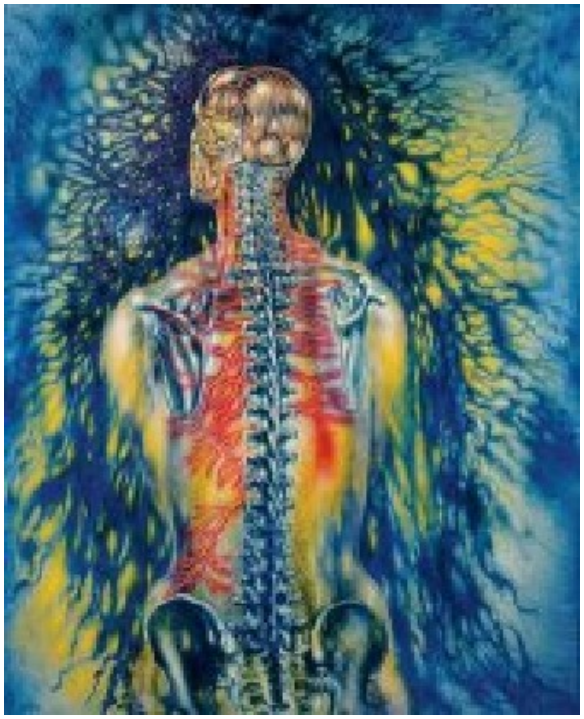
50a A&P: Nervous System - Peripheral Nervous System



50a A&P: Nervous System - Peripheral Nervous System

Class Outline

5 minutes	Attendance, Breath of Arrival, and Reminders
10 minutes	Lecture: Extensor Digitorum
25 minutes	Lecture:
15 minutes	Active study skills:
60 minutes	Total

50a A&P: Nervous System - Peripheral Nervous System

Class Reminders

ABMP Exam Coach

- "Access your ABMP account" using instructions on page A-74
- Familiarize yourself with the ABMP Exam Coach "Study Subjects" section
- Preview the preparation assignments for MBLEx Prep classes (74a, 75a, 80a, 81a, 84a, 86a, 87a)

Assignments:

- 50b Business: Marketing. B-55 for ABMP.com 'Website Builder' instructions
- 53a Internship Review Questions - due before class starts
- 55a Review Questions – due before class starts

Quizzes and Exams:

- 52a Kinesiology Quiz
  (brachialis, brachioradialis, flexor digitorum superficialis, and extensor digitorum)

Preparation for upcoming classes:

- 51a A&P: Nervous System - Autonomic Nervous System and Sensory Receptors
  - Salvo: Pages 586-592.
  - Packet E: 113-116.
  - RQ - Packet A-189

Classroom Rules

Punctuality - everybody's time is precious

- Be ready to learn at the start of class; we'll have you out of here on time
- Tardiness: arriving late, returning late after breaks, leaving during class, leaving early

The following are not allowed:

- Bare feet
- Side talking
- Lying down
- Inappropriate clothing
- Food or drink except water
- Phones that are visible in the classroom, bathrooms, or internship

You will receive one verbal warning, then you'll have to leave the room.

Do you know what you must do to be ready to go into clinic after class 56?

Are you making up your absences?

Are you taking makeup tests and turning in missed assignments so you are passing in all subjects?

Not sure? – Check your student portal or email Tila about to verify your status!

tilat@tlcschool.com

Extensor Digitorum, Trail Guide Page 136

A Extend the second through fifth fingers (metacarpophalangeal and interphalangeal joints)

Assist to extend the wrist (radiocarpal joint)

O Common extensor tendon from lateral epicondyle of the humerus

I Bases of middle and distal phalanges of second through fifth fingers



Posterior View

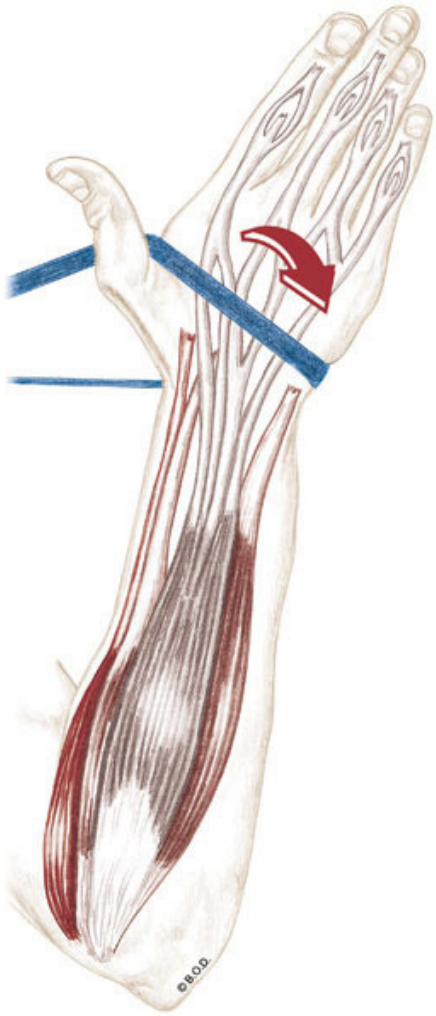
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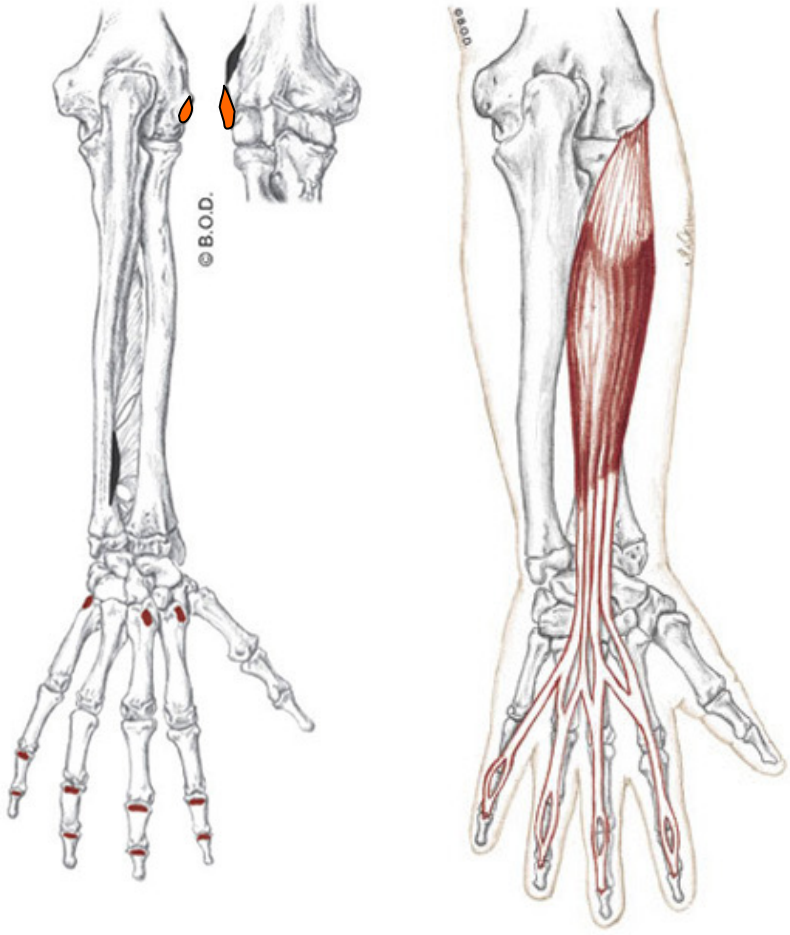
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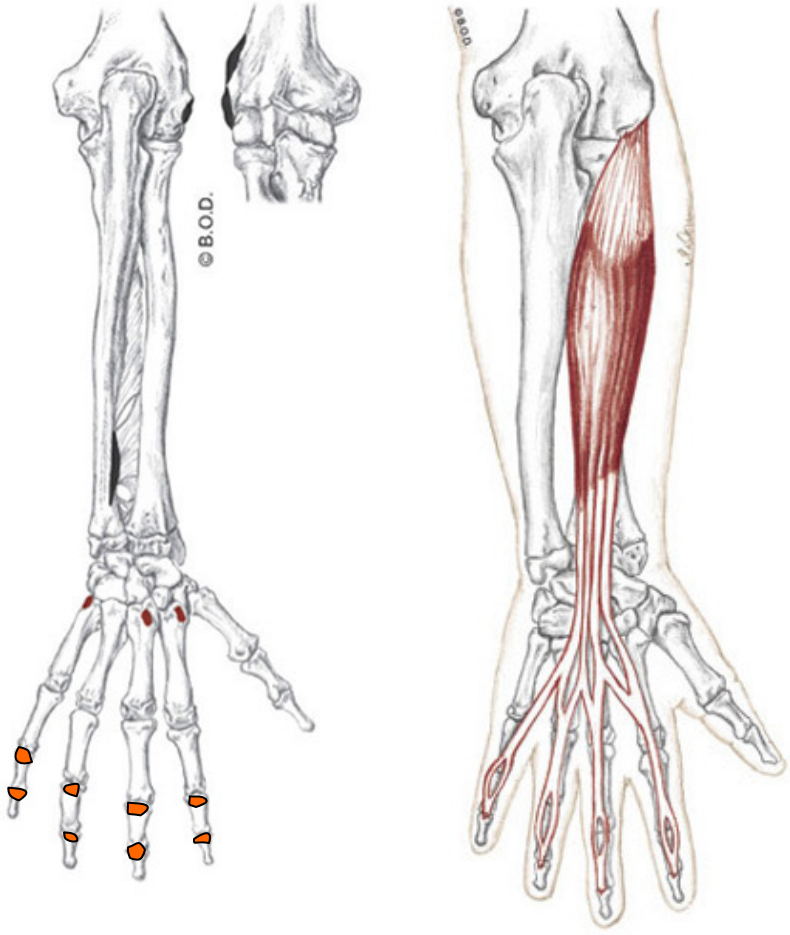
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Posterior View

50a A&P: Nervous System - Peripheral Nervous System

Packet E - 109

Central Nervous System

Spinal cord

Ascending tracts

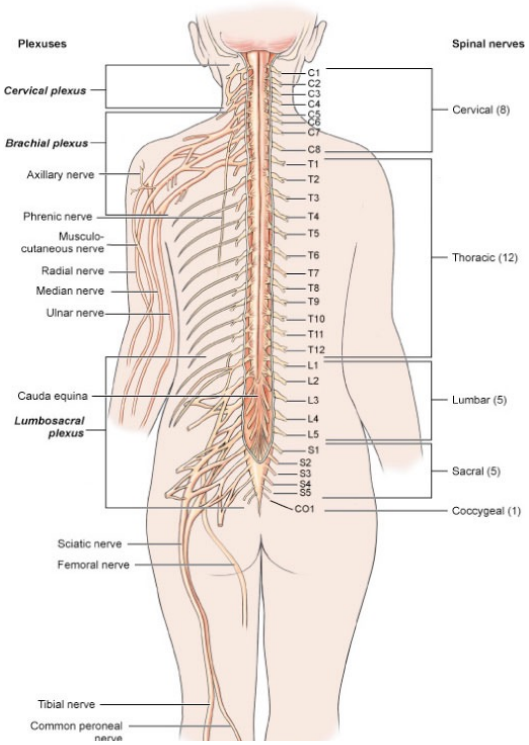
Descending tracts

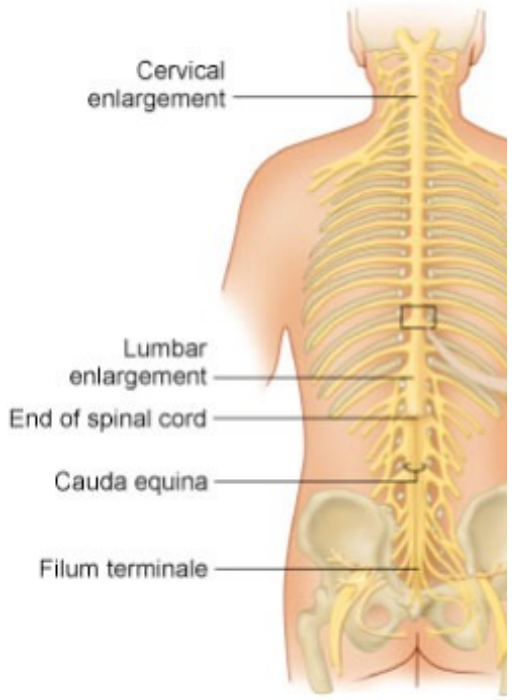
Meninges

Cerebrospinal fluid

Central Nervous System

Spinal cord Structure that exits the skull through the foramen magnum and extends to approximately the second lumbar region. Functions as an integrating center and an information highway between the brain and the periphery.





Spinal Cord

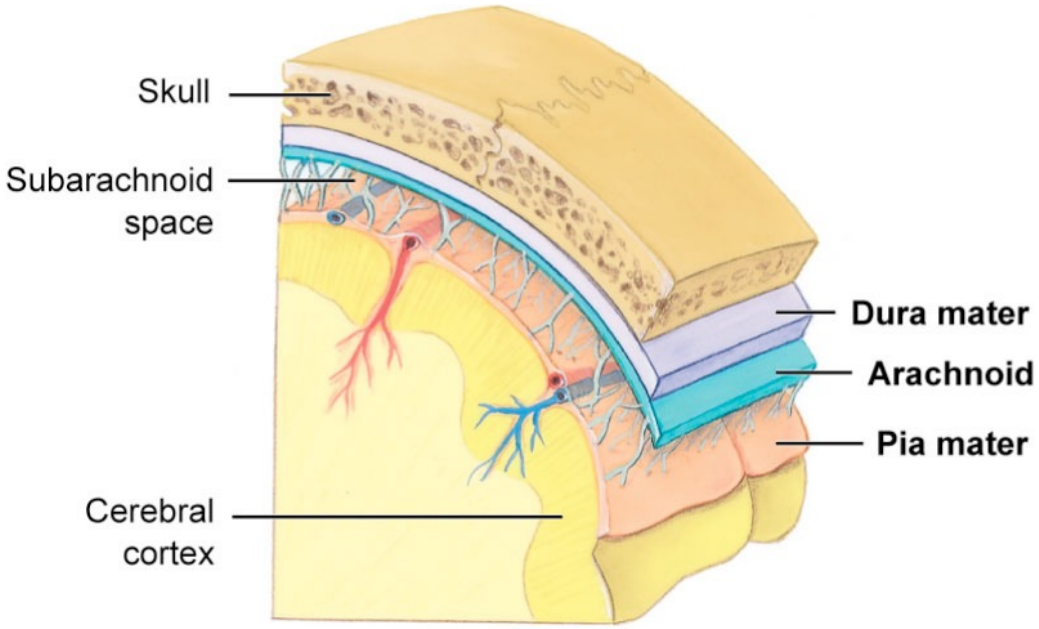
Ascending tracts Collection of axons running up the spinal cord to the brain carrying sensory or afferent impulses.

Spinal Cord

Descending tracts Collection of axons running down the spinal cord from the brain carrying motor or efferent impulses.

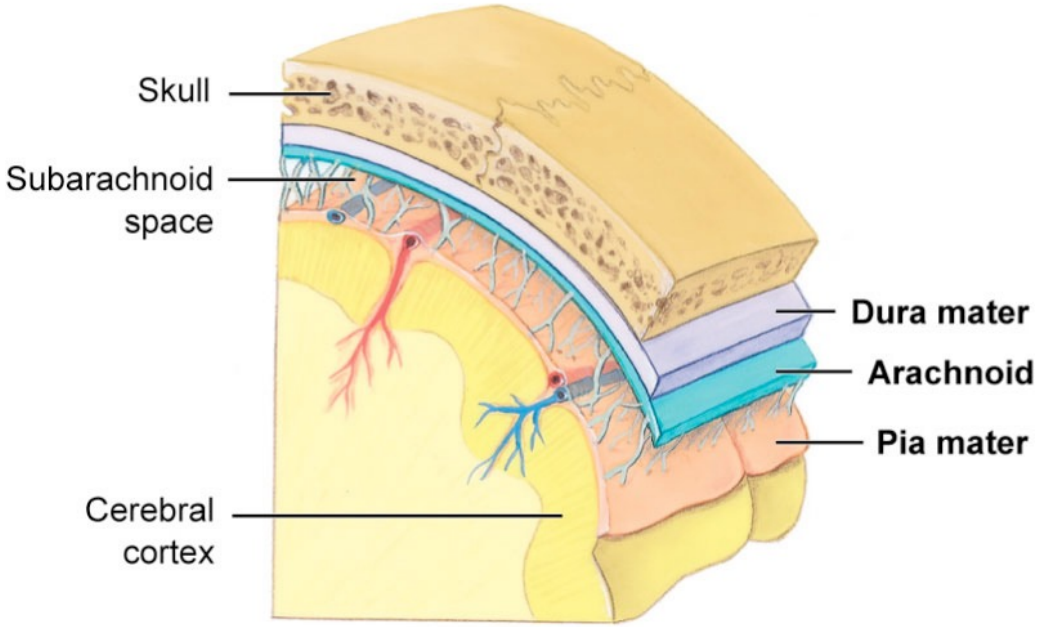
Central Nervous System

Meninges Connective tissue coverings surrounding the brain and spinal cord.



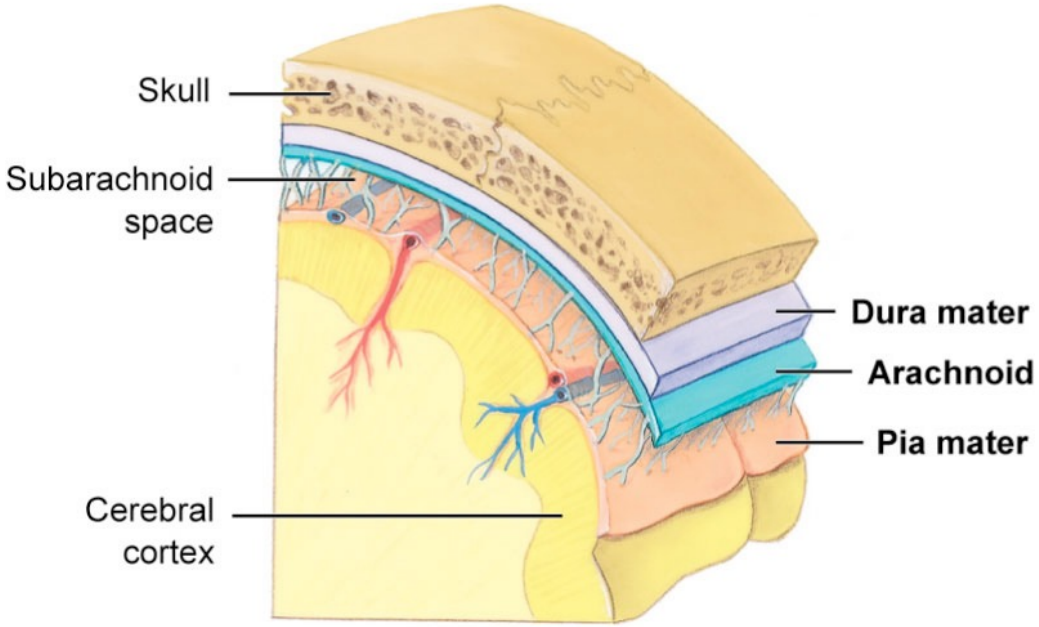
Meninges

Pia mater Innermost meningeal layer that is delicate, transparent, vascular, and attached to the surface of the central nervous system.



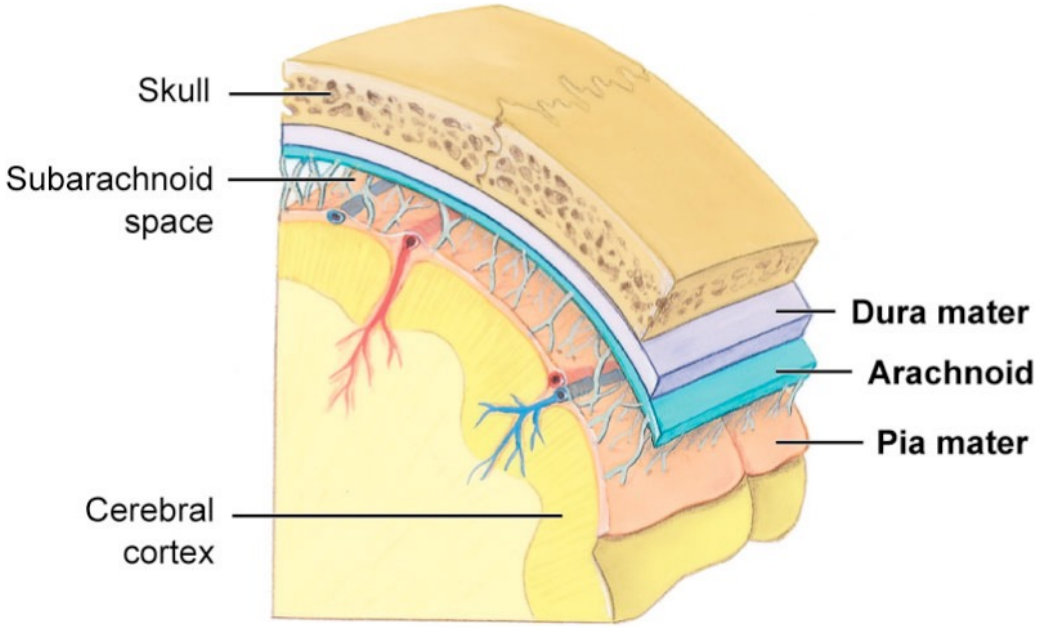
Meninges

Arachnoid Middle meningeal layer that forms a loose, web-like covering around the central nervous system. Just deep to this layer is the space (subarachnoid space) where cerebrospinal fluid is contained.



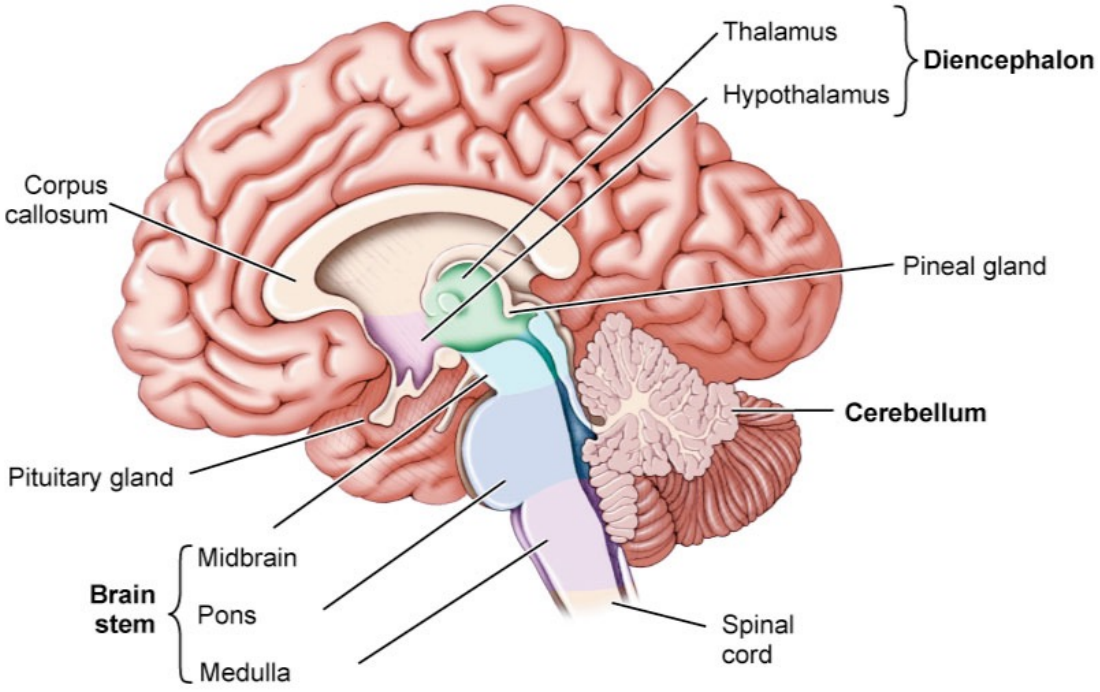
Meninges

Dura mater Outermost meningeal layer that is thick, dense, and lies against bone. The space just deep to this layer (subdural space) is filled with circulating serous fluid.



Central Nervous System

Cerebrospinal fluid (CSF) Fluid circulating around the brain and spinal cord within the subarachnoid space. Supplies oxygen and nutrients, carries away wastes, and acts as a shock absorber.



Peripheral Nervous System

Cranial nerves

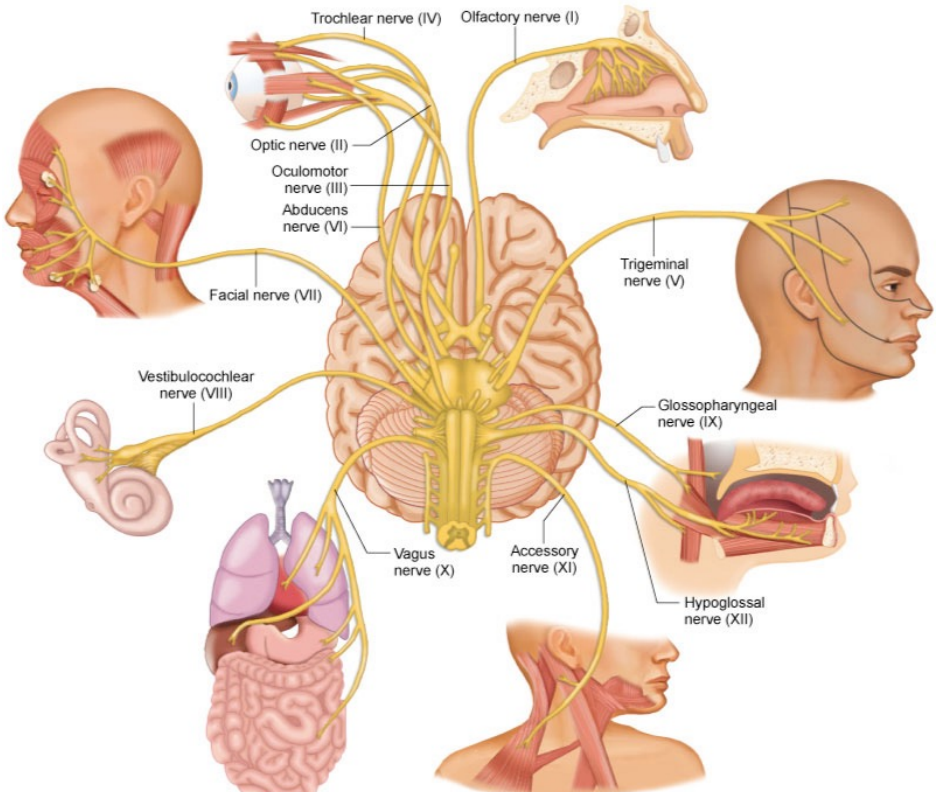
Spinal nerves

Plexi

Reflexes

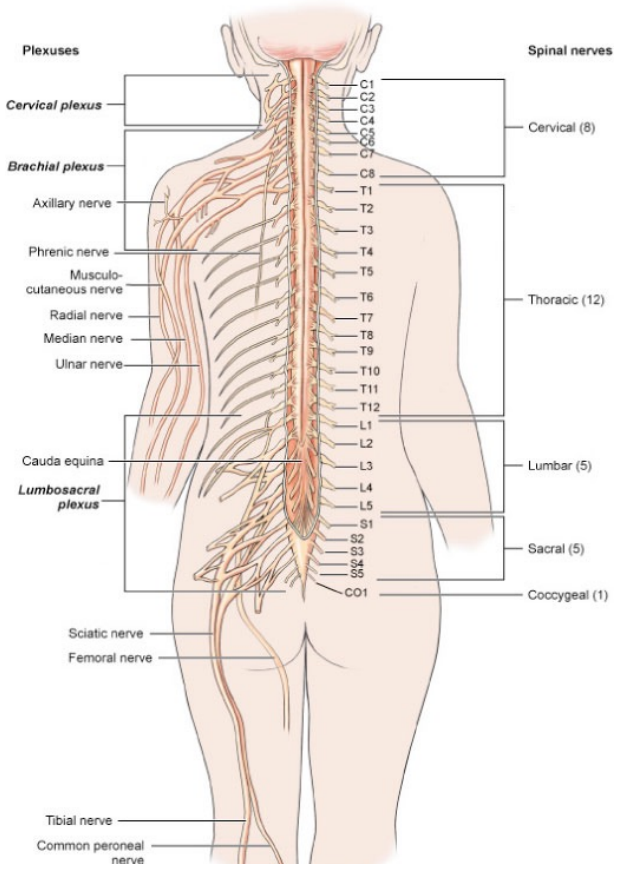
Peripheral Nervous System

Cranial nerves Pairs of nerves originating in the brain. Mostly supply and control functions of the head, face and throat. 12 pairs total.



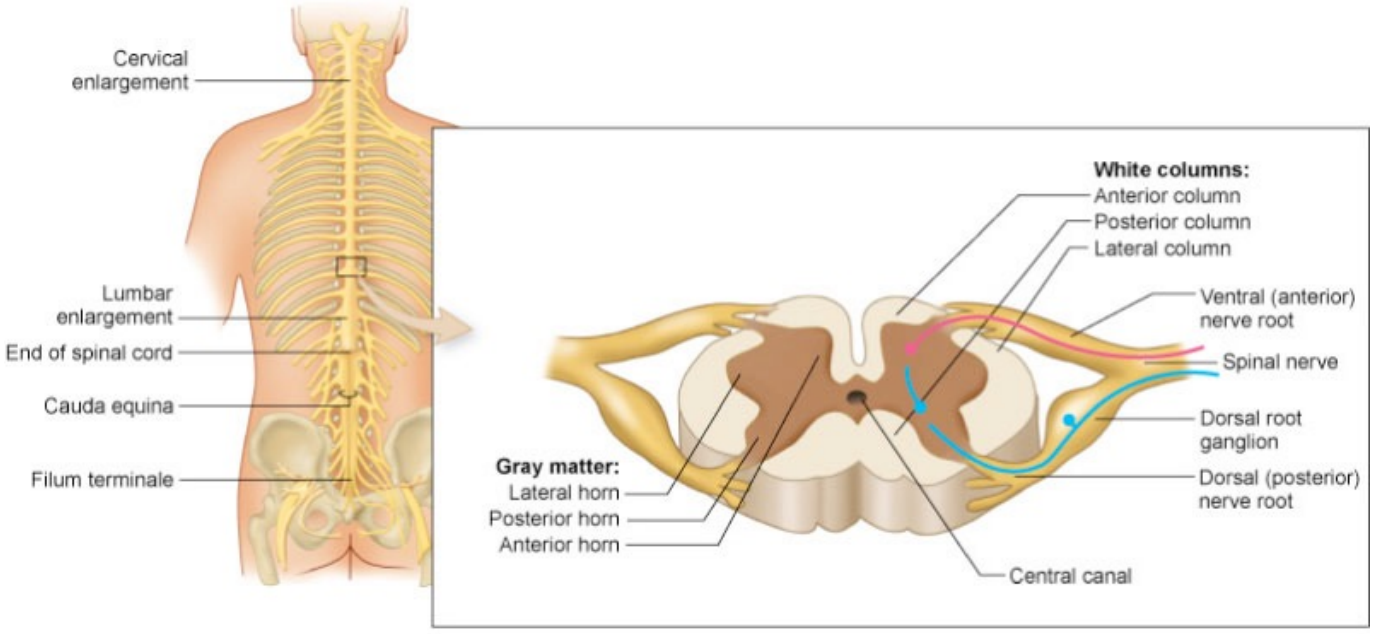
Peripheral Nervous System

Spinal nerves Pairs of nerves originating from the spinal cord. 31 pairs total.



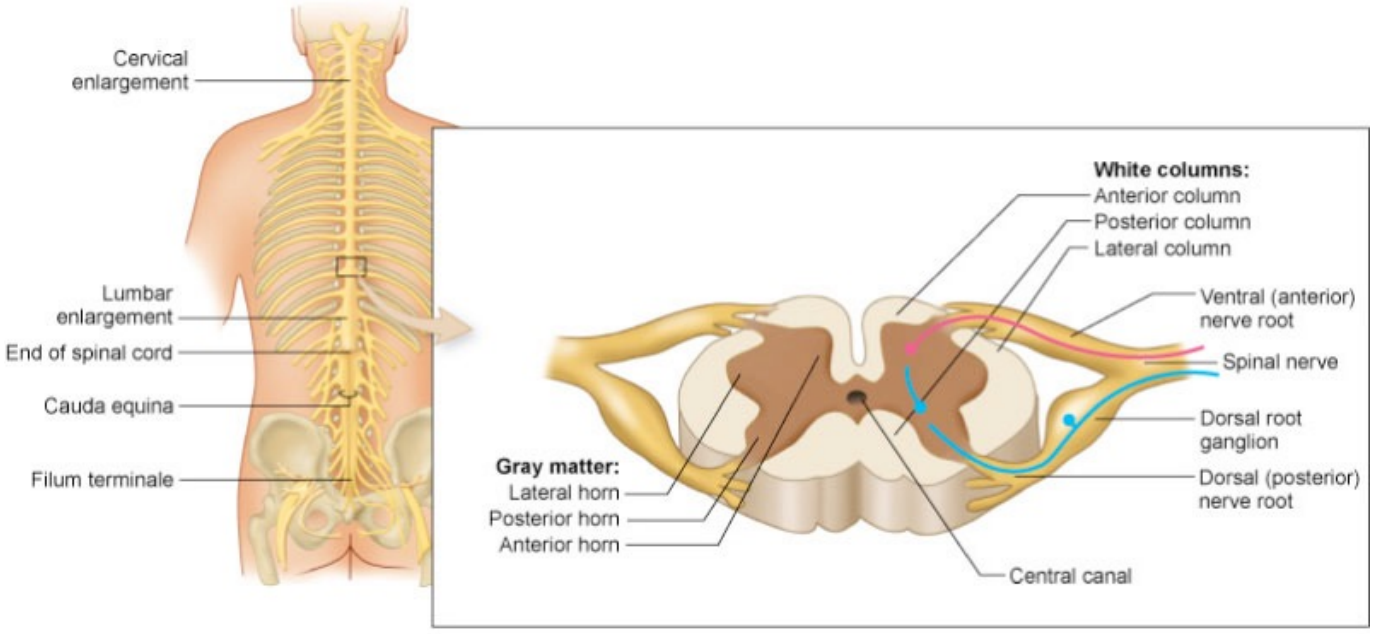
Peripheral Nervous System

Ventral nerve root Attachment of a spinal nerve to the spinal column containing only ___motor___ neurons.



Peripheral Nervous System

Dorsal nerve root Attachment of a spinal nerve to the spinal column containing only __sensory__ neurons.



Peripheral Nervous System

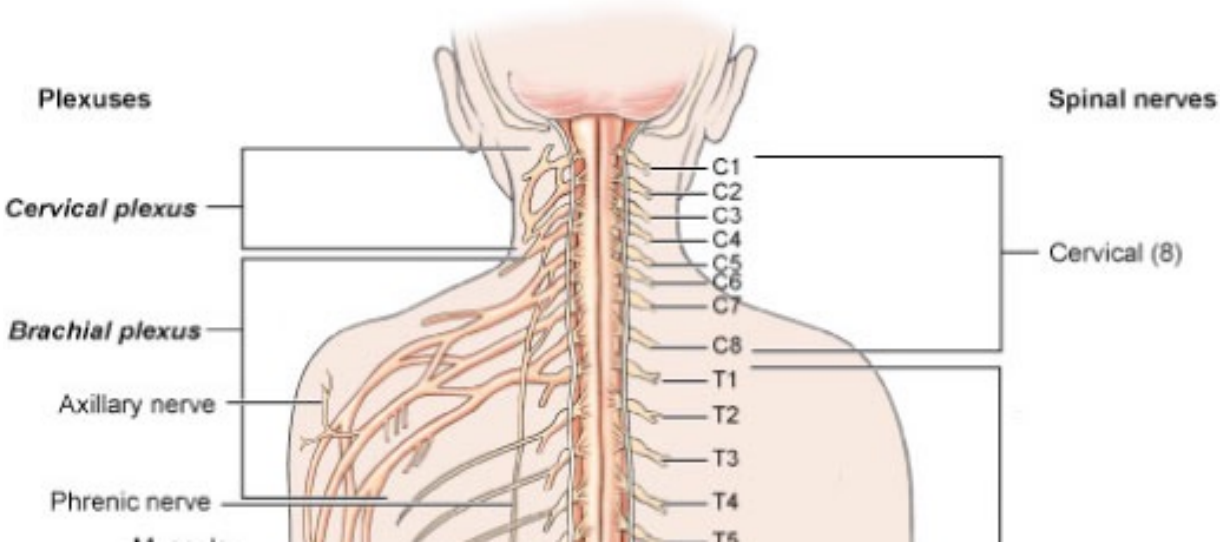
Cervical plexus (C1-C5)

Brachial plexus (C5-T1)

Lumbosacral plexus (L1-S4)

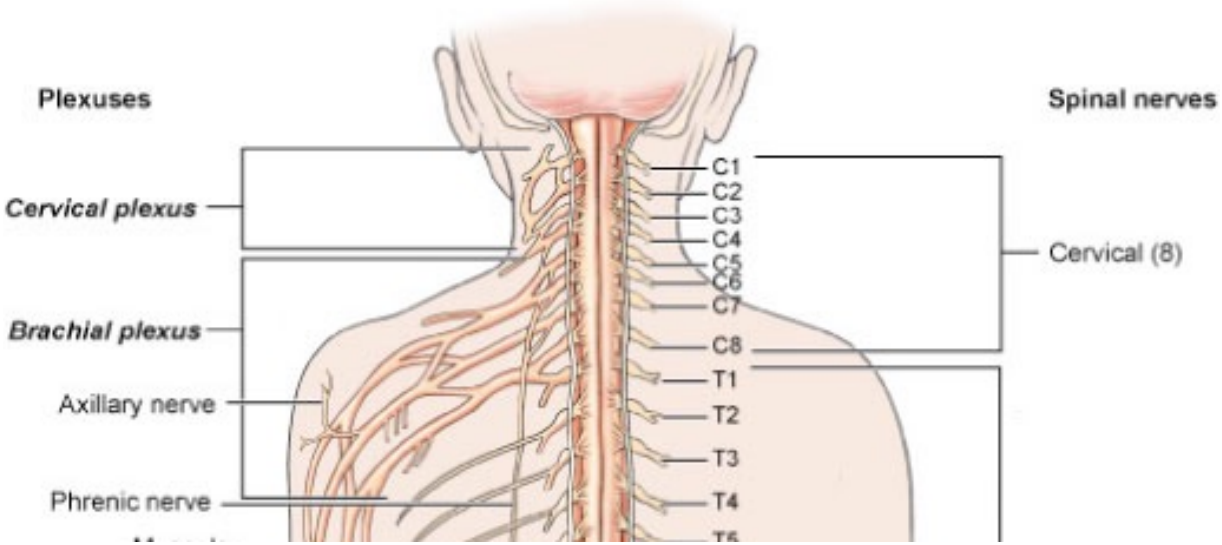
Peripheral Nervous System

Cervical plexus (C1-C5) Network of intersecting nerves in the PNS that innervate skin and muscle of the head, neck, shoulders, and diaphragm.



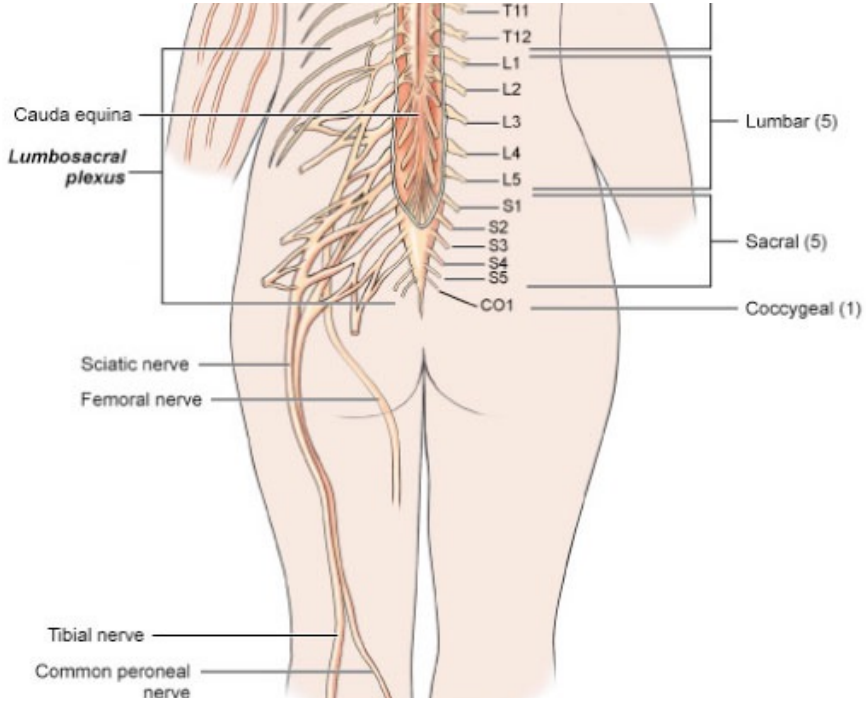
Peripheral Nervous System

Brachial plexus (C5-T1) Network of intersecting nerves in the PNS that innervate skin and muscle of the upper extremity.



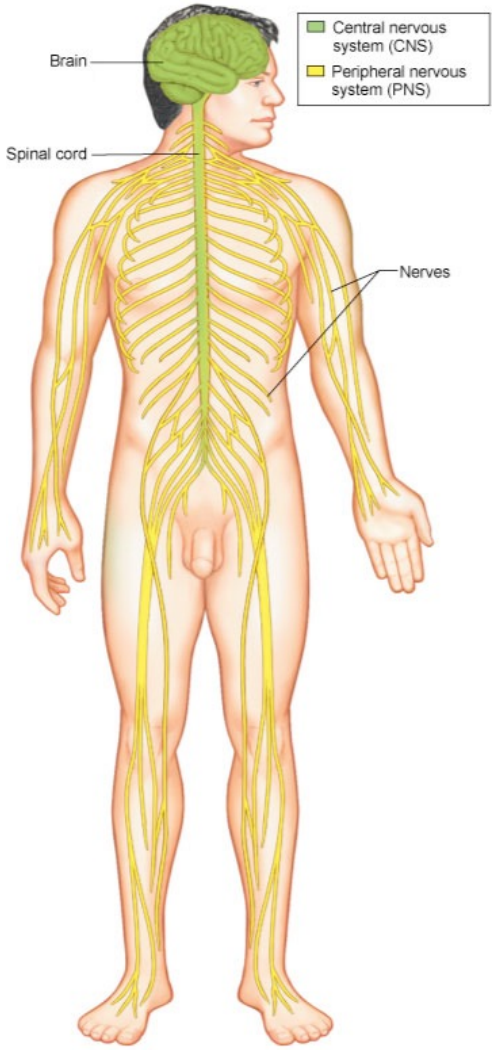
Peripheral Nervous System

Lumbosacral plexus (L1-S4) Network of intersecting nerves in the PNS that innervate skin and muscle of the abdomen, lower back, genitals, and lower extremity.



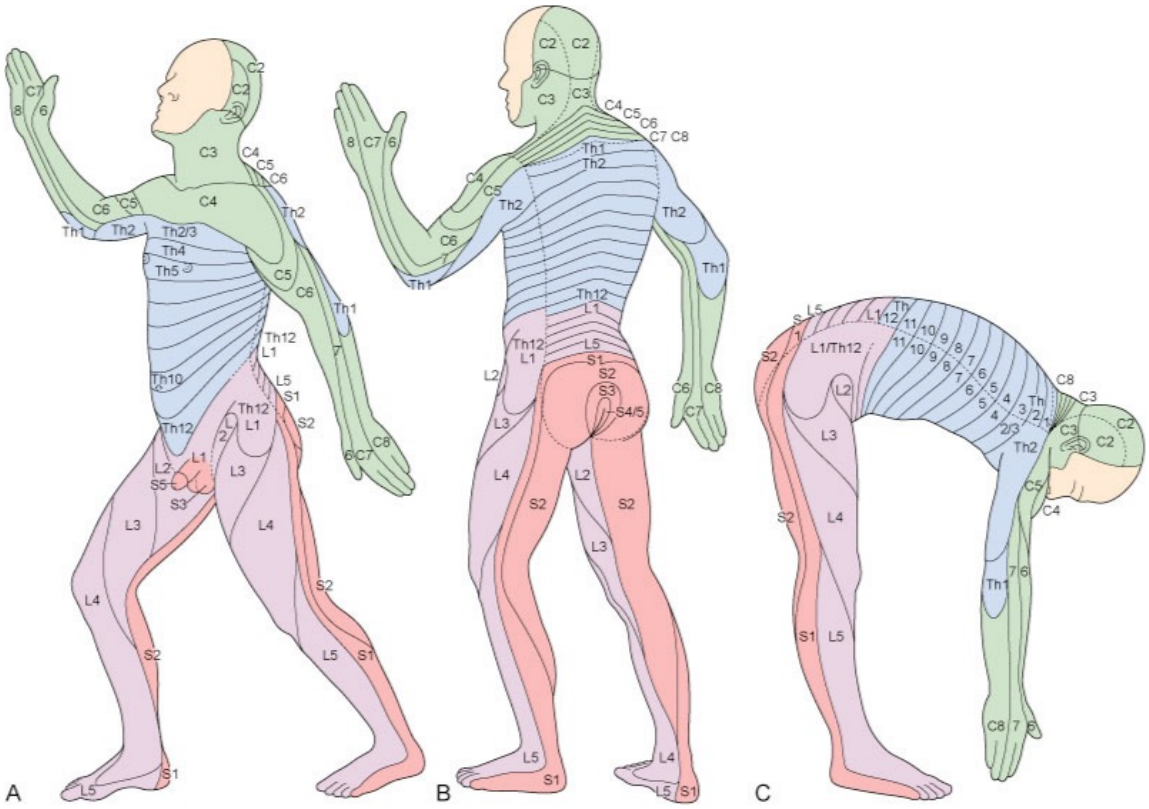
Peripheral Nervous System

Innervate To supply with nerves.



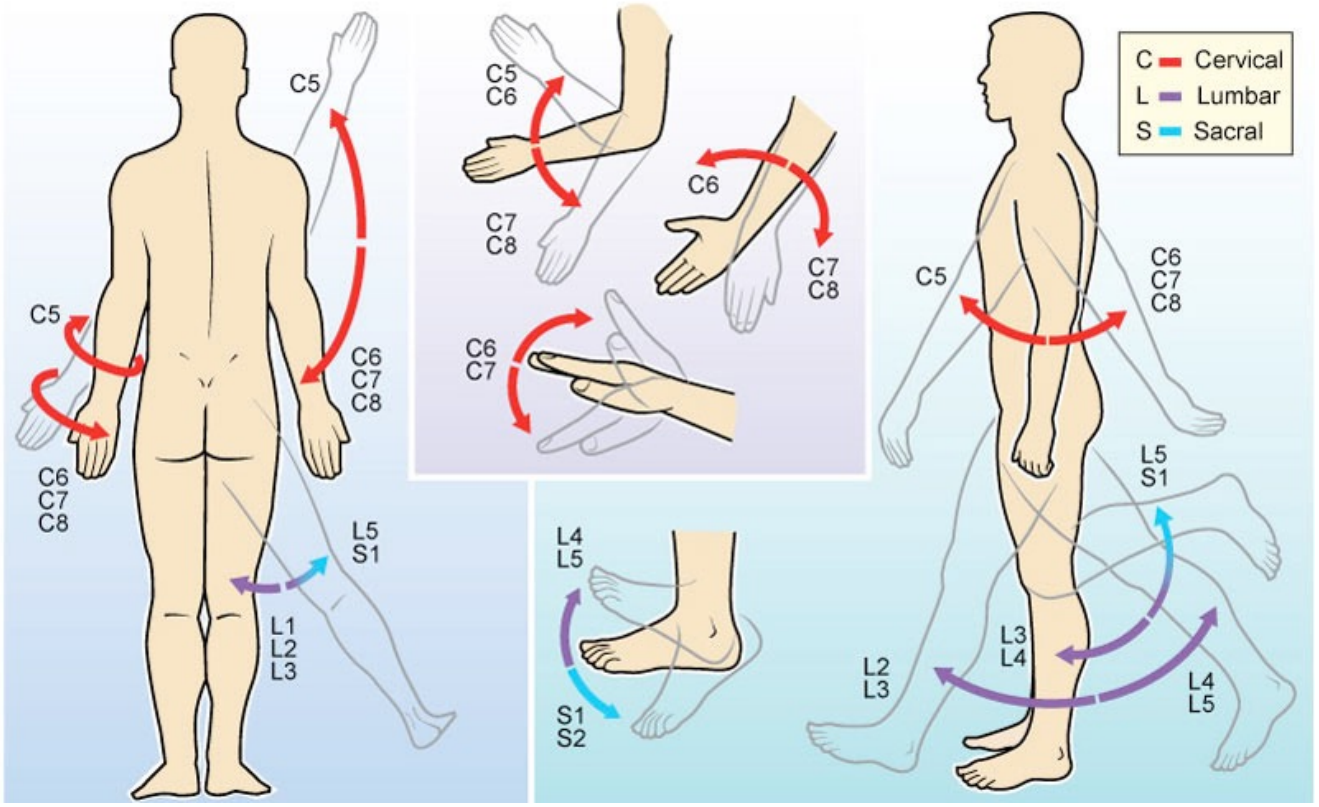
Peripheral Nervous System

Dermatome Area of skin innervated by a specific sensory nerve root.



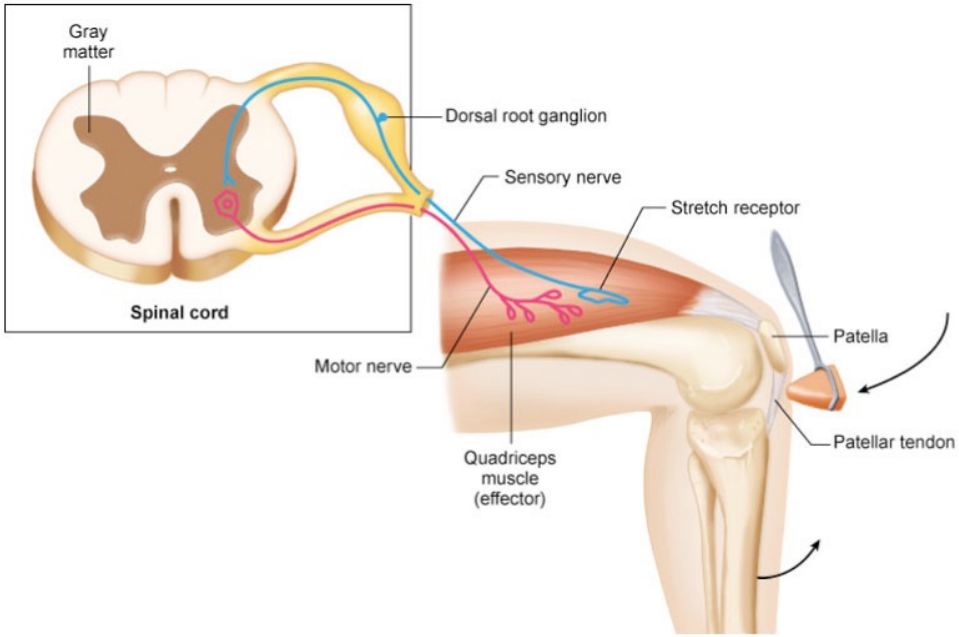
Peripheral Nervous System

Myotome Group of skeletal muscles innervated by a single spinal segment.



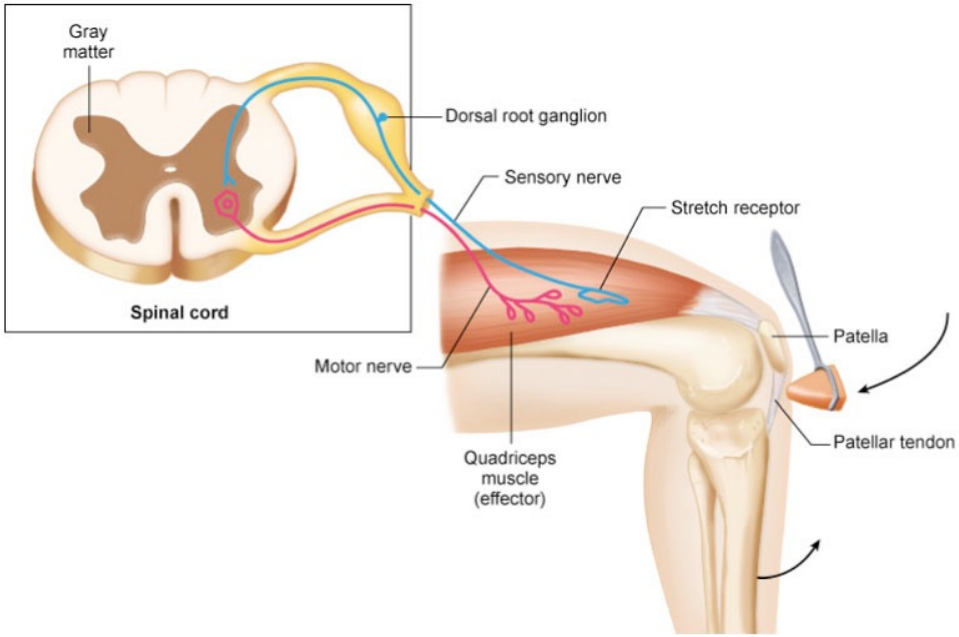
Peripheral Nervous System

Reflex Involuntary, __predictable__ response to a stimulus. Examples: coughing, sneezing, blinking, correcting heart rate, respiratory rate, and blood pressure.



Peripheral Nervous System

Reflex arc Nervous system's simplest functional unit. Carries a stimulus impulse to the spinal cord where it connects with a motor neuron that carries the reflex impulse back to an appropriate __muscle__ or gland (effector).



50a A&P: Nervous System - Peripheral Nervous System

