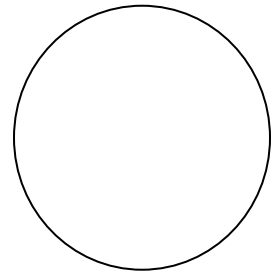
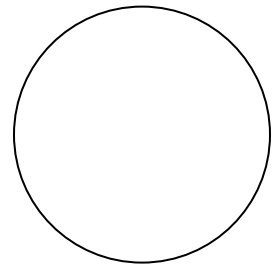
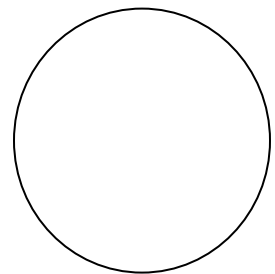


**Lab 10: Muscle Tissue and Selected Muscles****Ex. 10: Histology of Muscle****Muscle Tissue****Skeletal muscle:****Cardiac muscle:****Smooth muscle**

## MUSCLE LIST

Ex. 11: Gross Anatomy of Muscle

Locate these muscles on models and charts in the lab and on the CD in the computer lab.

Know the origin, insertion and action for each of the following muscles:

Muscle	Origin	Insertion	Action
<b>1. Temporalis</b> [mastication]	temporal fossa	mandible	closes jaw
<b>2. Orbicularis oris</b> [facial expression]	maxilla, mandible	lips	closes & protudes lips (speaking/kissing)
<b>3. Lateral rectus</b> [extrinsic eye muscle]	tendinous ring of eye orbit	lateral eyeball	moves eye laterally
<b>4. Sternocleidomastoid</b> [neck]	sternum and clavicle	mastoid process	flexes neck forward (if both contract)
<b>5. Deltoid</b> [shoulder joint]	acromion process & spine of scapula, clavicle	deltoid tuberosity (humerus)	flexion, adduction & extension of arm
<b>6. Trapezius</b> [posterior shoulder]	occipital bone, spinous processes-thoracic vert.	clavicle, scapula (acromion process and spine)	elevate, retract, depress scapula
<b>7. Triceps Brachii</b> [posterior arm]	<i>Long head:</i> glenoid cavity <i>Lat. head:</i> humerus (post.) <i>Medial head:</i> humerus	ulna (olecranon process)	extension of forearm
<b>8. Rectus abdominis</b> [abdominal wall]	pubic symphysis	xiphoid process	abdominal compression
<b>9. Gluteus maximus</b> [gluteal region]	ilium, sacrum, coccyx	fascia lata (iliotibial tract)	hip extension (climb stairs)
<b>10. Rectus femoris</b> (part of Quadriceps femoris gp.) [thigh muscle]	ant. inf. iliac spine, femur	tibial tuberosity	extension of knee (flex thigh at hip)

**Lab 11: Eye and Ear**

## Ex. 17: Special Senses

Locate the following structures on models, charts, and **\*sheep eye**:

**The EYE**

\*Extrinsic Muscles

\*Conjunctiva

Lacrimal Gland

Nasolacrimal duct

Fibrous tunic: { \*Cornea  
\*Sclera

Vascular tunic: { \*Iris  
\*Pupil  
\*Ciliary body  
\*Choroid

Neural tunic: \*Retina  
Rods  
Cones

\*Lens

\*Optic disk

\*Optic nerve ( CN II)

Fovea centralis

\*Aqueous humor

\*Vitreous humor

**Visual Tests:**

Blind Spot:

Near-Point Accommodation:

Visual Acuity (Snellen Chart):

Color Blindness (Ishihara color plates):

## THE EAR

Locate the following structures on models and charts:

### External Ear

Pinna (auricle)

External acoustic canal

Tympanic membrane

### Middle Ear

Ossicles (Malleus, Incus, Stapes)

Oval window

Auditory (Eustachian) tube

### Inner Ear

Semicircular canals

Vestibule

Cochlea

Spiral organ (Organ of Corti)

Vestibulocochlear (Auditory) Nerve (CN VIII)

### Hearing Tests:

Weber Test:

Rinne Test:

**LAB 12: Nerve Tissue, Nerves, Spinal Cord, and Brain**

Ex. 13: Histology of Nerve Tissue

Ex. 14: Brain and Cranial Nerves

Ex. 15: Spinal Cord and Spinal Nerves

Giant Multipolar Neuron slide:

cell body or soma  
processes

Motor Neuron model:

cell body or soma  
dendrites  
axon  
Schwann cell  
nodes of Ranvier

Spinal Cord slide:

gray matter  
white matter  
central canal

Spinal Cord model:

gray matter  
white matter  
central canal  
dorsal (posterior) root ganglion  
ventral (anterior) root

Brain (human brain model and sheep brain)

meninges (dura mater, arachnoid, pia mater)

cerebrum

hemispheres (right & left)

longitudinal fissure

lobes (frontal, parietal, temporal, occipital)

sulci (valleys)

gyri (hills)

olfactory bulbs and tracts

optic chiasma

cerebellum

arbor vitae

pons

medulla oblongata

corpora quadrigemina

superior colliculi

inferior colliculi

corpus callosum

pineal gland

thalamus

hypothalamus

infundibulum

pituitary gland

**LAB 13: Cranial Nerves**

## Ex. 14: Brain and Cranial Nerves

<u>Name</u>	<u>Test for Nerve Function</u>	<u>Major Function</u>
<b>I. OLFACTORY</b>		<b>S</b> only: Smell
<b>II. OPTIC</b>		<b>S</b> only: Sight
<b>III. OCULOMOTOR</b>		<b>S</b> : Receptors that influence pupil size <b>M</b> : Muscles that move eye ( <i>except</i> sup. oblique, lat. rectus)
<b>IV. TROCHLEAR</b>		<b>S</b> : Muscle sense (eye muscles) <b>M</b> : Superior oblique eye muscle
<b>V. TRIGEMINAL</b>		<b>S</b> : Sensations of head, face <b>M</b> : Muscles of mastication
<b>VI. ABDUCENS</b>		<b>S</b> : Muscle sense (eye muscles) <b>M</b> : Lateral rectus eye muscle
<b>VII. FACIAL</b>		<b>S</b> : Tastebuds (ant. 2/3 tongue) <b>M</b> : Muscles for facial expressions
<b>VIII. VESTIBULOCOCHLEAR</b> (or AUDITORY)		<b>S</b> only: Hearing & equilibrium
<b>IX. GLOSSOPHARYNGEAL</b>		<b>S</b> : Tastebuds (post. 1/3 tongue) <b>M</b> : Salivary glands & muscles for swallowing
<b>X. VAGUS</b>		<b>S</b> : Pharynx, thoracic & abdominal viscera <b>M</b> : Major PSN nerve to thoracic & abdominal viscera
<b>XI. ACCESSORY (SPINAL)</b>		<b>S</b> : Proprioception from head, neck, shoulder muscles <b>M</b> : Head & shoulder movements
<b>XII. HYPOGLOSSAL</b>		<b>S</b> : Proprioception from tongue <b>M</b> : Tongue movement & swallowing

S = Sensory  
M = Motor