# neuroanatomy-lab-handout.md

## Directional terms

|  |  |  |  |
| --- | --- | --- | --- |
| Direction | Brain Model | Specimen | Atlas |
| Rostral/caudal |  |  |  |
| Anterior/posterior |  |  |  |
| Medial/lateral |  |  |  |
| Dorsal/ventral |  |  |  |
| Superior/inferior |  |  |  |

## Planes of Section

|  |  |  |  |
| --- | --- | --- | --- |
| Plane | Brain Model | Specimen | Atlas |
| [Sagittal](https://en.wikipedia.org/wiki/Sagittal_plane) |  |  |  |
| [Coronal/frontal](https://en.wikipedia.org/wiki/Coronal_plane) |  |  |  |
| [Axial/horizontal/transverse](https://en.wikipedia.org/wiki/Transverse_plane) |  |  |  |

## Brain Structure

|  |  |  |  |
| --- | --- | --- | --- |
| Structure | Brain Model | Specimen | Atlas |
| [Forebrain](https://en.wikipedia.org/wiki/Prosencephalon) |  |  |  |
| [Midbrain](https://en.wikipedia.org/wiki/Midbrain) |  |  |  |
| [Hindbrain](https://en.wikipedia.org/wiki/Rhombencephalon) |  |  |  |

## Surface of Cerebral Cortex

|  |  |  |  |
| --- | --- | --- | --- |
| Structure | Brain Model | Specimen | Atlas |
| [Central sulcus](https://en.wikipedia.org/wiki/Central_sulcus) |  |  |  |
| [Lateral sulcus/fissure](https://en.wikipedia.org/wiki/Lateral_sulcus) |  |  |  |
| [Longitudinal fissure](https://en.wikipedia.org/wiki/Medial_longitudinal_fissure) |  |  |  |
| [Cerebral hemispheres](https://en.wikipedia.org/wiki/Cerebral_hemisphere) |  |  |  |
| [Parietal lobe](https://en.wikipedia.org/wiki/Parietal_lobe) |  |  |  |
| [Frontal lobe](https://en.wikipedia.org/wiki/Frontal_lobe) |  |  |  |
| [Insular cortex](https://en.wikipedia.org/wiki/Insular_cortex) |  |  |  |
| [Temporal lobe](https://en.wikipedia.org/wiki/Temporal_lobe) |  |  |  |
| [Occipital lobe](https://en.wikipedia.org/wiki/Occipital_lobe) |  |  |  |

## 

## Surface of Cerebral Cortex

|  |  |  |  |
| --- | --- | --- | --- |
| Structure | Brain Model | Specimen | Atlas |
| [Precentral gyrus](https://en.wikipedia.org/wiki/Precentral_gyrus) |  |  |  |
| [Postcentral gyrus](https://en.wikipedia.org/wiki/Postcentral_gyrus) |  |  |  |
| [Superior temporal gyrus](https://en.wikipedia.org/wiki/Superior_temporal_gyrus) |  |  |  |

## Fiber tracts

|  |  |  |  |
| --- | --- | --- | --- |
| Structure | Brain Model | Specimen | Atlas |
| [Corpus callosum](https://en.wikipedia.org/wiki/Corpus_callosum) |  |  |  |
| [Anterior commissure](https://en.wikipedia.org/wiki/Anterior_commissure) |  |  |  |
| [Posterior commissure](https://en.wikipedia.org/wiki/Posterior_commissure) |  |  |  |
| [Olfactory nerve, Ist](https://en.wikipedia.org/wiki/Olfactory_nerve) |  |  |  |
| [Optic nerve/tract, IInd](https://en.wikipedia.org/wiki/Optic_nerve) |  |  |  |
| [Optic chiasm](https://en.wikipedia.org/wiki/Optic_chiasm) |  |  |  |
| [Fornix](https://en.wikipedia.org/wiki/Fornix_(neuroanatomy) |  |  |  |

## Subcortical structures

|  |  |  |  |
| --- | --- | --- | --- |
| Structure | Brain Model | Specimen | Atlas |
| [Caudate nucleus](https://en.wikipedia.org/wiki/Caudate_nucleus) |  |  |  |
| [Putamen](https://en.wikipedia.org/wiki/Putamen) |  |  |  |
| [Globus Pallidus](https://en.wikipedia.org/wiki/Globus_pallidus) |  |  |  |
| [Thalamus](https://en.wikipedia.org/wiki/Thalamus) |  |  |  |
| [Hypothalamus](https://en.wikipedia.org/wiki/Hypothalamus) |  |  |  |
| [Pituitary gland](https://en.wikipedia.org/wiki/Pituitary_gland) |  |  |  |
| [Hippocampus](https://en.wikipedia.org/wiki/Hippocampus) |  |  |  |
| [Amygdala](https://en.wikipedia.org/wiki/Amygdala) |  |  |  |

## Midbrain

|  |  |  |  |
| --- | --- | --- | --- |
| Structure | Brain Model | Specimen | Atlas |
| [Tectum](https://en.wikipedia.org/wiki/Midbrain_tectum) |  |  |  |
| [Superior colliculus](https://en.wikipedia.org/wiki/Superior_colliculus) |  |  |  |
| [Inferior colliculus](https://en.wikipedia.org/wiki/Inferior_colliculus) |  |  |  |
| [Tegmentum](https://en.wikipedia.org/wiki/Tegmentum) |  |  |  |
| [Substantia nigra](https://en.wikipedia.org/wiki/Substantia_nigra) |  |  |  |
| [Ventral tegmental area](https://en.wikipedia.org/wiki/Ventral_tegmental_area) |  |  |  |
| [Locus coeruleus](https://en.wikipedia.org/wiki/Locus_coeruleus) |  |  |  |

## Hindbrain

|  |  |  |  |
| --- | --- | --- | --- |
| Structure | Brain Model | Specimen | Atlas |
| [Cerebellum](https://en.wikipedia.org/wiki/Cerebellum) |  |  |  |
| [Pons](https://en.wikipedia.org/wiki/Pons) |  |  |  |
| [Medulla Oblongata](https://en.wikipedia.org/wiki/Medulla_oblongata) |  |  |  |
| [Spinal cord](https://en.wikipedia.org/wiki/Spinal_cord) |  |  |  |

## Ventricles

|  |  |  |  |
| --- | --- | --- | --- |
| Structure | Brain Model | Specimen | Atlas |
| [Lateral ventricles](https://en.wikipedia.org/wiki/Lateral_ventricles) |  |  |  |
| [3rd ventricle](https://en.wikipedia.org/wiki/Third_ventricle) |  |  |  |
| [Cerebral aqueduct](https://en.wikipedia.org/wiki/Cerebral_aqueduct) |  |  |  |
| [4th ventricle](https://en.wikipedia.org/wiki/Fourth_ventricle) |  |  |  |