

Cerebrum The cerebrum (front of brain) comprises gray matter (the cerebral cortex) and white matter at its center. Functions of the medulla regulate many bodily activities, including heart rhythm, breathing, blood flow, and oxygen and carbon dioxide levels. The medulla produces reflexive activities such as sneezing, vomiting, coughing and swallowing. The largest part of the brain, the cerebrum initiates and coordinates movement and regulates temperature. Other areas of the cerebrum enable speech, judgment, thinking and reasoning, problem-solving, emotions and learning. At the bottom of the brainstem, the medulla is where the brain meets the spinal cord. Supported by the vertebrae, the spinal cord carries messages to and from the brain and the rest of the body. The spinal cord extends from the bottom of the medulla and through a large opening in the bottom of the skull. Other functions relate to vision, hearing, touch and other senses. The medulla is essential to survival. Medulla