

The Brain Key Information

The brain is the central organ of the nervous system and is responsible for processing sensory information, coordinating movement, and regulating vital functions such as breathing and heart rate. It is made up of different regions, each with specialised functions. The cerebrum controls voluntary actions, memory, and reasoning; the cerebellum coordinates muscle movement and balance; the medulla oblongata regulates involuntary actions like breathing and heartbeat; and the hypothalamus maintains homeostasis and links the nervous system to the endocrine system via the pituitary gland. The brain is protected by the skull, meninges, and cerebrospinal fluid.

Key words & definitions

Key word	Key information
Cerebrum	The largest part of the brain, responsible for voluntary actions, memory, intelligence, and reasoning.
Cerebellum	A brain region that coordinates muscle movement and maintains balance and posture.
Medulla oblongata	The part of the brain that controls involuntary actions such as breathing and heart rate.
Hypothalamus	A small brain region involved in maintaining homeostasis and connecting the nervous and endocrine systems.
Pituitary gland	An endocrine gland controlled by the hypothalamus that releases hormones to regulate many bodily functions.
Meninges	Three protective membranes that cover the brain and spinal cord.
Cerebrospinal fluid	A clear fluid that surrounds the brain and spinal cord, providing cushioning and protection.