

### **Chapter 3: The Brain**

**Amygdala-** The amygdala is a term that is founded in chapter 3, section 6. “The amygdala is involved in learning about biologically relevant stimuli, such as those important to survival, and plays a special role in responding to stimuli that elicit fear. The emotion processing of frightening stimuli in the amygdala is a hardwired circuit that developed over the course of evolution to protect animals from danger.” (Gazzaniga, 2018) In this artifact, the term amygdala is applied to show the location of where the amygdala is related to the brain. This term also provides the definition of what the term means and the function of this term.

**Basal Ganglia-** The basal ganglia is a term that is founded in chapter 3, section 6. “The basal ganglia are a system of subcortical structures crucial for planning and producing movement. They send that input to the motor centers of the brain stem. Damage to the basal ganglia can impair the learning of movements and habits, such as automatically looking for cars before you cross the street.” (Gazzaniga, 2018) In this artifact, the term basal ganglia are applied to show the location of where the basal ganglia are related to the brain. This term also provides the definition of what the term means and the function of this term.

**Brain Stem-** The brain stem is a term that is founded in chapter 3, section 5. “The brain stem consists of the medulla, oblongata, the pons, and the midbrain. It houses the nerves that control the most basic functions of survival, such as heart rate, breathing, swallowing, vomiting, urination, and orgasm.” (Gazzaniga, 2018) In this artifact, the term brain stem is applied to show the location of where the brain stem is related to the brain. This term also provides the definition of what the term means and the function of this term.

**Cerebellum-** The cerebellum is a term that is founded in chapter 3, section 5. “The cerebellum is extremely important for proper motor function, and damage its different parts produces very different effects, for example, damage to the little nodes at the very bottom causes head tilt, balance problems, and loss of smooth compensation of eye position for head movement.” (Gazzaniga, 2018) In this artifact, the term cerebellum is applied to show the location of where the cerebellum is related to the brain. This term also provides the definition of what the term means and the function of this term.

**Frontal Lobes-** The frontal lobe is a term that is founded in chapter 3, section 7. “The Frontal lobes are essential for planning and movement. Consists of the primary cortex, the primary motor cortex, and the prefrontal cortex that is responsible for directing and maintaining attention, keeping ideas in mind while distractions bombard people from the outside world, and developing and acting on plans.” (Gazzaniga, 2018) In this artifact, the term frontal lobes are applied to show the location of where the frontal lobes are related to the brain. This term also provides the definition of what the term means and the function of this term.

**Hippocampus-** The hippocampus is a term that is founded in chapter 3, section 6. “The hippocampus plays an important role in the formation of new memories, by creating new interconnections within the cerebral cortex with each new experience. It is involved in how we

remember the arrangements of places and objects in space, such as how streets are laid in a city or how furniture is positioned in a room.” (Gazzaniga, 2018) In this artifact, the term hippocampus is applied to show the location of where the hippocampus is related to the brain. This term also provides the definition of what the term means and the function of this term.

**Hypothalamus-** the hypothalamus is a term that is founded in chapter 3, section 6. “The hypothalamus is the brain’s master regulatory structure. It receives input from almost everywhere in the body and brain. It affects the functions of many internal organs, regulating body temperature, body rhythms, blood pressure, and blood glucose levels. It is also involved in many emotional behaviors, including thirst, hunger, aggression, and lust.” (Gazzaniga, 2018) In this artifact, the term hypothalamus is applied to show the location of where the hypothalamus is related to the brain. This term also provides the definition of what the term means and the function of this term.

**Temporal Lobes-** The temporal lobe is a term that is founded in chapter 3, section 7. “The temporal lobes hold the primary auditory cortex, the brain region responsible for hearing. At the intersection of the temporal lobe and the occipital lobe is the fusiform face area, an active area when people look at faces rather than other things. Other regions of the temporal lobe are more activated by objects, such as houses or cars, than by faces.” (Gazzaniga, 2018) In this artifact, the term temporal lobes are applied to show the location of where the temporal lobes are related to the brain. This term also provides the definition of what the term means and the function of this term.

**Thalamus-** The thalamus is a term that is founded in chapter 3, section 6. “The thalamus is the gateway to the cortex and receives almost all incoming sensory information, organizes it, and relays it to the cortex, but not the sense of smell.” (Gazzaniga, 2018) In this artifact, the term thalamus is applied to show the location of where the thalamus is related to the brain. This term also provides the definition of what the term means and the function of this term.

**Occipital Lobes-** The occipital lobe is a term that is founded in chapter 3, section 7. “The occipital lobes are at the back part of the brain and are devoted almost exclusively to vision, with the largest area in this lobe is the primary visual cortex, the major destination for visual information.” (Gazzaniga, 2018) In this artifact, the term occipital lobes are applied to show the location of where the occipital lobes are related to the brain. This term also provides the definition of what the term means and the function of this term.

**Partial Lobes-** The partial lobe is a term that is founded in chapter 3, section 7. “The partial lobes are divided between cerebral hemispheres, the left hemisphere receives touch information from the right side of the body, and the right hemisphere receives touch information from the left side of the body. This information is directed to the primary somatosensory cortex, is a strip in the front part of the partial lobe.” (Gazzaniga, 2018) In this artifact, the term partial lobes are applied to show the location of where the partial lobes are

related to the brain. This term also provides the definition of what the term means and the function of this term.

**References List:**

Gazzaniga, M. (2018). *Psychological Science: 6<sup>th</sup> Edition*. W.W. Norton & Company