A biological psychologist studies the relationship between biological and psychological processes. A very easy way to describe how a biological psychologist would begin to find out this relationship would be to use an easy everyday example. A good every day example would be a student sitting down to take a test. The student would be very nervous, sweaty and have to use his memory to answer questions. There are many parts of the brain that are active during these times but I will try to explain the most active parts of the brain and their location. The most active parts of the brain are the Medulla, Pons, Occipital lobe, Frontal lobe, Temporal lobe, Basal Ganglia, Limbic system and the Hypothalamus.

The student's heart rate would most likely increase before taking a test. The medulla is responsible for keeping your heart beat and the pons helps control heart rate so together those two parts would be the very active as the student is getting ready to receive the test. (According to University of Alberta, psychology department, 1990.) The medulla and pons are located on the base of the brainstem the medulla is the farthest down and the pons is slightly above it.

The nervous feeling the student is feeling comes from limbic system which consists of the Hippocampus, Amygdala and Hypothalamus. The limbic system is responsible for your emotions according to the Myers (2014). The Amygdala and the Hippocampus are located in the temporal lobe while the hypothalamus is in the middle of the brain.

The student palms become sweaty, most likely from being nervous. The Hypothalamus which helps control many parts of the body is also responsible for regulating body temperature (Myers, 2014). The body would most likely start to heat up from being nervous so the hypothalamus which is linked to help cause the nerves also is what helps

make sure you don't overheat.

When the student begins to read the question his occipital lobe picks up the text he is reading and sends it to your association areas in temporal lobe and parietal lobe to analyze the information and to access the student's memory. This information then gets sent to the association areas of the frontal lobe. The frontal lobe then after getting this information creates a plan of action (According to University of Alberta, psychology department, 1990). The whole process described takes places in the cerebral cortex which makes up 85% of the brains weight (Myers, 2014).

After the plan of actions has been created and the brain has selected an answer the Basal ganglia and Cerebellum both fire messages to the motor nuclei of the upper brainstem. The motor nuclei then sends the message to the lower motor nuclei. From there the lower motor nuclei of the brainstem and spinal cord send information to your muscles (According to University of Alberta, psychology department, 1990.). The process happens in the cerebral cortex, middle of the brain and the spinal cord. The final result of all this is the student using pencil to circle the answer he has chosen on the test.

References

Myers, D. G. (2014). *Exploring psychology*. New York: Worth.

University of Alberta, Department of Psychology. (1999). *Midsagittal structures study module*. Retrieved from http://www.psych.ualberta.ca/~ITL/brain/module1.htm

Work Sample Evaluation

Subject Area: Psychology
Task Title: Your Brain: Don't Leave Home Without It
Student Work Sample Title: N/A

The document was scored using the *CCR Task Bank Rubric*. The final scores are indicated in the following chart.

Scoring Criteria	Insufficient Evidence	Developing	Progressing	Accomplished	Exceeds
Research and Investigation			**X**		
Ideas and Content			**X**		
Reading and Analysis			**X**		
Communication		**X**			
Organization		**X**			
Accuracy		**X**			

Annotations: The following evidence from the work sample and the reviewer's comments support the scores above. Page and line numbers refer to the original work sample.

Scoring Criteria	Page #	Line #	Commentary about the work sample
Research and Investigation: *Locating resources independently and/or identifying information within provided texts*	1	12	The author refers to a website that was previously provided as part of the task.
	1	21	The author makes reference to material in the textbook.
Ideas and Content: *Presenting a thesis and understanding concepts*	1	5-7	The work sample provides a unifying statement connecting brain structures to everyday behaviors in the introduction paragraph.
	1	20-21	The author demonstrates a basic understanding of the concepts (e.g., noting the role of the hypothalamus in the regulation of body temperature).
Reading and Analysis: *Evaluating sources and selecting evidence to support the central idea*	1	9-12	The author connects the brain structures discussed in the provided sources to the provided scenario (e.g., connects the medulla to increased heart rate).
	1	17-18	Within the work sample the author does not always use supporting evidence appropriately (e.g., focuses on brain structure location instead of brain structure function).
Communication: *Using subject-appropriate language and considering audience*	1	6-9	The paper includes subject-appropriate language (e.g., occipital lobe, frontal lobe, and temporal lobe), but tone of paper is stilted and changes point of view (e.g., uses first person only on line 6).
	2	2-5	The author does not always clearly articulate the connection between brain structures and scenario behaviors to the audience.
Organization: *Structuring main ideas and supporting information*	1	6-8	The author provides an outline of the essay in the introduction.
	2	15	The work sample is missing a conclusion paragraph. No attempt is made to summarize the main points of the essay or to restate the thesis.
Accuracy: *Attending to detail, grammar, spelling, conventions, citations, and formatting*	1	12	The work sample consistently refers to sources in the text, but the in-text citations to the University of Alberta web site don't follow conventions.
	1	7-8	Improper capitalization of parts of the brain distracts the reader.
	2	14-15	Grammar errors and readability issues sometimes detract from the paper's message.
	3	1-4	The references provided in the work sample use correct formatting.