

HUMAN ANATOMY & PHYSIOLOGY I LAB – CAHS 121
Key Points

Lab # 9

EXERCISE #19 – Gross Anatomy of the Brain and Cranial Nerves

	<i>CNS</i>	<i>PNS</i>
“Above the neck” (this lab)	brain	cranial nerves
“Below the neck” (next lab)	spinal cord	spinal nerves

-Know & ID major brain landmarks using model to point out major external and internal brain structures:

1. Cerebrum – independence of L&R hemispheres, lobes, Sulci vs. Gyri, cortex (gray matter)
2. Diencephalon – thalamus and hypothalamus
3. Cerebellum
4. Brainstem – midbrain, pons, medulla oblongata

-Know Gray matter (cell bodies) vs. White matter (myelinated nerve fibers)

-Know Meninges (dura, arachnoid, pia mater)

-Know 4 Ventricles (filled with cerebrospinal fluid)

-Know & ID the 12 cranial nerves pairs – use Table 19.1 – Test cranial nerve functions on lab partner:

Cranial Nerve Testing (*s=sensory, m=motor, b=both*)

S	I	Olfactory	sniff essences
S	II	Optic	eye chart
M	III	Oculomotor	penlight (iris/pupil), roll eyes
M	IV	Trochlear	same as III
B	V	Trigeminal	S: feel sensation on face, M: clench teeth, blink reflex
M	VI	Abducens	same as III
B	VII	Facial	S: tastes, M: tearing, face symmetry
S	VIII	Vestibulocochlear	tuning forks
B	IX	Glossopharyngeal	gag (and taste at post. of tongue)
B	X	Vagus	throat muscles, etc.
M	XI	Accessory	head/neck rotation
M	XII	Hypoglossal	stick tongue out, retract tongue

-Sheep brain dissection (in groups of 3-4) – described on p.293-297

-Know & ID **ALL** structures in Figs. 19.13 and 19.14

Homework: Review Sheet 19

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