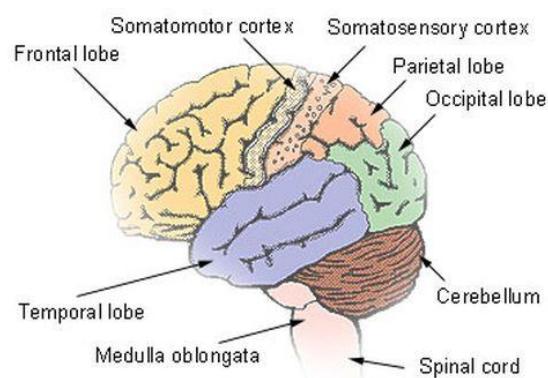


## Focus: What's inside

Why is the brain so mighty? It has billions of *neurons* (nerve cells) to carry out its commands. Without the brain, you would not be able to think, feel, move, remember, or do all the things that make you the special person you are.



At birth, the brains of infants weigh the same. But by adulthood, that changes. The average male brain weighs about 11 to 12 percent more than a woman's brain. But brain weight and size have nothing to do with intelligence. What matters is what's *inside* the brain.

Despite its small size (about 3 pounds), the brain is able to receive and send an unlimited number of messages. It does this with the help of the spinal cord, the sense organs, and the autonomic (automatic) nervous system. The brain carries out this task by assigning jobs.

- It puts the *cerebellum* (sair-ah-BELL-um) in charge of balance and coordination.
- The *brainstem* regulates heartbeat, breathing, and blood pressure.
- And the largest parts of the brain, the *cerebral cortex* (suh-REE-brul CORE-tex) and the *cerebrum* (suh-REE-brum), control thoughts, feelings, and actions.

The cerebrum is divided into two halves. Each controls the muscles on the opposite side of the body. So, if you usually eat with your right hand and kick with your right foot, then your brain's left half is said to "dominate," and you're right-handed. When the opposite is true, your brain's right half takes the lead and you're left-handed.

People use both halves of the brain, but the left half is especially good at helping you with words and numbers and helping you read and speak. The right side is better at creative tasks, such as music and art. And your sense of humor develops there.

Each half has four sets of lobes (sections). The *frontal lobes* behind your forehead do a lot of the thinking and planning. The *parietal* (pa-RYE-ih-tul) *lobes* toward the back of your head sense pain. And the *occipital* (ock-SIP-ah-tul) *lobes* at the base of the brain allow you to see. The *temporal lobes* behind your ears store memories of music, taste, vision, and touch.

Adopted from: <https://www.readworks.org/article/Focus-Whats-Inside/>