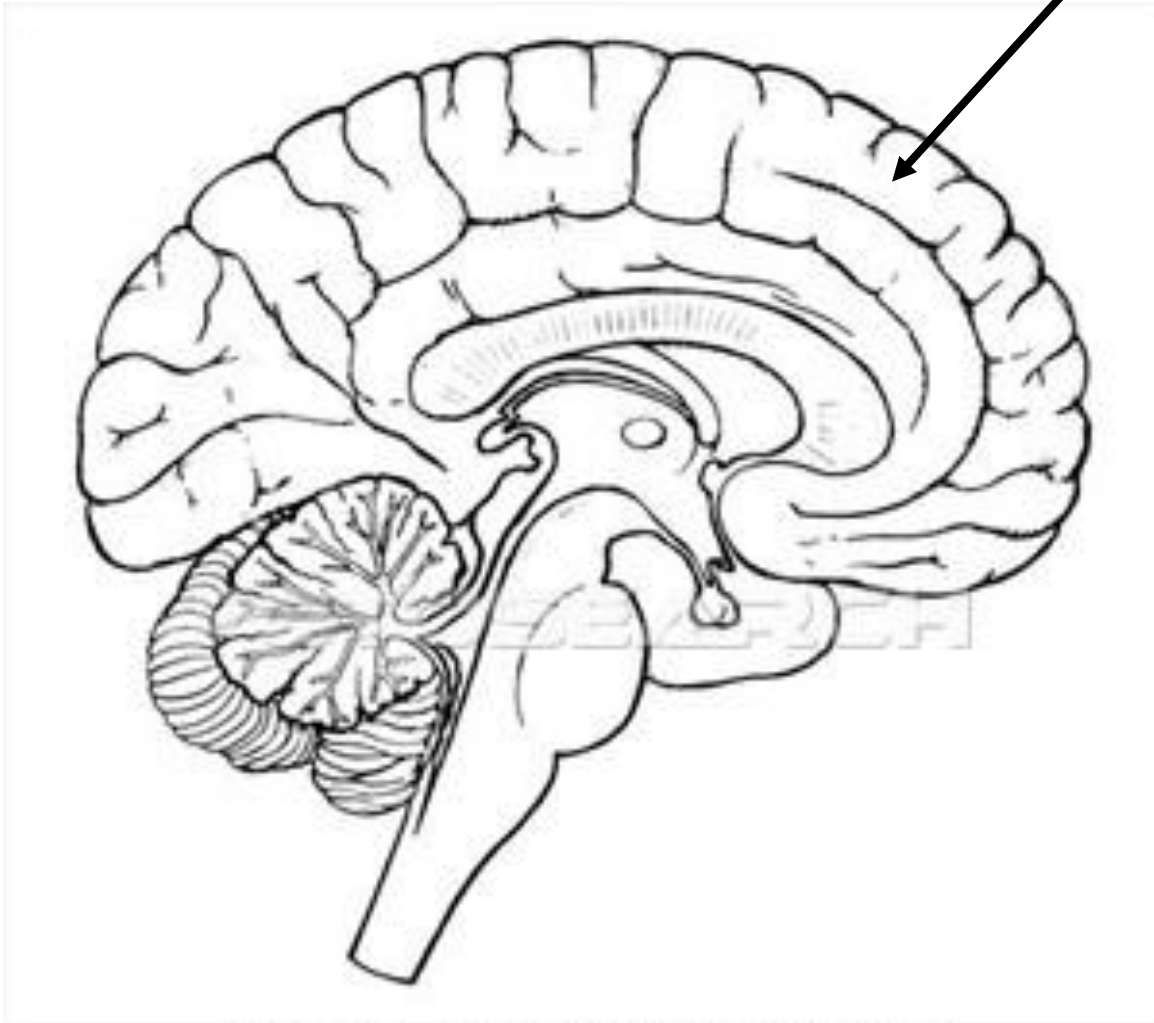


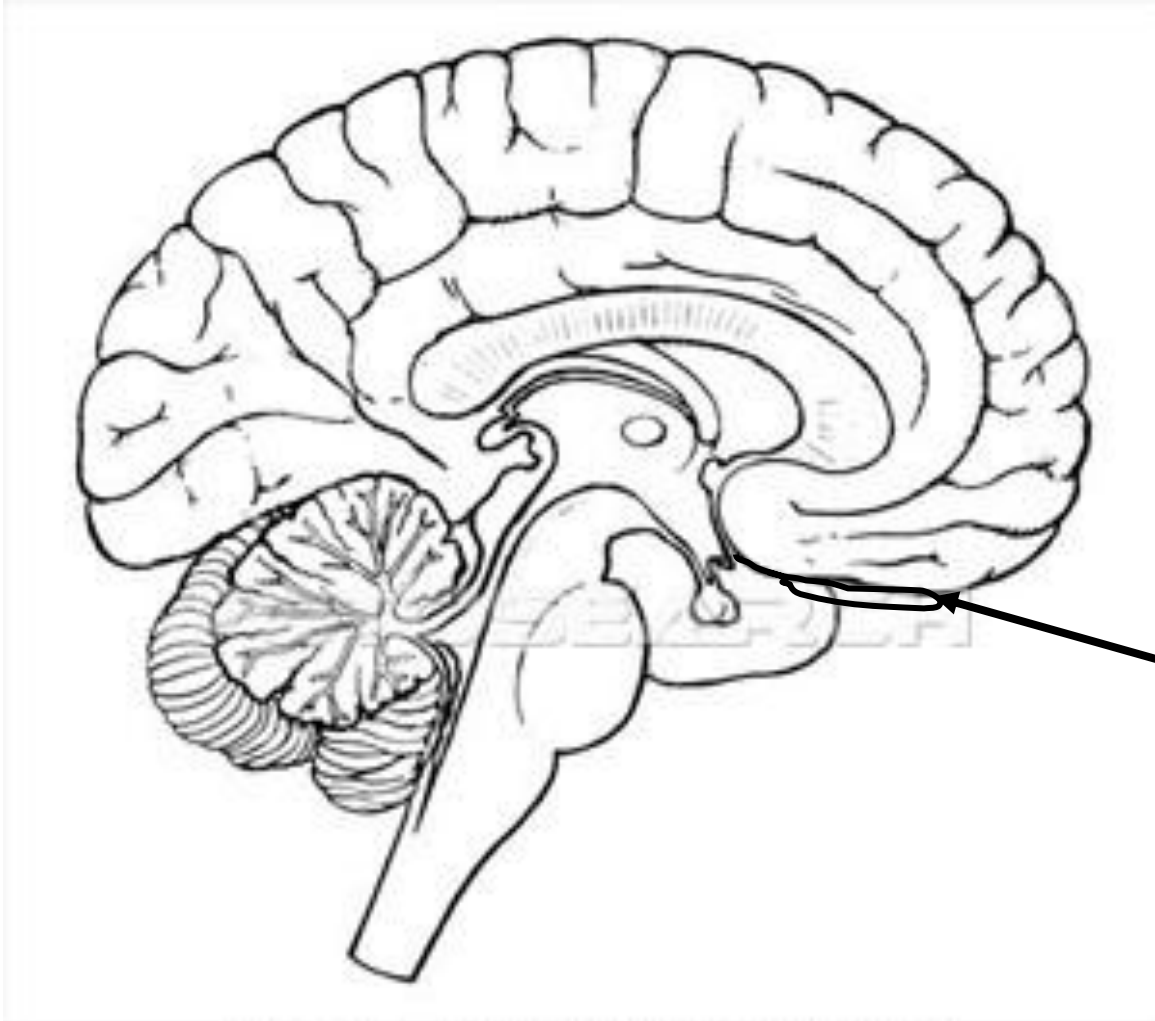
Station # _____



The Cerebrum

The biggest part of the brain is the cerebrum. The cerebrum makes up 85% of the brain's weight. The cerebrum is the thinking part of the brain and it controls your voluntary muscles – the muscles that move when you want them to move. So, you can't dance or kick a soccer ball without your cerebrum. When you're thinking hard, you're using your cerebrum. You need it to solve math problems, figure out a video game, and draw a picture. Your memory lives in the cerebrum. The cerebrum also helps you reason, like when you figure out that you'd better do your homework now because your mom is taking you to a movie later. Scientists do know for sure that the right half of the cerebrum controls the left side of your body, and the left half controls the right side.

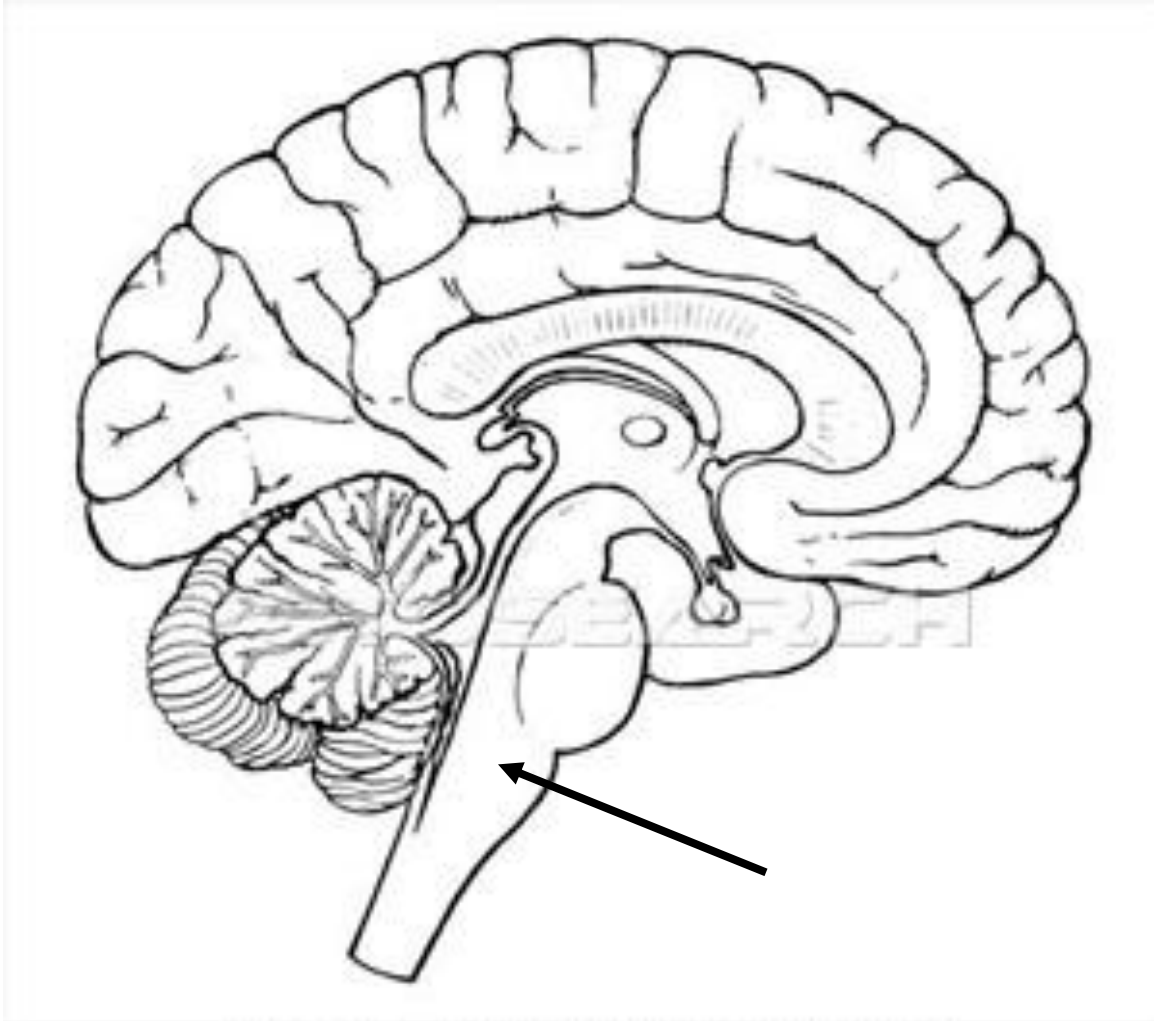
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Olfactory Bulb

Smell depends on sensory receptors that respond to airborne chemicals. In humans, these chemoreceptors are located in the olfactory epithelium (a patch of tissue about the size of a postage stamp located high in the nose). Each receptor is capable of binding to several different odors – some more tightly than others. Each odor is capable of binding to several different receptors.

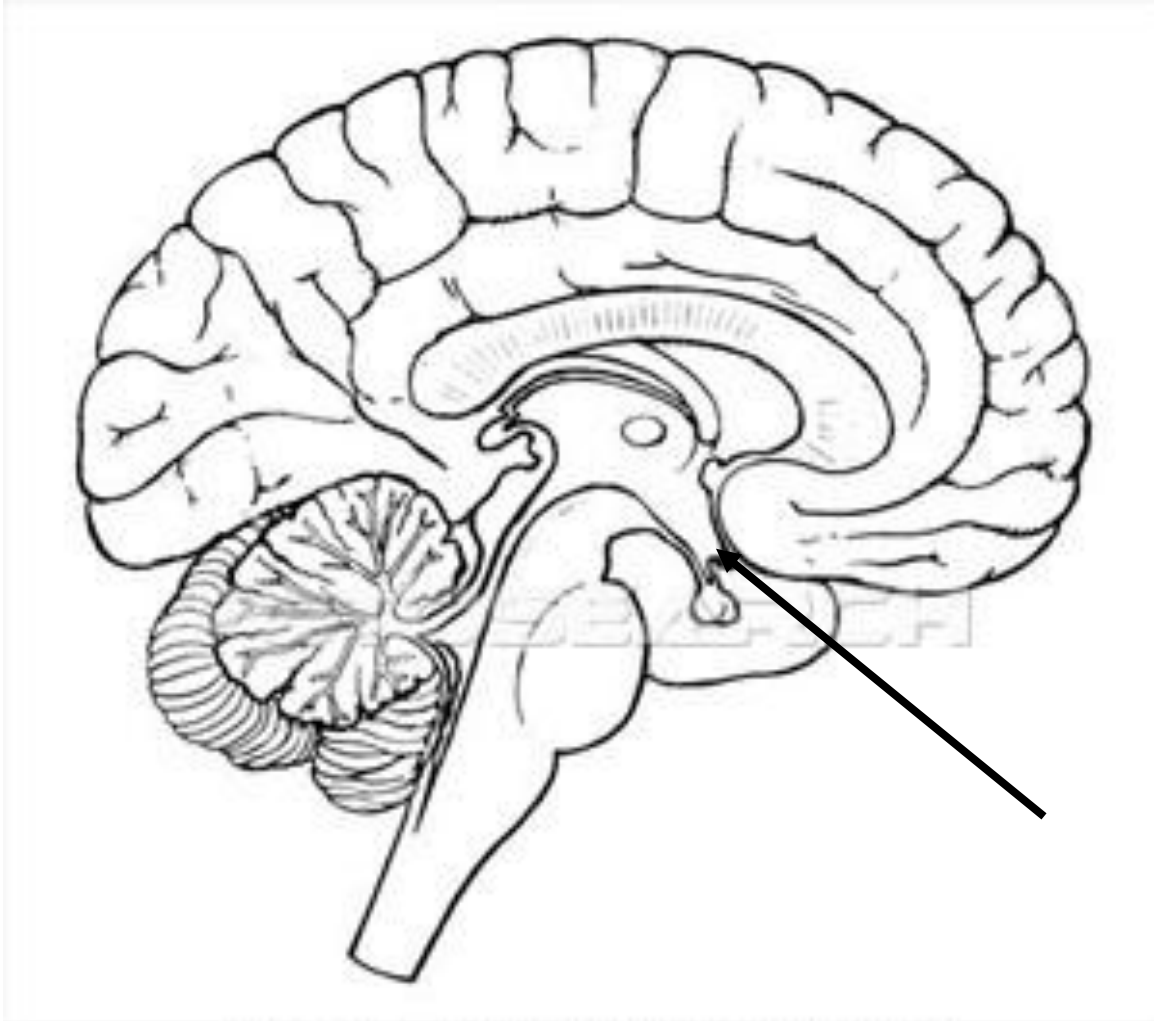
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Medulla Oblongata

The medulla looks like a swollen tip of the spinal cord. Nerve impulses arising here rhythmically stimulate the muscles of the ribs and diaphragm – making breathing possible, regulate heartbeat and regulate blood flow.

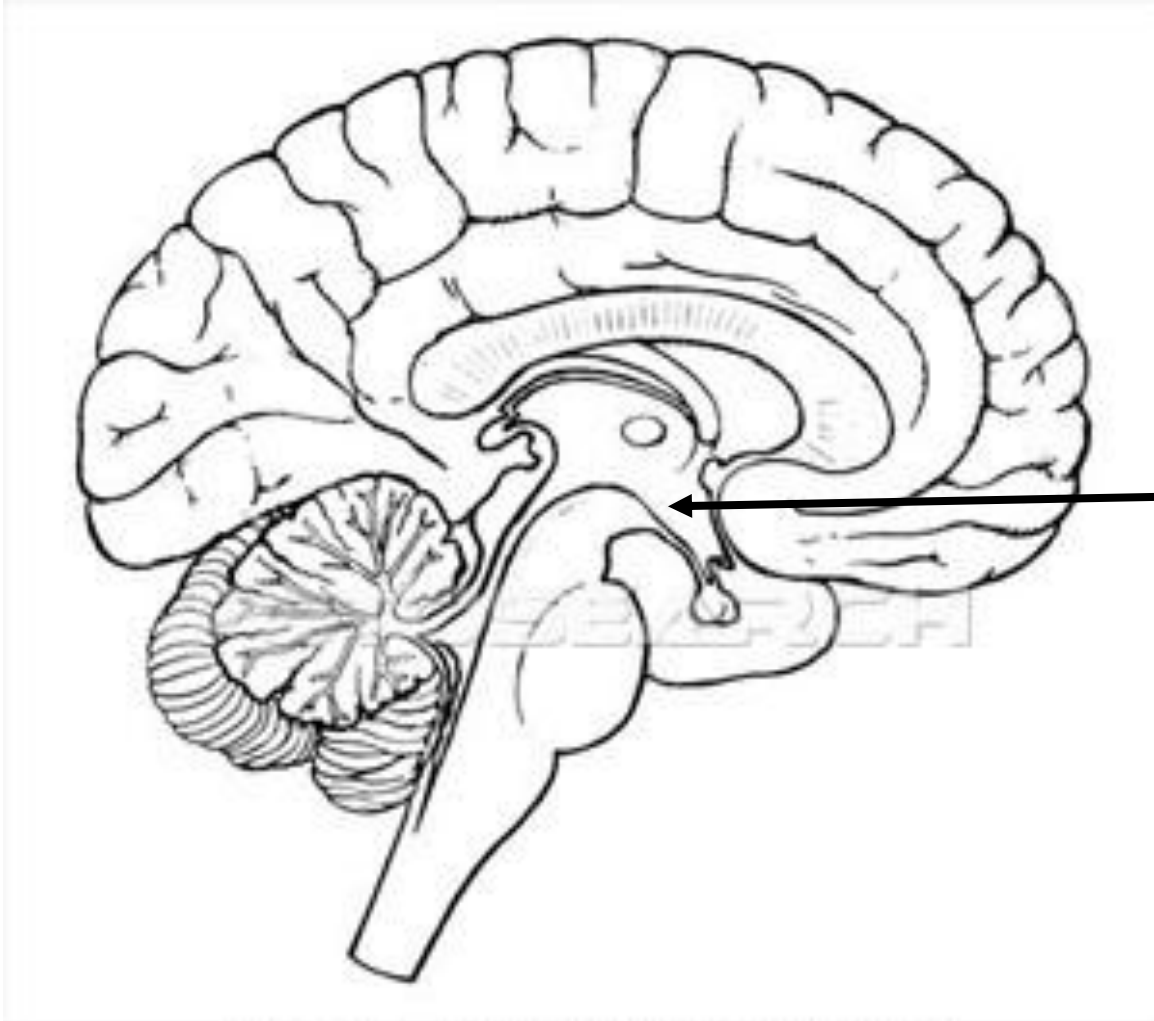
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Optic Nerve

The optic nerve transmits electrical impulses from the retina (part of the inner eye) to the brain. It connects to the back of the eye. When examining the back of the eye, a portion of the optic nerve called the optic disc can be seen. The retina's sensory receptor cells are absent from the optic disc (the area where the optic nerve connects to the back of the eye). Because of this, everyone has a normal blind spot. This is not normally noticeable because vision of both eyes overlaps.

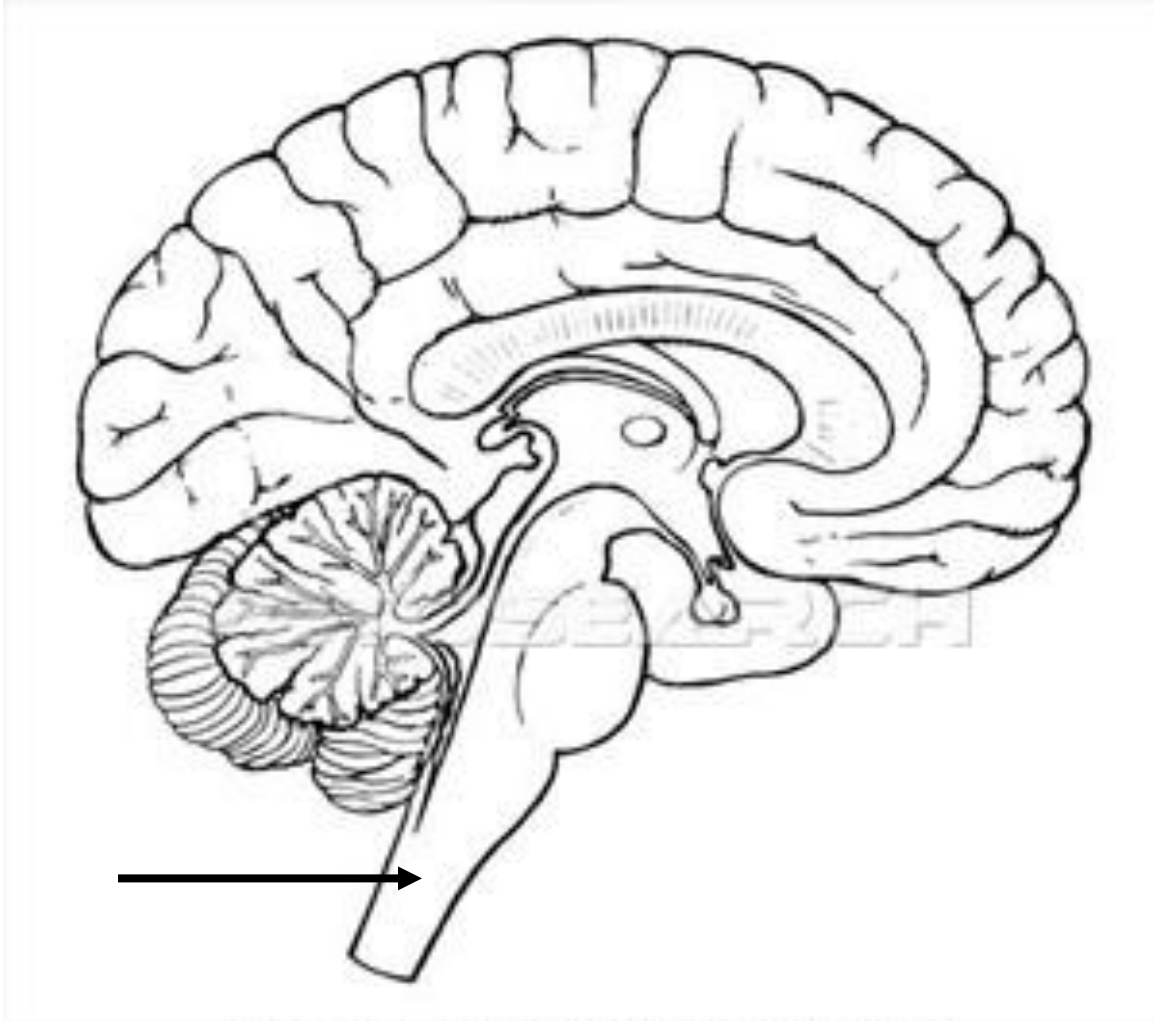
Station # _____



The Hypothalamus

The hypothalamus is like your brain's inner thermostat (like that little box on the wall that controls the heat in your house). The hypothalamus knows what temperature your body should be (about 98.6 degrees Fahrenheit). If your body is too hot, the hypothalamus tells it to sweat. If you're too cold, the hypothalamus gets you shivering. Both shivering and sweating are attempts to get your body's temperature back where it needs to be.

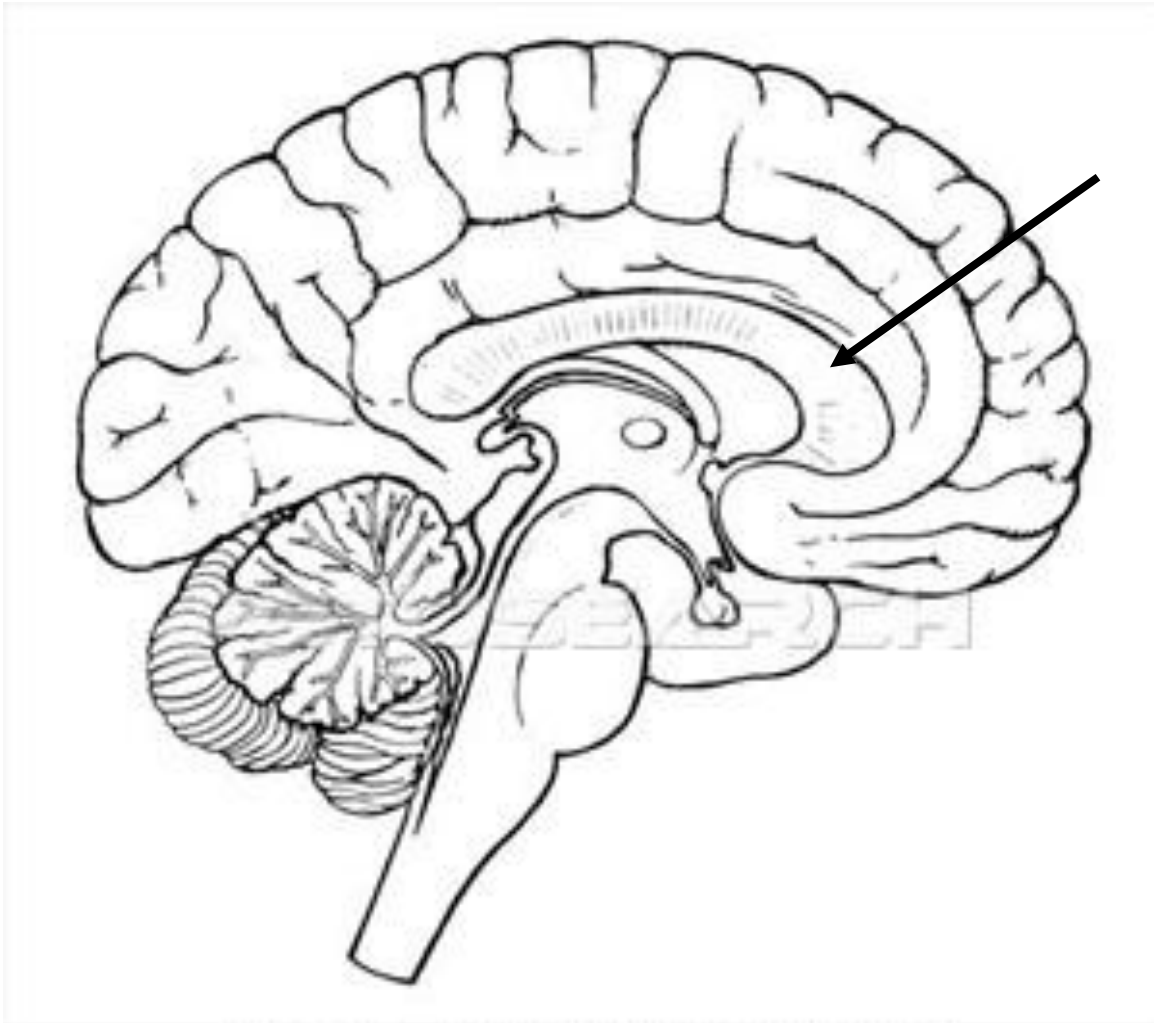
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The Brain Stem

The brain stem sits beneath the cerebrum and in front of the cerebellum. It connects the rest of the brain to the spinal cord, which runs down your neck and back. Part of the brain stem's job is to control your involuntary muscles – the ones that work automatically, without you even thinking about it. The brain stem is in charge of all the functions your body needs to stay alive, like breathing air, digesting food, and circulating blood. The brain stem also sorts through millions of messages that the brain and the rest of the body send back and forth.

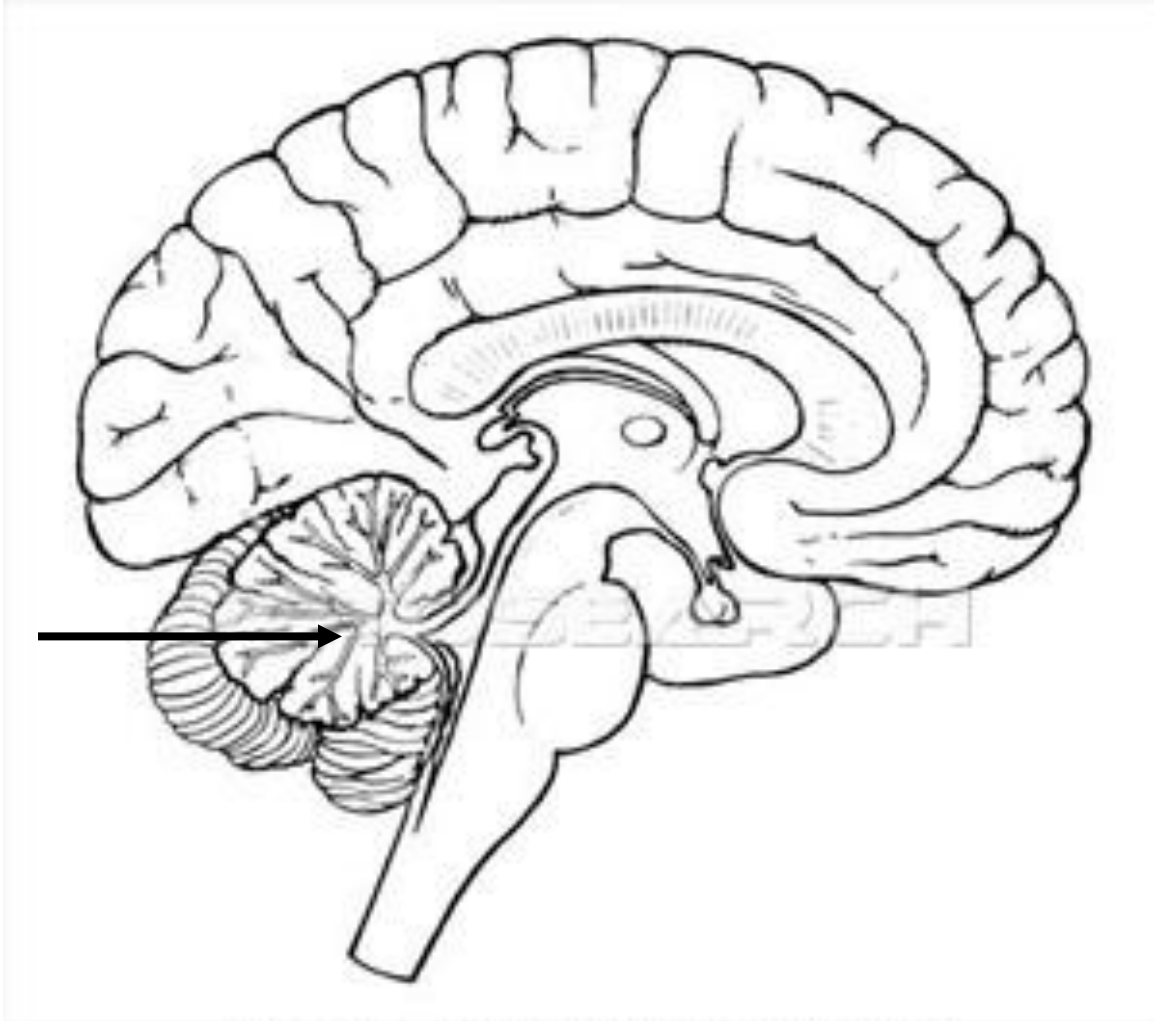
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Corpus Callosum

The corpus callosum is the main link that connects the two halves of the brain. The primary function of the corpus callosum is to coordinate movement, senses, and cognitive (thinking) performances between the two halves of the brain.

Station # _____



The Cerebellum

The cerebellum is at the back of the brain, below the cerebrum. It's a lot smaller than the cerebrum at only 1/8 of its size. It controls balance, movement, and coordination (how your muscles work together). Because of your cerebellum, you can stand upright, keep your balance, and move around.