Psychology
Unit 4- The Parts and Functions of the Brain

Conscious vs. Subconscious

The Brain From Top to Bottom

Web Quest Scavenger Hunt

Visit the site: http://thebrain.mcgill.ca/flash/index_d.html

Directions: Answer the following questions about the Brain as they correspond to the different categories on the website. Have fun!

The Four Lobes of the Brain

1. Click on “From the Simple to the Complex” – Anatomy by Level of Organization
   a. Drag your cursor over the different lobes of the brain to find out what they are called, where they are located and what they do.

Frontal Lobe:
Parietal Lobe:
Temporal Lobe:
Occipital Lobe:

2. On the left hand side of the page are ORANGE, RED, BLUE squares that are links to other pages, click on the ORANGE top left link that will bring you to: http://www.pbs.org/wnet/brain/3d/index.html
   a. Play around with the 3-D brain and get a feel for the location for each lobe.
   b. Go to EXPLORE THE BRAIN, in the drag down menu search the brain for the following functions:

3. Label the two cerebral hemispheres of the brain:
Which hemisphere controls the **right** side of your body?
Which hemisphere controls the **left** side of your body?

**The Nervous System**

The brain is something like the body’s ______________. It must be kept quickly informed of the body’s ___________ and of the ______________ available in the environment to satisfy them. For this purpose, the brain relies on a vast network of ____________ distributed throughout the body: the ______________. Together with the brain and the ________________, the nerves constitute the ______________. To distinguish the control centers from the information pathways, we divide the nervous system into two sub-systems: The _______________ Nervous System and the ______________ Nervous System.

4. Drag your cursor over the Central Nervous System and the Peripheral Nervous System. Label the drawings to the left.
   
a. What does the Central Nervous System do for the body?

b. What are the **two subdivisions** of the Peripheral Nervous System exist? What are each responsible for?

**The Wired Brain and the Hormonal Brain**

5. Click on the other Sub-Topic in “From Simple to Complex” – **Function by Level of Organization**
   
a. The Brain’s wiring consists of Axons, what are Axons? What do they do?
b. Neural circuits link the different parts of our brains to each other so that each part of the brain knows what the other is doing—what other major responsibilities do neural circuits perform in our bodies?

c. What are the three steps in every reflex? Describe what each step means.

d. What function does the neural circuit that links Wernicke’s Area to Broca’s Area serve?

6. What is the major difference between the speed of the way the hormonal brain and the wire brain communicate?

7. What are three examples of hormonal states of the brain?

8. Go back to the main menu—click on Evolution and the Brain
   a. Describe the three layers of the brain and what they are primarily responsible for controlling:
      i. Reptilian:
      ii. Limbic:
      iii. Neocortex:

   a. List the five parts of the Central Core, give a brief description of each part.
b. List the three parts of the Limbic System, give a brief description of each part.

c. List the four parts of the Cerebral Cortex, give a brief description of each part.

10. Click on the “Senses”—Vision. Skim the reading. How are the fields of vision tied to the hemispheres of the brain?

   a. Scroll back up to the top and click on the ORANGE “Beaker” Link and go to:
      http://thebrain.mcgill.ca/flash/capsules/experience_jaune06.html and play around with your blind spot. Click on some of the “Beaker” links at the bottom of that page to continue to test your blind spot.

Can you create your own blind spot test?

11. Click on “Emotions and the Brain”—Fear, Anxiety, Anguish

   a. What is the amygdale? What is its major role?