

## Lab 12 — Structures of the Brain to Know

| Structure  | Brain Model | Sheep's Brain |
|--|-------------|---------------|
| Dura + Arachnoid maters                                  |             | ✓             |
| Pia mater  |             | ✓             |
| Cerebrum (Cerebral hemispheres)                          | ✓           | ✓             |
| Longitudinal fissure                                     | ✓           | ✓             |
| Frontal lobe   | ✓           | ✓             |
| Parietal lobe  | ✓           | ✓             |
| Occipital lobe   | ✓           | ✓             |
| Temporal lobe  | ✓           | ✓             |
| Central sulcus   | ✓           |               |
| Postcentral gyrus  | ✓           |               |
| Precentral gyrus   | ✓           |               |
| Lateral sulcus   | ✓           |               |
| Corpus callosum  | ✓           | ✓             |
| Fornix   | ✓           | ✓             |
| Cranial Nerves (for others on brain stem, see next page) | ✓           |               |
| Optic chiasma  | ✓           | ✓             |
| Optic nerve  | ✓           | ✓             |
| Olfactory nerve  | ✓           | ✓             |
| Olfactory bulb   | ✓           | ✓             |
| Cerebellum   | ✓           | ✓             |
| Arbor vitae  | ✓           | ✓             |
| Cerebellar cortex  | ✓           | ✓             |
| Ventricles   |             |               |
| Lateral ventricles separated by septum pellucidum        | ✓           | ✓             |
| Choroid plexus of third ventricle                        | ✓           |               |
| Fourth ventricle   | ✓           | ✓             |
| Cerebral aqueduct  | ✓           | ✓             |
| Thalamus   | ✓           | ✓             |
| Interthalamic adhesion                                   | ✓           |               |
| Pineal gland   | ✓           | ✓             |
| Hypothalamus   | ✓           | ✓             |
| Mammillary bodies  | ✓           | ✓             |
| Pituitary gland  | ✓           | if present    |
| Midbrain (Mesencephalon)                                 | ✓           | ✓             |
| Corpora quadrigemina                                     | ✓           | ✓             |
| Pons   | ✓           | ✓             |
| Medulla oblongata  | ✓           | ✓             |
| Spinal cord (not part of brain, of course)               |             | ✓             |

**Complete the Chart of Cranial Nerves**

| <b>Number</b> | <b>Name</b> | <b>Innervation*</b> | <b>Functions</b> |
|---------------|-------------|---------------------|------------------|
| <b>I</b>      |             |                     |                  |
| <b>II</b>     |             |                     |                  |
| <b>III</b>    |             |                     |                  |
| <b>IV</b>     |             |                     |                  |
| <b>V</b>      |             |                     |                  |
| <b>VI</b>     |             |                     |                  |
| <b>VII</b>    |             |                     |                  |
| <b>VIII</b>   |             |                     |                  |
| <b>IX</b>     |             |                     |                  |
| <b>X</b>      |             |                     |                  |
| <b>XI</b>     |             |                     |                  |
| <b>XII</b>    |             |                     |                  |

\* List organs, major muscles, and regions innervated