

#### The organization of the human nervous system.

Label 1 through 17 on the following diagram.





BLM 11.1.3

Label 1 through 8 on the following diagram.



Label 1 through 7 on the following diagram.



#### BLM 11.1.7

CHAPTER 11 HANDOUT

#### Establishing the Resting Membrane Potential in a Neuron

Label 1 through 10 on the following diagram. Describe what is occurring in steps A through E.



CHAPTER 11		BLM 11.1.7
HANDOUT	Establishing the Resting Membrane	
	Potential in a Neuron (cont'd)	

1. 2.	6. 7.
3. 4. 5	8. 9. 10
A	10.
B	
C	
D	
E	

## Depolarization and Repolarization of a Neuron

BLM 11.1.9

Label 1 through 6 on the following diagram.





What is this process called?

# CHAPTER 11 BLM 11.1.9 HANDOUT Depolarization and Repolarization of a Neuron (cont'd)

Label 1 through 6 on the following diagram.





What is this process called?

Label 1 through 4 on the following diagram.





Label 1 through 6 on the following diagram.



1.	
2.	
3.	
4.	
5.	
6	

Label A through E on the following diagram. What occurs during steps 1 through 4?



Label 1 through 9 on the following diagram.



1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	

### Neurotransmitters and Their Functions Quiz

#### **Instructions:**

Fill in the appropriate neurotransmitter in the first column: norepinephrine, serotonin, dopamine, endorphins.

Fill in the blanks to describe the function and effects of each neurotransmitter.

Neurotransmitter	Function	Effects of abnormal production
	<ul> <li>affects the brain synapses in the control of body movements</li> <li>is linked to</li></ul>	<ul> <li>excessive production linked to schizophrenia, a disorder in which the individual's perception of reality is greatly distorted</li> <li>inadequate production linked to  disease, a progressive disorder that destroys neurons, causing tremors, slurred speech, and other coordination problems</li> </ul>
	<ul> <li>regulates</li></ul>	<ul> <li>inadequate amounts in the brain synapses linked to</li> </ul>
	<ul> <li>act as natural</li></ul>	<ul> <li>deficiency linked to an increased risk of</li> </ul>
	<ul> <li>is used by the brain and some autonomic neurons</li> <li>complements the actions of the hormone epinephrine, which readies the body to respond to or other stressful situations</li> </ul>	<ul> <li>overproduction linked to high, anxiety, and insomnia</li> <li>deficiency linked to hunger cravings and</li> </ul>

#### **The Spinal Cord**

Label 1 through 14 on the following diagram.



 CHAPTER 11
 BLM 11.2.3

 HANDOUT
 The Structure of the Human

 Brain

Label 1 through 7 and A through G on the following diagram.





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#### **Protection for the Brain**

Label the following diagrams.





Label the following diagram.



1.	
2.	
3.	
4.	

Label the following spinal nerve map.





## CHAPTER 11 BLM 11.3.2 HANDOUT Sympathetic and Parasympathetic Nervous Systems Image: Compatibility of the systems

Label 1 through 29 on the following diagram of the sympathetic and parasympathetic nervous systems.



CHAPTER 12		BLM 12.3.2
HANDOUT	Sympathetic and Parasympathetic	
	<b>Nervous Systems</b> (cont'd)	

1.	16.
2.	17.
3.	18.
4.	19.
5.	20.
6.	21.
7.	22.
8.	23.
9.	24.
10.	25.
11.	26.
12.	27.
13.	28.
14.	29.
15.	