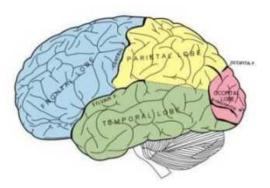
# Biology for Kids The Human Brain



The brain is where we do our thinking. All our senses are tied into our brain allowing us to experience the outside world. We remember, have emotions, solve problems, worry about stuff, dream about the future, and control our bodies in our brain.

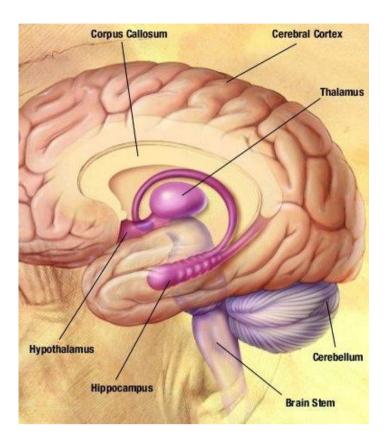
For such an awesome organ, the brain doesn't look like much. It's a ball of gray looking wrinkled tissue about the size of two of your fists put together. The brain sits in our hard, thick skull with membranes and fluid around it to protect it.

### **How the Brain Communicates**

The brain is part of the <u>nervous system</u>. Together with the spinal cord, it makes up the central nervous system. The brain connects to nerves that travel throughout the body. Nerves from our senses (hearing, seeing, touch, etc.) send signals to the brain to let the brain know what is going on in the outside world. The brain also sends signals using nerves to muscles in order to make our body move.

### Parts of the Brain

- Cerebrum The cerebrum is the biggest part of the brain. It's the gray wrinkly upper part. The surface of the cerebrum is called the cerebral cortex. Different parts of the cerebrum deal with different parts of the body. The back part deals with vision while other parts deal with other functions like movement, hearing, language, and touch. Smart or thinking people are sometimes called cerebral.
- Cerebellum At the back and bottom of the brain is the cerebellum. This part of brain deals with motor movement. It processes all the incoming motor messages from the nerves and figures out what to do with them. The cerebellum can learn motor movements with practice allowing us to do stuff like riding a bike or typing without even thinking about it. Hey, I didn't think about typing this once!
- Brain Stem or Medulla This is where the brain connects to the spinal cord. Also, many automatic functions are controlled here like keeping the heart beating, breathing, and digesting food.



# **Memory**

The brain has two kinds of memory, short term memory and long term memory. Scientists are still learning exactly how memory works, but they know that short term memory allows us to remember something for a very short time without rehearsing or practicing it. We can't remember a lot of things in short term memory though, and, like its name suggests, these memories don't last very long.

# The Brain Needs Energy

The brain may not move, but it needs lots of energy. Energy is sent to the brain by our blood. There are lots of blood vessels and blood flowing through the brain at all times. The brain actually uses around twenty percent of the body's energy.

# The Brain Has Two Halves

The brain is divided into two halves. Since the nerves cross when they enter the brain, the left side of our brain controls the right half of our body and the right side controls the left. Each half also controls specialized functions. What each half does depends on whether you are left or right handed. In a right handed person the left side of the brain is used for language and numbers while the right side is the more artistic side and is also used for recognizing objects.