The Nervous System

Learning Exercises

Class ________________  Name ____________________________

Matching Word Parts 1
Write the correct answer in the middle column.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Correct Answer</th>
<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.1. feeling</td>
<td></td>
<td>psych/o</td>
</tr>
<tr>
<td>10.2. brain</td>
<td></td>
<td>encephal/o</td>
</tr>
<tr>
<td>10.3. bruise</td>
<td></td>
<td>contus/o</td>
</tr>
<tr>
<td>10.4. mind</td>
<td></td>
<td>concuss/o</td>
</tr>
<tr>
<td>10.5. shaken together</td>
<td></td>
<td>esthet/o</td>
</tr>
</tbody>
</table>

Matching Word Parts 2
Write the correct answer in the middle column.

<table>
<thead>
<tr>
<th>Definition</th>
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<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.6. brain covering</td>
<td></td>
<td>-esthesia</td>
</tr>
<tr>
<td>10.7. process of recording an image</td>
<td></td>
<td>-graphy</td>
</tr>
<tr>
<td>10.8. sensation, feeling</td>
<td></td>
<td>klept/o</td>
</tr>
<tr>
<td>10.9. spinal cord</td>
<td></td>
<td>mening/o</td>
</tr>
<tr>
<td>10.10. to steal</td>
<td></td>
<td>myel/o</td>
</tr>
</tbody>
</table>

Matching Word Parts 3
Write the correct answer in the middle column.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Correct Answer</th>
<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.11. abnormal fear</td>
<td></td>
<td>-tropic</td>
</tr>
<tr>
<td>10.12. burning sensation</td>
<td></td>
<td>-phobia</td>
</tr>
<tr>
<td>10.13. madness</td>
<td></td>
<td>neur/o</td>
</tr>
<tr>
<td>10.14. nerve, nerves</td>
<td></td>
<td>-mania</td>
</tr>
<tr>
<td>10.15. having an affinity for</td>
<td></td>
<td>caus/o</td>
</tr>
</tbody>
</table>
Definitions
Select the correct answer and write it on the line provided.

10.16. The space between two neurons or between a neuron and a receptor is known as a

_________ ____________ ____________ ____________
dendrite ganglion plexus synapse

10.17. The white protective covering over some nerve cells is the ____________ ____________ ____________ ____________

myelin sheath neuroglia neurotransmitter pia mater

10.18. The ____________ ____________ are the root-like structures of a nerve that receive impulses and conduct them to the cell body.

axons dendrites ganglions neurotransmitters

10.19. The ____________ ____________ ____________ is the layer of the meninges that is located nearest the brain and spinal cord.

arachnoid membrane dura mater meninx pia mater

10.20. Seven vital body functions are controlled by the ____________ ____________ ____________ ____________
cerebral cortex cerebellum hypothalamus thalamus

10.21. The ____________ ____________ nervous system is the division of the autonomic nervous system that is concerned with body functions.

afferent parasympathetic peripheral sympathetic

10.22. A ____________ ____________ is a network of intersecting nerves.

ganglion plexus synapse tract

10.23. Cranial nerves are part of the ____________ ____________ nervous system.

autonomic central cranial peripheral

10.24. The ____________ ____________ relays sensory stimuli from the spinal cord and midbrain to the cerebral cortex.

cerebellum hypothalamus medulla thalamus

10.25. The ____________ ____________ neurons carry impulses away from the brain and spinal cord.

afferent associative efferent sensory

Matching Structures
Write the correct answer in the middle column.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Correct Answer</th>
<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.26. connects the brain and spinal cord</td>
<td></td>
<td>medulla</td>
</tr>
<tr>
<td>10.27. controls vital body functions</td>
<td></td>
<td>hypothalamus</td>
</tr>
<tr>
<td>10.28. coordinates muscular activity</td>
<td></td>
<td>cerebrum</td>
</tr>
<tr>
<td>10.29. most protected brain part</td>
<td></td>
<td>cerebellum</td>
</tr>
<tr>
<td>10.30. uppermost layer of the brain</td>
<td></td>
<td>brainstem</td>
</tr>
</tbody>
</table>
Which Word?
Select the correct answer and write it on the line provided.

10.31. A physician who specializes in administering anesthetic agents is an _________________.
   anesthetist
   anesthesiologist

10.32. A ________________ is a profound state of unconsciousness marked by the absence of
   spontaneous eye movements, no response to painful stimuli, and the lack of speech.
   coma
   stupor

10.33. An ________________ drug is also known as a tranquilizer.
   antipsychotic
   anxiolytic

10.34. A/an ________________ is a sense perception that has no basis in external stimulation.
   delusion
   hallucination

10.35. An excessive fear of heights is ________________.
   acrophobia
   agoraphobia

Spelling Counts
Find the misspelled word in each sentence. Then write that word, spelled correctly, on the line provided.

10.36. A miagaine headache is characterized by throbbing pain on one side of the head.
       ______________________

10.37. Alzheimer's disease is a group disorders involving the parts of the brain that control thought,
       memory, and language. ______________________

10.38. An anesthetic is medication that is administered to block the normal sensation of pain.
       ______________________

10.39. Epalepsy is a chronic neurological condition characterized by recurrent episodes of seizures of
       varying severity. ______________________

10.40. Schiatica is a nerve inflammation that may result in pain through the thigh and leg.
       ______________________

Abbreviation Identification
In the space provided, write the words that each abbreviation stands for.

10.41. CP
       ______________________

10.42. CVA
       ______________________

10.43. OCD
       ______________________

10.44. PTSD
       ______________________

10.45. TIA
       ______________________
Term Selection
Select the correct answer and write it on the line provided.

10.46. The acute condition caused by a high fever that is characterized by confusion, disorientation, disordered thinking, agitation, and hallucinations is known as ________________ 
- delirium
- dementia
- lethargy
- stupor

10.47. The term meaning inflammation of the spinal cord is ________________ . This term also means inflammation of bone marrow.
- encephalitis
- myelitis
- myelosis
- radiculitis

10.48. The medical term meaning an abnormal fear of being in narrow or enclosed spaces is ________________ .
- acrophobia
- claustrophobia
- kleptomania
- pyromania

10.49. The condition known as ________________ is characterized by severe lightning-like pain due to an inflammation of the fifth cranial nerve.
- Bell’s palsy
- Guillain-Barré syndrome
- Lou Gehrig’s disease
- trigeminal neuralgia

10.50. The medical term for the condition also known as a developmental reading disorder is ________________ .
- autism
- dissociative disorder
- dyslexia
- mental retardation

Sentence Completion
Write the correct term on the line provided.

10.51. A ________________ is the bruising of brain tissue as a result of a head injury.

10.52. The mental conditions characterized by excessive, irrational dread of everyday situations or fear that is out of proportion to the real danger in a situation are known as ________________

10.53. The disorder characterized by repeated, deliberate fire setting is known as ________________.

10.54. A/An ________________ disorder is a condition in which an individual acts as if he or she has a physical or mental illness when he or she is not really sick.

10.55. A/An ________________ drug is administered to treat severe mental disorders including schizophrenia and mania.

Word Surgery
Divide each term into its component word parts. Write these word parts, in sequence, on the lines provided. When necessary use a slash (/) to indicate a combining vowel. (You may not need all of the lines provided.)

10.56. An anesthetic is the medication used to induce the loss of normal sensation, especially sensitivity to pain.

10.57. Somnambulism is commonly known as sleepwalking.
10.58. **Electroencephalography** is the process of recording the electrical activity of the brain through the use of electrodes attached to the scalp.

10.59. **Echoencephalography** is the use of ultrasound imaging to diagnose a shift in the midline structures of the brain.

10.60. **Poliomyelitis** is a viral infection of the gray matter of the spinal cord that may result in paralysis.

**True/False**

If the statement is true, write True on the line. If the statement is false, write False on the line.

10.61. _______ A hemorrhagic stroke occurs when a blood vessel in the brain leaks.

10.62. _______ Arachnophobia is an excessive fear of spiders.

10.63. _______ A sedative is administered to prevent the seizures associated with epilepsy.

10.64. _______ A patient in a persistent vegetative state sleeps through the night and is awake during the day.

10.65. _______ A psychotropic drug acts primarily on the central nervous system where it produces temporary changes affecting the mind, emotions, and behavior.

**Clinical Conditions**

Write the correct answer on the line provided.

10.66. Harvey Ikeman has mood shifts from highs to severe lows that affect his mood, energy, and ability to function. Harvey's doctor describes this condition as a/an ________________ disorder.

10.67. In the auto accident, Anthony DeNicola hit his head on the windshield. The paramedics were concerned that this jarring of the brain had caused a/an ________________ .

10.68. Georgia Houghton suffered a ________________ attack (TIA), and her doctors were concerned that this was a warning of an impending stroke.

10.69. To control her patient's tremors caused by Parkinson's disease, Dr. Wang performed a/an ________________ . This is a surgical incision into the thalamus.

10.70. Mary Beth Cawthorn was diagnosed as having ________________ (MS). This autoimmune disease is characterized by patches of demyelinated nerve fibers.

10.71. After several months of being unable to sleep well, Wayne Ladner visited his doctor about this problem. His doctor recorded this condition as being ________________ .

10.72. After her stroke, Rosita Valladares was unable to understand written or spoken words. This condition is known as ________________ .

10.73. Jill Beck said she fainted. The medical term for this brief loss of consciousness caused by a lack of oxygen in the brain is ________________ .

10.74. The Baby baby was born with ________________ . This condition is an abnormally increased amount of cerebrospinal fluid within the brain.

10.75. The MRI indicated that Mrs. Hoshi had a collection of blood trapped in the tissues of her brain. This condition, which was caused by a head injury, is called a cranial ________________ .
Which Is the Correct Medical Term?
Select the correct answer and write it on the line provided.

10.76. Persistent severe burning pain that usually follows an injury to a sensory nerve is known as _____________.

causalgia  hyperesthesia  hypoesthesia  paresthesia

10.77. The classification of drug that depresses the central nervous system and usually produces sleep is known as a/an _____________.

anesthetic  barbiturate  hypnotic  sedative

10.78. A/an _____________. disorder is characterized by serious temporary or ongoing changes in function, such as paralysis or blindness, which are triggered by psychological factors rather than by any physical cause.

anxiety  conversion  factitious  panic

10.79. During childbirth, _____________. anesthesia is administered to numb the nerves from the uterus and birth passage without stopping labor.

epidural  local  regional  topical

10.80. The condition known as _____________. (ALS) is a rapidly progressive neurological disease that attacks the nerve cells responsible for controlling voluntary muscles.

amyotrophic lateral sclerosis  cerebral palsy  epilepsy  multiple sclerosis

Challenge Word Building
These terms are not found in this chapter; however, they are made up of the following familiar word parts. If you need help in creating the term, refer to your medical dictionary.

poly-  encephal/o  -algia
mening/o  -itis
myel/o  -malacia
neur/o  -oma
-pathy

10.81. Based on word parts, the term meaning any disease or disorders of a nerve or nerves is _____________.

10.82. Abnormal softening of the meninges is known as _____________.

10.83. A benign neoplasm made up of nerve tissue is a/an _____________.

10.84. Based on word parts, the term meaning any degenerative disease of the brain is _____________.

10.85. An inflammation affecting many nerves is known as _____________.

10.86. Abnormal softening of nerve tissue is known as _____________.

10.87. Inflammation of the meninges and the brain is known as _____________.

10.88. Based on word parts, the term meaning any pathological condition of the spinal cord is _____________.

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10.89. Abnormal softening of the brain is known as __________________.
10.90. Inflammation of the meninges, brain, and spinal cord is known as __________________.

**Labeling Exercises**
Identify the numbered items on the accompanying figures.

10.91. ____________  cortex
10.92. ____________  lobe
10.93. ____________  lobe
10.94. ____________  lobe
10.95. ____________  lobe
10.96. ____________
10.97. ____________
10.98. ____________
10.99. ____________  cord
10.100. ____________