**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Notes – Nervous System**

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| What are the two parts of the nervous system?  | * Nervous system:
* Two parts: CNS –\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (brain and spinal cord)PNS – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (nerve cells that send messages from \_\_\_\_ to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the body)
 |
| How does the Nervous system work?  | * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – nerve cells that run through the body
	+ \_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_ messages from muscles and glands
	+ Over\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_neurons found in our body
 |
| What are the parts of a neuron?  | * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – \_\_\_\_\_\_\_\_\_\_\_\_\_ the information and pass it thru cell body
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – produces the energy to fuel the activity of the cell
* \_\_\_\_\_\_\_\_ – carries message \_\_\_\_\_\_\_\_\_\_\_\_ from cellbody to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (axon endings)
* Axon is protected by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (white, fatty substance; helps protectand speed up messages)
* Axon \_\_\_\_\_\_\_\_\_\_\_\_\_\_: The end of the neuron, sends out messages
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| How does it go from one neuron to the next?  | * Once a message reaches the axon terminals, it must jump across a \_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – the gap that it must jump
* It jumps from the axon \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the next neuron
* If it does not make this jump, the message is lost
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| What types of nerve cells are there? | * \_\_\_\_\_\_\_\_\_\_ – Nerve cells that \_\_\_\_\_\_\_\_\_\_\_ info to CNS (brain/spinal cord)
* \_\_\_\_\_\_\_\_\_\_ – Nerve cells that send messages from CNS to PNS (tells muscles/glands what to do)
* Something like a concussion can affect this process
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| What are neurotransmitters? | * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ located in axon \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that send messages across the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Low levels of \_\_\_\_\_\_\_\_\_\_\_\_ (which controls motor behaviors) could lead to uncoordinated movements—think of Parkinson’s disease
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| What is the CNS? | * Central Nervous System – the \_\_\_\_\_\_\_\_\_\_\_\_\_ and the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Spinal cord – protected by bones of spine
* Transmits messages between the \_\_\_\_\_\_\_\_\_\_ and the \_\_\_\_\_\_\_\_\_/glands throughout the body
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – automatic response to something (hand touches stove)
* Message goes through sensory neurons to spinal cord; spinal cord instantly sends message back through motor neurons to remove hand)
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| What is the PNS? | * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Nervous System – Takes messages from \_\_\_\_\_ to the rest of the \_\_\_\_
* Two main divisions – \_\_\_\_\_\_\_\_\_\_\_\_ and the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Nervous System
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| What about the somatic system? | * Sends \_\_\_\_\_\_\_\_\_\_\_\_\_\_ messages to CNS (this stove is hot)
* Activated by touch, changes in temperature, body position, etc…); \_\_\_\_\_\_\_\_\_ movements
 |
| What about the autonomic? | * Think ‘\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_’
* Regulates \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ necessary for survival (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, breathing, digestion, etc..)
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_ divisions – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* ‘S’ for Sympathetic, ‘S’ for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* ‘P’ for Parasympathetic, ‘P’ for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
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| We want to know about the Sympathetic part | * Activated when person is going into action (under \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)
* Prepares the body to confront a situation or to run away
* “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_” response
* Example: You see someone in your yard with a gun, how do you respond?
* Or you look behind you and see an angry dog?
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| And the Parasympathetic part? | * Restores the body’s reserves of energy when at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_;
* Heart rate/blood pressure are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, breathing is slowed
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