

LEARNING OBJECTIVES

- Describe the structure of a nerve including its connective tissue layers
- Identify the location and attachment points of each of the twelve cranial nerves
- Identify the foramina through which each of the cranial nerves pass
- Describe the primary function of each of the cranial nerves

I. STRUCTURE OF A NERVE**A. Connective tissue layers**

TEXT: _____

FIG: _____

II. CRANIAL NERVE OVERVIEW**A. Overview****B. Attachments to the brain**

1. Cerebrum

2. Diencephalon

3. Midbrain

4. Pons

5. Medulla

III. THE 12 CRANIAL NERVES**A. Learning Objectives:**

1. Name and number of nerve
2. Sensory, Motor, or Mixed function
3. Foramina through which nerve passes
4. Attachment site to brain
5. Divisions, if any
6. Functions (symptoms of dysfunction)

LEARNING OBJECTIVES

- Describe the numbering system of spinal nerves
- Describe the arrangement of the spinal nerves as they leave the spinal cord and the structures involved in forming plexuses
- Identify the spinal nerves belonging to the four plexuses
- Explain the importance of a dermatome

IV. SPINAL NERVES**A. Organization**

1. Names/numbering

TEXT: _____

FIG: _____

2. Dorsal and ventral roots

3. Dorsal and ventral rami of spinal nerves

4. Plexuses

a) *Definition*b) *Implications***B. Cervical Plexus**

1. Location and function

2. Phrenic nerve (C3-5)

C. Brachial Plexus

1. Location and function
2. Radial nerve (C5-8, T1)
3. Musculocutaneous nerve (C5-7)
4. Median nerve (C5-7, C8, T1)
5. Ulnar nerve (C8, T1)

D. Lumbar Plexus

1. Location and function
2. Femoral nerve (L2-4)
3. Obturator (L2-4)

E. Sacral Plexus

1. Location and function
2. Sciatic nerves (L4-S3)

8. How might you distinguish functions of the median, radial and ulnar nerves?

9. The lumbar plexus innervates what three regions of the body?

10. Why does a herniated disk in the lumbar region alter gait?

11. Identify the two clinical functions of dermatomes.

SUMMARY