

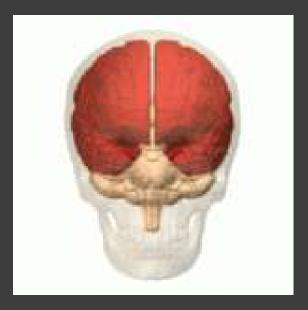
# CHAPTER 3

Part 2

#### I. TASKS OF THE CEREBRAL HEMISPHERES

Through experiments with people who have had their corpus callosum severed scientists have associated different tasks to each half of the brain.

The left hemisphere seems to deal with verbal or speech material. It also handles writing and grammar, as well as logic.



#### I. TASKS OF THE CEREBRAL HEMISPHERES

The right hemisphere deals with some math ideas, as well as art, music, spatial reasoning and emotions.

But both hemispheres work together in practically everything we do, so there is not always a direct correlation about being "right-brained" or "left-brained".

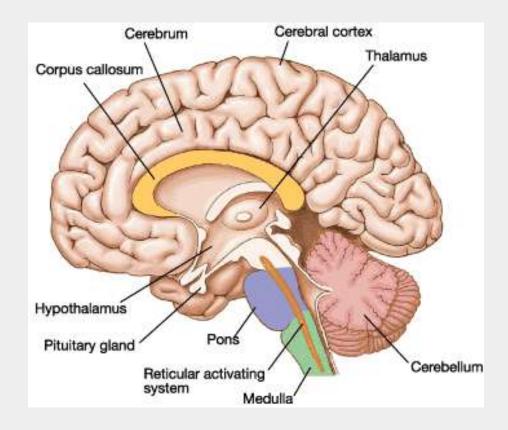
Reading / phonics / language / talking Detail / fact oriented singing ( music ) theater ( art Like shapes Auditory / listening R Like the "parts" before the "whole-Likes to see the "whole" picture Logical Emotion Numbers Colors Time-oriented Active Prefers true / false to multiple-choice Prefers essay tests to true / false Doesn't like to take risks ling to take risks R Looks for difference L Poles himpelander des latinuns 155 lot mention in How to find your dominant brain How to find your stronger eve Circle the EAR you use to listen through 1. Extend your arms and a door. make a triangle with your thumbs and 2. Circle which EYE is forefingers. stronger (see quide). 2. Center a light switch 3. Circle the HAND you use in the triangle. to write or eat. 3. Close each eye. Circle the FOOT you use to kick a ball. 4. Which one keeps the switch centred? That's 5. Mostly L's = Right brained. your stronger eve. Mostly R's = Left brained.

W Are You Right or Left Brained?

Underneath the cerebral cortex is the lower brain that has specialized parts that interacts with each other and the cortex.

The thalamus sends messages to and from the different parts of the brain to the body and from the body to the brain.

The hypothalamus controls the drives that our body feels: hunger, thirst, fear, sex, anger, pleasure.



The limbic system is involved in some emotions and in our ability to create and access memories.

The amygdala deals with the anger and fear, interacting with the hypothalamus for that emotion.

The hippocampus allows the brain to form memories. The memories are not stored in the hippocampus, it just allows memories to be created and stored in the cortex.



The cerebellum maintains balance and coordination, and controls voluntary muscle movement throughout the body.

The more you do an action or activity, the more used to doing that activity your cerebellum becomes. You will eventually be able to do that activity without having to actively think about it.



The reticular activating system is part of the reticular formation that keeps us alert and awake. When many things are going on, our brain is alert and processing information.

When there is little change to what is going on, the RAS starts to put you to sleep. That is why counting sheep helps you fall asleep. The same thing over and over again slows down the RAS.



#### IN YOUR NOTEBOOKS

321 + 1

Write 3 things you learned

2 things you want to learn more about

- 1 thing you did not understand
- And 1 thing someone else learned that you did not write down