A Piece of Your Mind:

Brain Anatomy

Teacher Enrichment Initiatives
The University of Texas Health Science Center at San Antonio

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CEREBRUM: Frontal Lobe

Frontal Lobe:
• Responsible for thinking and creativity
• The motor area is located within the frontal lobe
• Color the Frontal Lobe Purple
Parietal Lobe:
• Controls memory of objects and their uses, and directions
• Contains the Sensory Area, which receives sensory messages such as touch, pain and temperature from the rest of the body
• Color the **Parietal Lobe Green**
CEREBRUM: Motor & Sensory Areas

Motor Area: Located at the back of the Frontal Lobe
Sensory Area: Located at the front of the Parietal Lobe
Temporal Lobes (one on each side of brain):
• Control hearing, speech, and memory
• Color the **Temporal Lobe Orange** (the other temporal lobe is on the other side and is not shown)
CEREBRUM: Occipital Lobes

Occipital lobes:
• Nerve impulses from eyes are received and turned into images
• Color the Occipital Lobes Blue (There are two occipital lobes, one on each side - only 1 is shown in this diagram)
Insular Lobe:
• Located under other four lobes - it cannot be seen without pushing aside the frontal and temporal lobes (Beneath Flap in your diagram)
• It may control behavior related to feelings
• Color the **Insular Lobe White**
Understanding the planes of the body will help as you study the structure and function of the brain (and other parts of the body, too).
Cerebellum or “Little Brain"
• This structure controls movement, posture, and balance
• It may also play a role in learning (cognitive development)
• Color the Cerebellum Red
Diencephalon (Cross Section of Brain)

Located below the two hemispheres of the cerebrum and above the brain stem

You are looking at a Sagittal Cross Section of the Brain

• Contains thalamus, hypothalamus, optic tracts, part of the pituitary gland, and the pineal gland
• Color the Diencephalon Green
Brain Stem: • Connects to the spinal cord • Divided into three parts (see next slide) • Color the Brainstem Blue
Brain Stem (Enlarged from previous slide)

**Midbrain:** controls functions such as vision, hearing, eye movement, and body movement.

**Pons:** motor control and sensory analysis. Some structures within the Pons are linked to the cerebellum, thus are involved in movement and posture.

**Medulla Oblongata:** Located between the Pons and the Spinal cord – controls vital body functions, such as breathing and heart rate.

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