Superior: above
Inferior: below
Ipsilateral: Same side
Contralateral: Opposite Side
Horizontal: Shows brain structures as seen from the side
Sagittal: Shows brain structures as seen from the side
Coronal: Shows brain structures as seen from the front

Specialized Parts
Gray matter: cell bodies & dendrites
White matter: axons, mostly myelinated
Tract/Projection: Set of axons in the CNS
Nerve: Set of axons in the PNS
Nucleus: cluster of neuron cell bodies within CNS
Ganglion: cluster of neuron cell bodies in the PNS
Gyrus (plural: gyri): Bumpy parts of brain (mounds).
Sulcus (plural: sucli): Grooves that separate the gyri.
Fissure: Long, deep sulcus

Brain Structures
3 major divisions: Hindbrain, Midbrain, Forebrain.
Hindbrain: consist of the medulla, pons, and cerebellum.
Located at the posterior portion of the brain.
Medulla: Located above the spinal cord. Responsible for vital reflexes such as breathing, heart rate, vomiting, salivation, coughing and sneezing.
Cranial Nerves: Allow the medulla to control sensations from the head, muscle movement in the head, and many parasymathetic outputs to the organs.
Pons: Lies on each side of the medulla (ventral and anterior). Along with the medulla, it contains the reticular formation and raphe system, which work together to increase arousal and readiness of other parts of the brain.
Cerebellum: Located posterior to the brainstem with many deep folds. Helps regulate motor movement, balance, and coordination. Also important for shifting attention between auditory and visual stimuli.
Midbrain: Comprised of the following structures:
- Superior Colliculus: Helps process visual info.
- Inferior Colliculus: Helps process auditory info.
- Substatia Nigra: Involved in movement.

Brain stem: consists of the medulla, pons, midbrain, some forebrain structures.
Forebrain: most prominent part of the brain, consisting of the outer cortex (cerebral cortex) and subcortical regions.
Limbic System: Associated with motivation, emotion, drives and aggression, and includes: olfactory bulb, hypothalamus, hippocampus, and amygdala.
Olfactory bulbs: Send info about smell to cortex