Introduction to Anatomy and Physiology

BIOL 2404: Lab Practical 2

**Chapter 7: Muscles**

Head and Neck:

|  |  |  |
| --- | --- | --- |
| Frontalis | Buccinator | Sternocleidomastoid |
| Occipitalis | Masseter | Scalenes |
| Orbicularis Oculi | Temporalis |  |
| Orbicularis Oris | Zygomaticus |  |

Torso and Arm:

|  |  |  |
| --- | --- | --- |
| Trapezius | Biceps brachii | Rectus Abdominis |
| Serratus Anterior | Brachialis | Linea Alba\* |
| Pectoralis Major | Brachioradialis | Diaphram |
| Latissimus Dorsi | Triceps brachii |  |

Lower limb

|  |  |  |  |
| --- | --- | --- | --- |
| Gluteus maximus | Hamstring Group: | | Quadriceps Group: |
| Adductor group: | Biceps femoris | | Rectus femoris |
| Adductor longus | Semitendinosus | | Vastus lateralis |
| Adductor magnus | Semimembranosus | | Vastus medialis |
| Gracilis |  | | Vastus intermedius |
| Sartorius | Gastrocnemius | | Calcaneal (Achilles) Tendon |
| **Muscle Action** | | | |
| orbicularis oris | | Closes mouth | |
| orbicularis oculi | | Closes eye | |
| masseter | | Elevates mandible | |
| trapezius | | Rotates scapula | |
| deltoid | | Abducts, extend and flexes arm | |
| biceps brachii | | Flexes forearm | |
| triceps brachii | | Extends forearm | |
| Rectus abdominis | | Compresses abdominal region | |
| gluteus maximus | | Extends thigh | |
| adductor group | | Adducts leg | |
| hamstring group | | Flexes Leg | |
| quadriceps group | | Extends leg | |

**Joints:**

Temporomandibular joint (TMJ) Tibiofemoral joint (knee joint)

Glenohumeral Joint (shoulder joint) patellar ligament

Pubic symphysis quadriceps tendon

Sacroiliac Joint

**Chapter 8: Nervous**

|  |  |  |
| --- | --- | --- |
| **Neuron:** | **Brain:** | **Spinal Cord:** |
| Dendrite | Meninges | Central canal |
| Cell body | Cerebrum | Dorsal root |
| Axon | Cerebral hemispheres | Dorsal root ganglion |
| Schwann Cell | Convolutions | Ventral root |
| Nodes of Ranvier | Longitudinal fissure |  |
|  | Central sulcus | Spinal Nerves: |
|  | Corpus callosum | Cervical nerves |
|  | Lobes of cerebrum | Thoracic nerves |
|  | Frontal | Lumbar nerves |
|  | Parietal lobe | Sacral Nerves |
|  | Temporal Lobe |  |
|  | Occipital lobe | Ulnar nerve |
|  | Insula | Radial Nerve |
|  | Diencephalon | Median nerve |
|  | Thalamus | Femoral nerve |
|  | Hypothalamus |  |
|  | Pituitary gland |  |
|  | Pons |  |
|  | Medulla Oblongata |  |
|  | Cerebellum  Cranial Nerves |  |
|  | Olfactory nerve |  |
|  | Optic nerve |  |