
  - Less easily recognized
- Weakness will be on left side
  - Don't recognize left side of body or weakness

#### Frontal Lobe

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- Problem solving
- Emotional traits
- Reasoning (judgment)
- Speaking
- Voluntary motor activity

#### Temporal Lobe

- Understanding language
- Behavior
- Memory
- Hearing

#### Brain Stem

- Breathing
- Body temperature
- Digestion
- Alertness/sleep
- Swallowing

#### Parietal Lobe

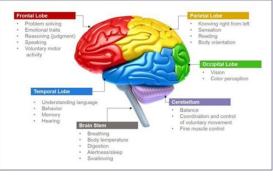
- Knowing right from left
- Sensation
- Reading
- Body orientation

#### **Occipital Lobe**

- Vision
- Color perception

#### Cerebellum

- Balance
- Coordination and control of voluntary movement
- Fine muscle control



### 13 – thinking, judgement

3 – movement

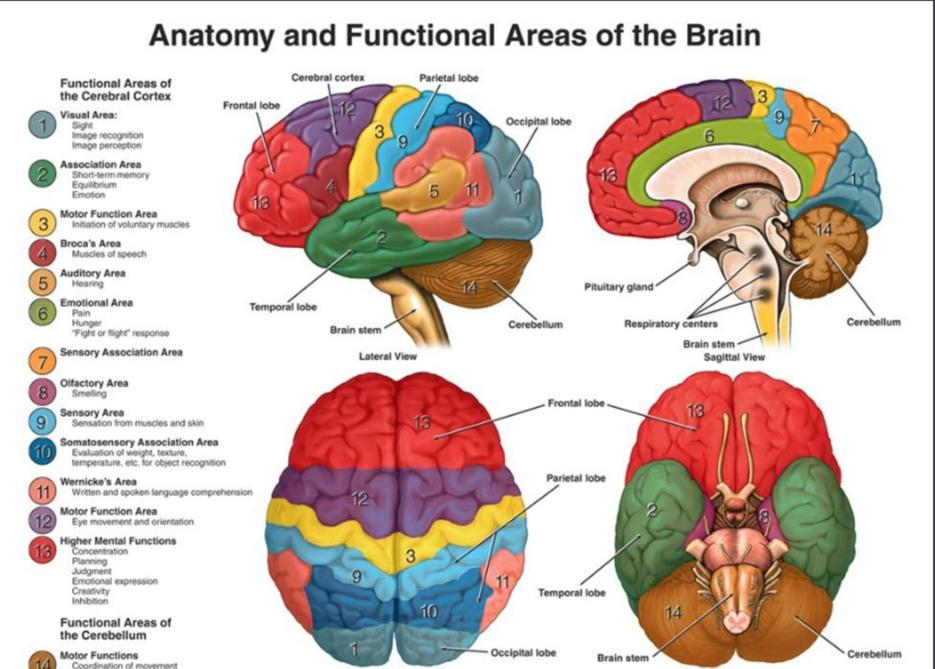
9 – sensory input

### 4 – speaking

11 – understanding language

Balance and equilibrium

Posture



Superior View

Inferior View

Front:

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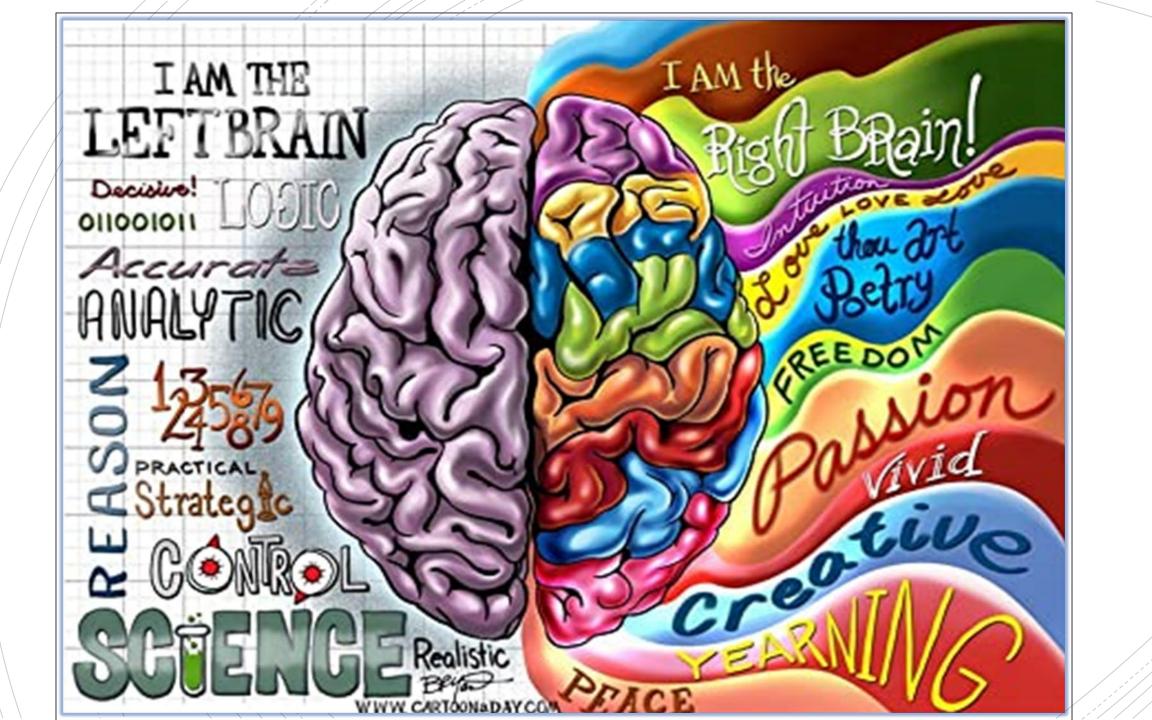
# Left & Right Side Comparison



#### LEFT SIDE

Analytical thought	Detail oriented perception
Ordered sequencing	Rational thought
Verbal	Cautious
Planning	Math/science
Logic	Facts
Right side motor skills	Right field vision

RIGHT SIDE	
Intuitive thought	Holistic perception
Random sequencing	Emotional thought
Non-verbal	Adventurous
Impulse	Art / Creative writing
Imagination	Rhythm
Left side motor skills	Left field vision



#### Front:

### Right & Left Sides Work Together

The left and right sides:

- Have unique functions
- Work in synch
  - "The left [side] processes details of visible objects; the right processes overall shape."
  - "The left [side] plays a major role in grammar and decoding literal meaning; the right plays a role in understanding verbal metaphors and decoding indirect or implied meaning."

Psychology Today, 2014



#### "Put Your Hands Up"



#### Back:

### Posterior Strokes

### OCCIPITAL LOBE = VISION

- Strokes in the occipital lobe affects vision
  - Trouble interpreting message from eye

#### CEREBELLUM = BALANCE

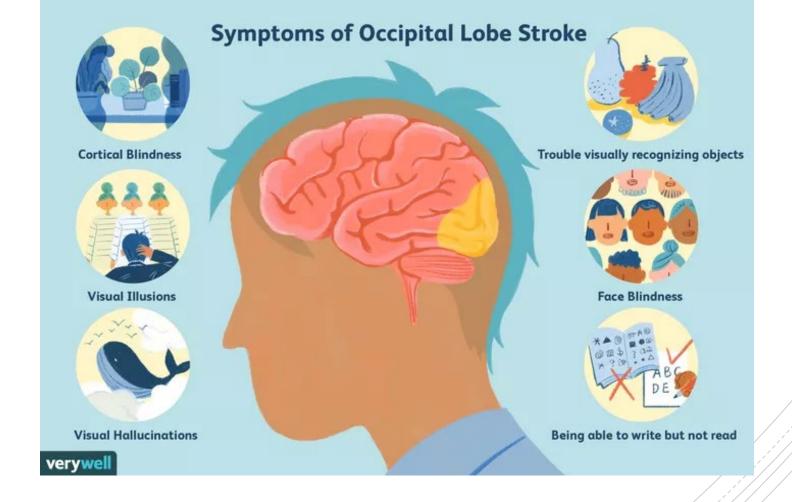
- Strokes in the cerebellum affects balance & coordination
  - Also can have dizziness, Nausea & Vomiting

#### BRAIN STEM = MAY AFFECT MANY THINGS....

- Trouble swallowing, speaking
- Weakness of limbs, Sensory loss (could be both sides)
- Trouble with vision
- Dizziness, Nausea, Vomiting
- Drowsy

#### Back:

# Occipital Lobe Strokes



#### BACK:

## Cerebellar Strokes





Vertigo strong sense of motion or spinning



**Disequilibrium** feeling off-balance, unsteady or wobbly



#### BACK:

### Brain Stem Strokes

### Common Symptoms of a Brainstem Stroke **Difficulty breathing Difficulty speaking** Problems with chewing and swallowing - 55 . **Blurred Vision** Weakness of Paralysis the limbs Partial or complete Numbness or loss hearing loss of sensation

# Differences & Commonalities in Stroke

#### Why is my stroke so different from others?

- Location Front / Back or Left / Right
- Area Size of stroke
- One or more areas of stroke
- □ Ischemic / Hemorrhagic (ischemic or bleed)

#### Why do I feel the same way after my stroke as others?

- Cognitive symptoms memory, trouble speaking
- Physical symptoms weakness, difficulty swallowing
- Emotional symptoms depression, impulsivity
- Heavy fatigue and trouble sleeping



### Take-Away...

Know what to do when you see stroke symptoms!

#### **RECOGNIZE STROKE**

- Know BEFAST
- Teach BEFAST to others ③

#### **CALL 911**

- Best to call an ambulance
  - They will notify the hospital and doctor prior to arrival
  - Then the stroke team can be prepared and respond promptly

