The CEREBRAL HEMISPHERES are divided into four lobes that carry out specialized functions. The frontal lobes make up the “command center,” concerned with decision making and other executive tasks; the occipital lobes process vision; the parietal lobes analyze sensation; the temporal lobes are responsible for hearing, understanding speech and forming an integrated sense of self.

SENSATION AND MOVEMENT are processed in the sensory and motor areas of the hemispheres and are located in close proximity to each other. Both the sensory and motor areas are organized so that the largest percentages of neurons are given over to those parts of the body used most frequently. Thus the hand and finger areas command large amounts of space compared to leg or trunk.