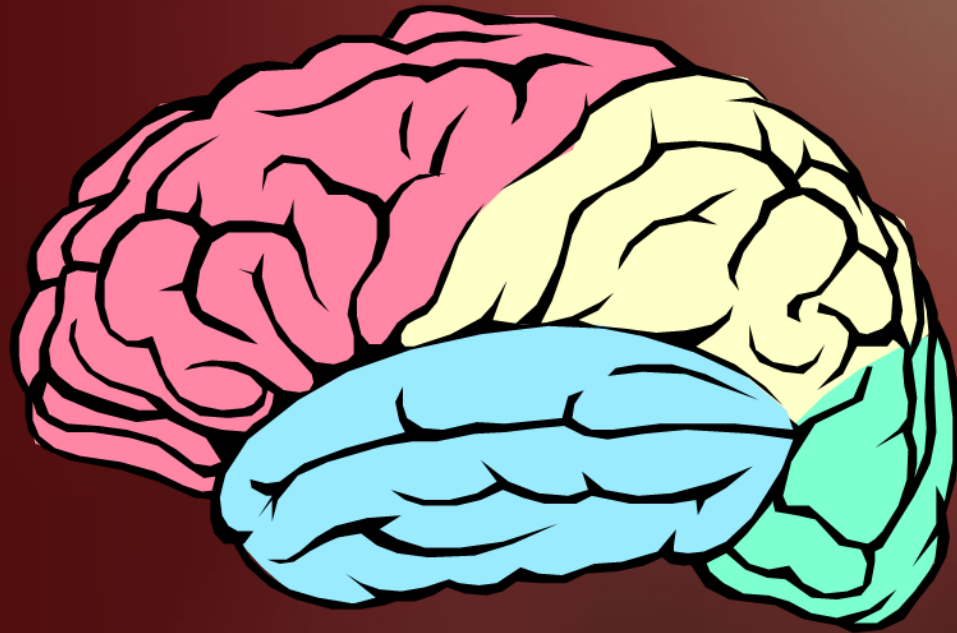


How Are Parts Of The Brain Related To Brain Function?



Scientists Have Found...

That the basic anatomical components of brain function are related to brain size and shape.



This Power Point Presentation Will Explain:

- **How the lobes of the brain function**
- **What each lobe is responsible for**

This Presentation May Be Better Understood

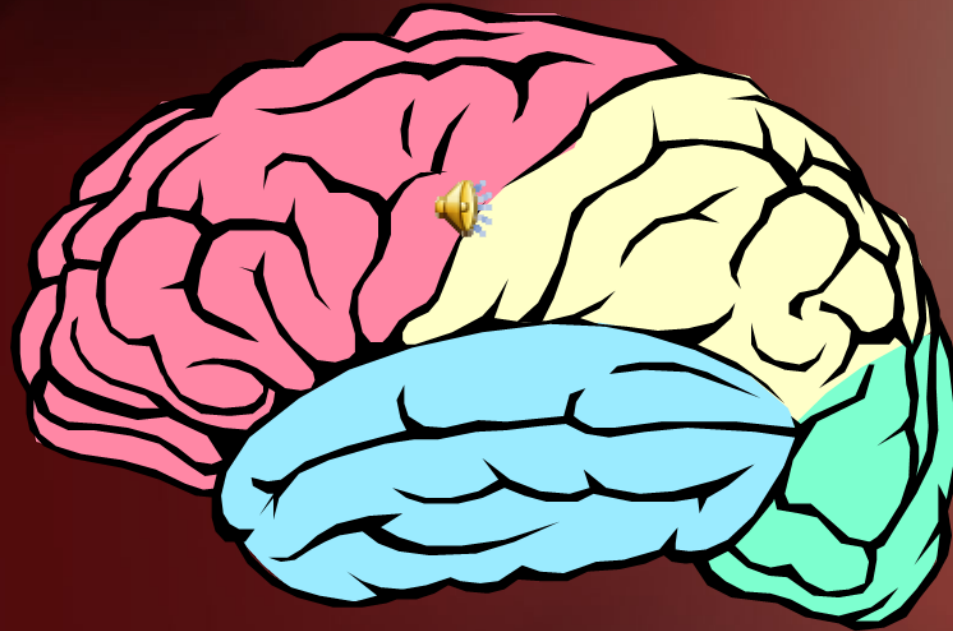
If you have already viewed some of the other and more basic presentations.



The Brain Is Composed Of Two Hemispheres



The Brain Is Divided Into Lobes

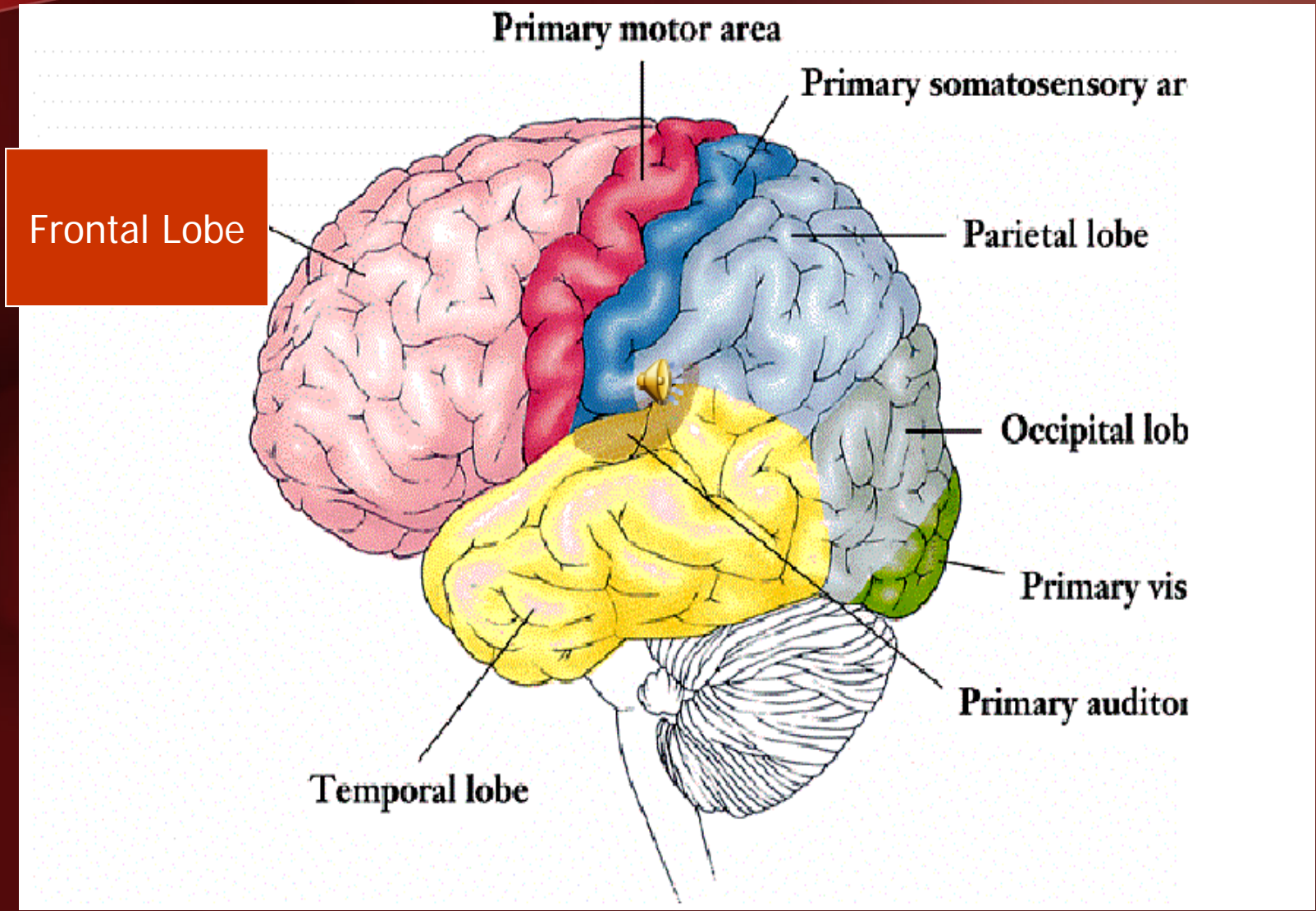


Frontal Lobes Begin To Mature When A Person Is Four , Peak In Growth At Age 11 And Continue To Age 45.



- The Frontal lobe (forehead) is responsible for **emotions, judgment, and planning**.
- This lobe is the last to mature (which explains why children do not plan very effectively).

In This Slide, The Frontal Lobe Is Pink.

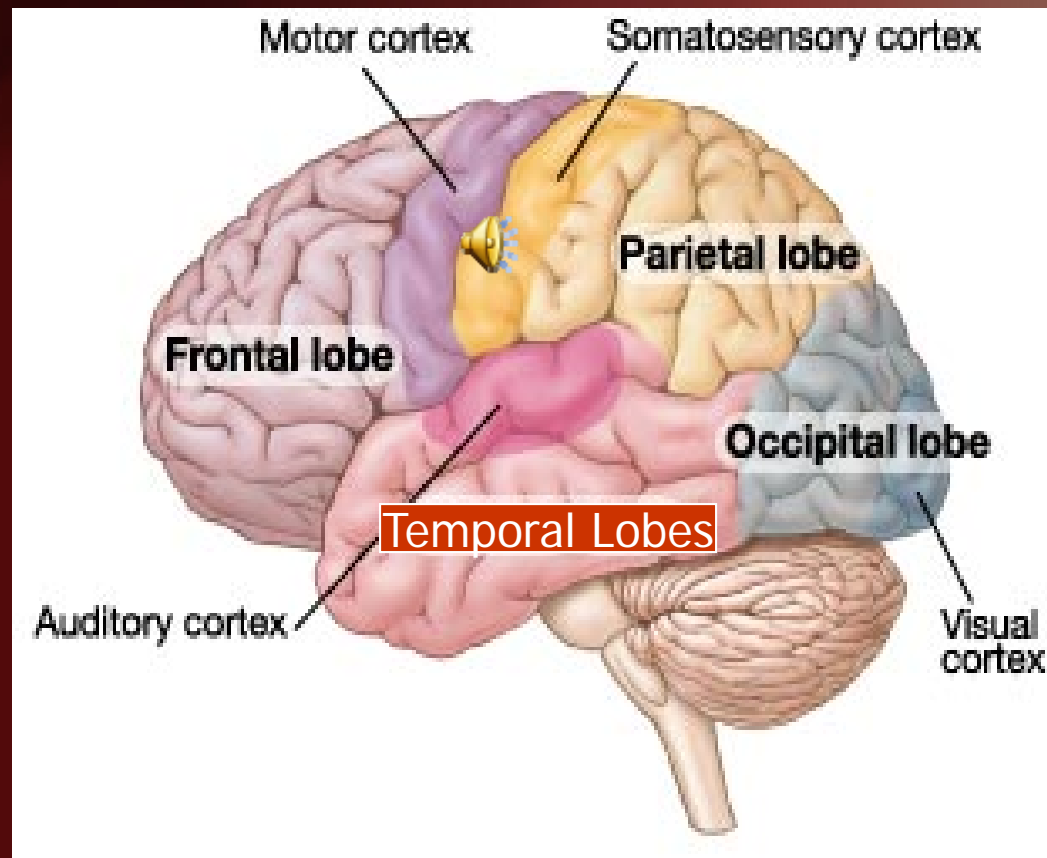


The Temporal Lobes

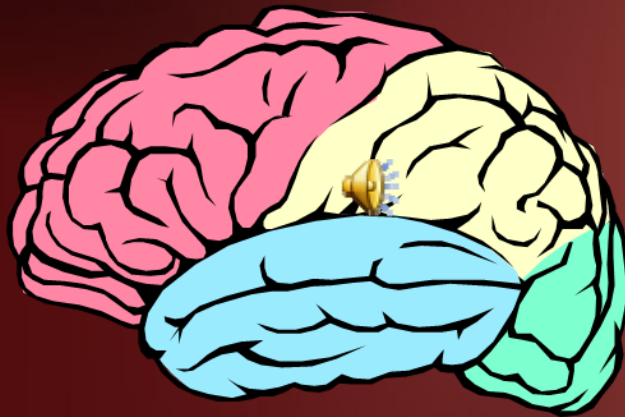


- Temporal lobes are responsible for **timing, attention, memory, and expressive and receptive speech.**
- Temporal lobes are thought to mature at about 7 years of age.

Temporal Lobes Are Light Pink In This Slide.



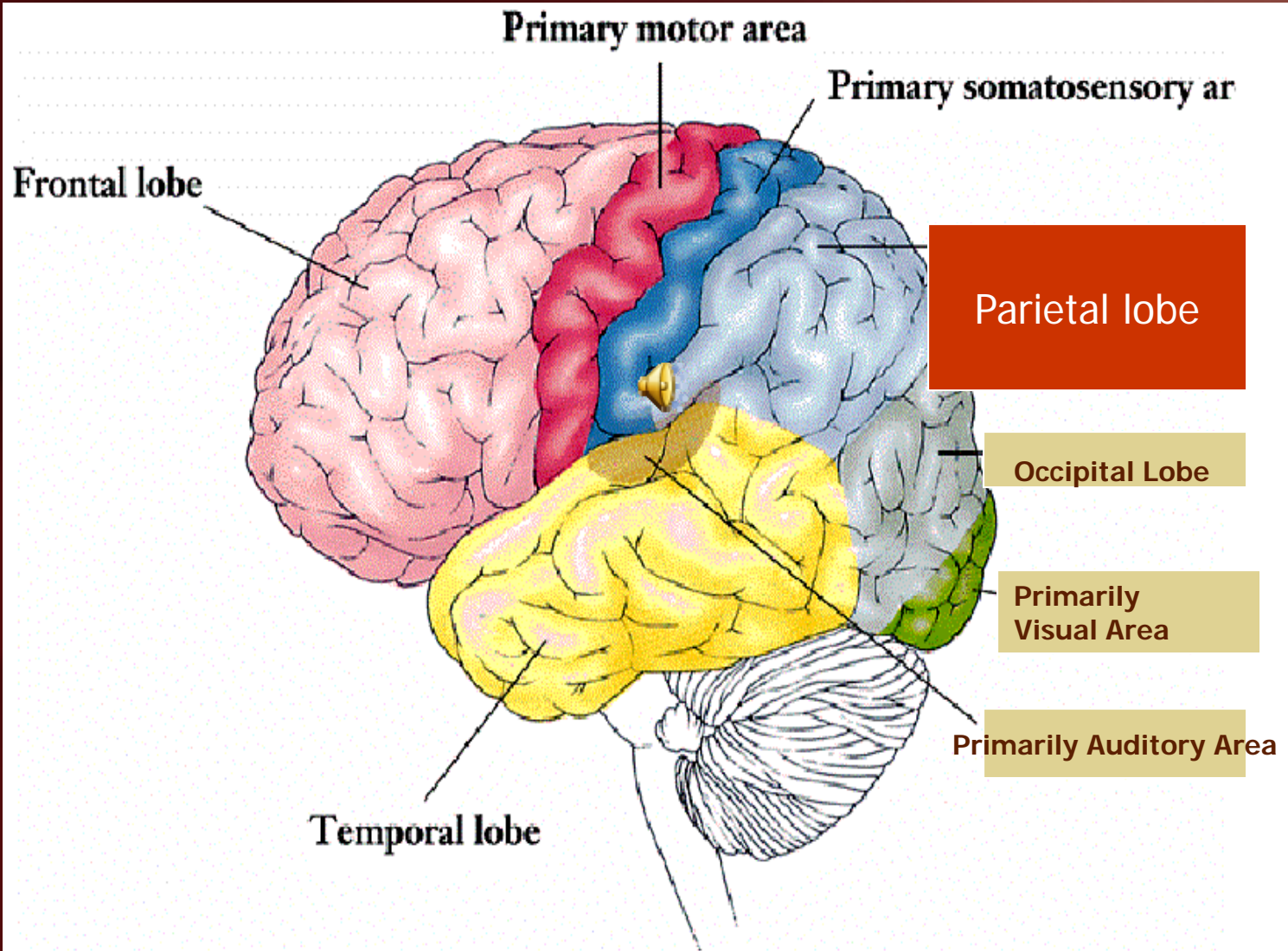
Parietal Lobes



Parietal Lobes

- The Parietal lobes are responsible for spatial functions.
- The left Parietal lobe is responsible for spatial language (on, over, on top of, before).
- The right Parietal lobe is responsible for spatial functions. (How big is the room you are in?)

The Parietal Lobes are Blue-Gray on this slide.



What Tasks Engage Our Parietals?

- Timed tasks
- Spatial relationship tasks



Spatial Relationship Tasks Are Age Dependent

- **Spatial relationships cannot be taught until about 5 years of age.**
- **Young children cannot understand spatial concepts regardless of intellect.**

Since Young Children Do Not Understand Spatial Relationships...

They do not understand conservation, a concept discussed by Piaget.



Conservation Is The Ability To Understand That While These Glasses Are Equal In Height, They Hold Different Amounts Of Liquid.



To a young child these glasses are equal even though they hold different amounts.



Prepositions Express Spatial Relationships



The snake is
In the book.

The books are
on the shelf.



The books are
under the people.



The apple is
on top of the book.



The book is on top
of the boy.




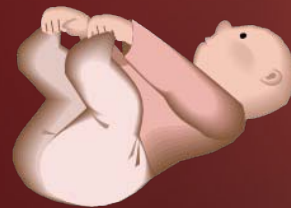
The books are
in the basket.

**Even the ability to read
a clock is a spatial task.**



These Skills Are Dependent On Organic Maturity...

They cannot be mastered by young children, even those who are highly intelligent, since children do not have  the organic maturity to support this understanding.



The Last Cortical Region We Will Examine

is the Occipital Lobe

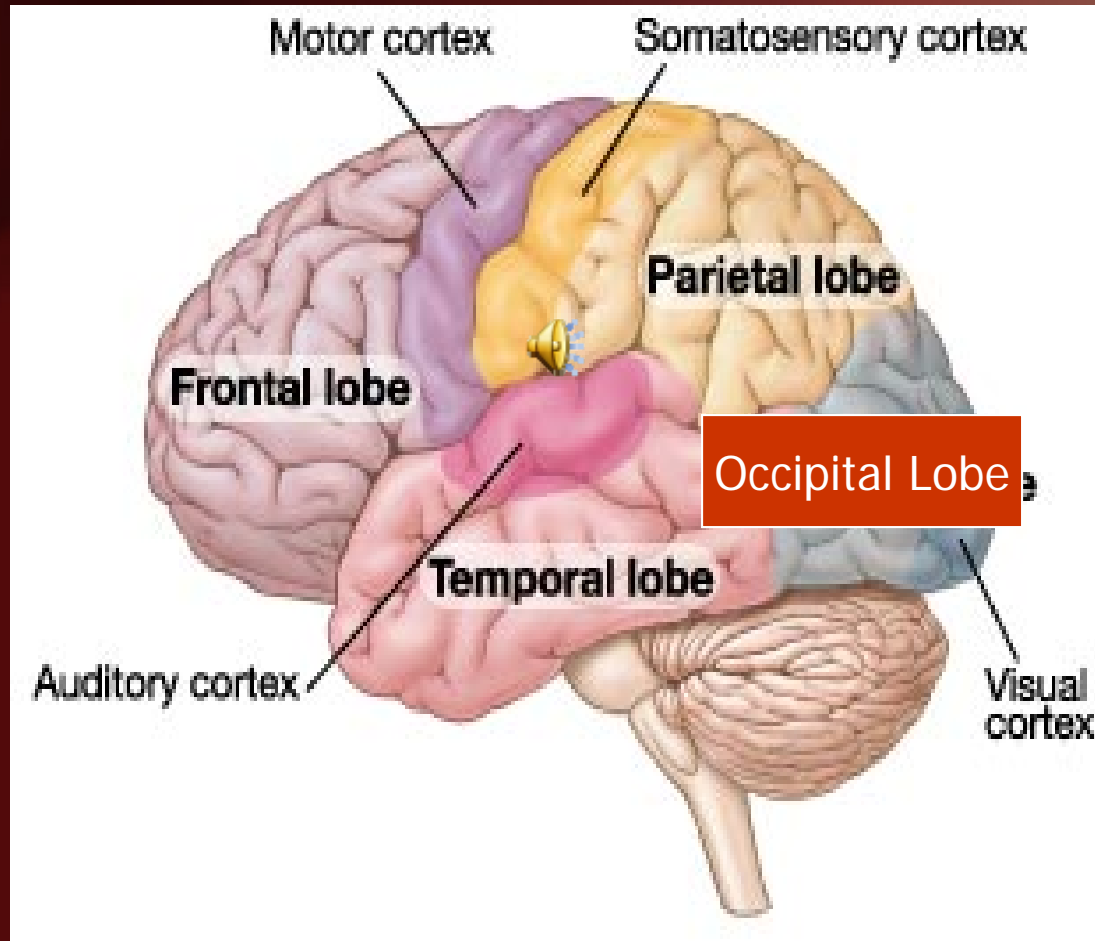


The Occipital Lobe

Located in the back of the head is primarily responsible for sight.

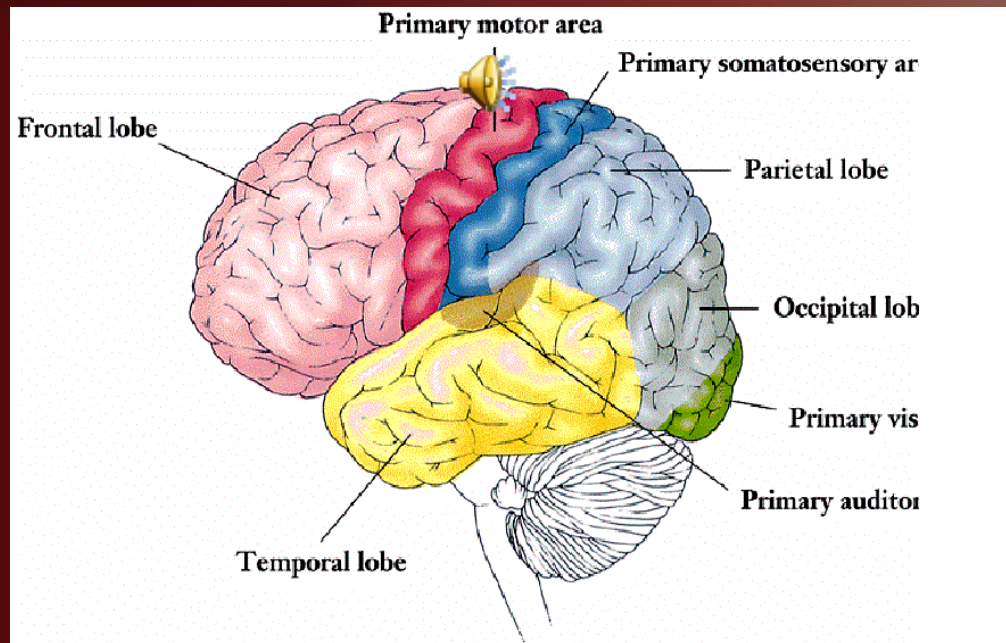


The Occipital Lobe Is Gray On This Slide



Sometimes Cortical Lobes Work In Concert...

Difficulty with estimation can implicate either or both the Parietal or Frontal regions.



The Brain Functions As A Unit

One cortical region will often compensate for another region which is not functioning optimally.



Sometimes one region will need the assistance of another

**More Information About the Brain and
Learning Is Available On Other
Presentations**

The David Program

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