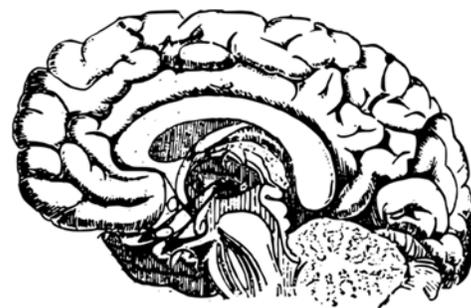


The Brain



The brain is one of your body's largest and most complex organs, even though an adult brain only weighs about three pounds or 1.35 kg. It controls all of your actions whether they are voluntary like moving a limb or involuntary like the beating of your heart. It controls movements, thoughts, intelligence, feelings, behaviors and communication.

The brain is like your master computer or control system, controlling all of your body's functions. The brain is what makes you who you are. The brain is also a part of the nervous system along with the spinal cord and nerves. The nervous system carries messages from the body to the brain and from the brain to the body using electricity and body chemicals. The brain is divided into three basic parts: the forebrain, midbrain and hindbrain that work together to perform a variety of functions. The forebrain is responsible for memory, mind, and intelligence and receives speech, hearing and sight messages. The midbrain relays messages to and from your brain. The hindbrain is responsible for body movement, especially those from your limbs, arms and legs. The brain is made up of many parts with the main parts being the cerebellum, cerebrum, brain stem and the pituitary gland. Your brain is protected by your cranium which is the part of your skeleton called the skull that surrounds your brain. Scientists discovered long ago that the left side of your body is controlled by the right side of your brain and the right side of your body is controlled by the left side of your brain. The brain's nerve cells are called neurons and they connect our brain with every part of our body. We have sensory neurons that carry information to the brain, motor neurons that tell your muscles what to do and connector neurons that communicate and process information. Most of the signals from the brain reach our bodies through the spinal cord which the brain is attached to. Your brain has billions of neurons that are all linked together sending and receiving information constantly. Your five senses help the brain immensely to receive information. The spinal cord is connected to the brain and is also considered part of the central nervous system, it is part of the two way communication to and from the brain.

- ❶ Why is the brain so important?
- ❷ Explain what the brain does.
- ❸ What would we be like without a brain?
- ❹ Write 5 facts about the brain.
- ❺ List 3 questions you have about the brain.