

# Major Divisions of the NS

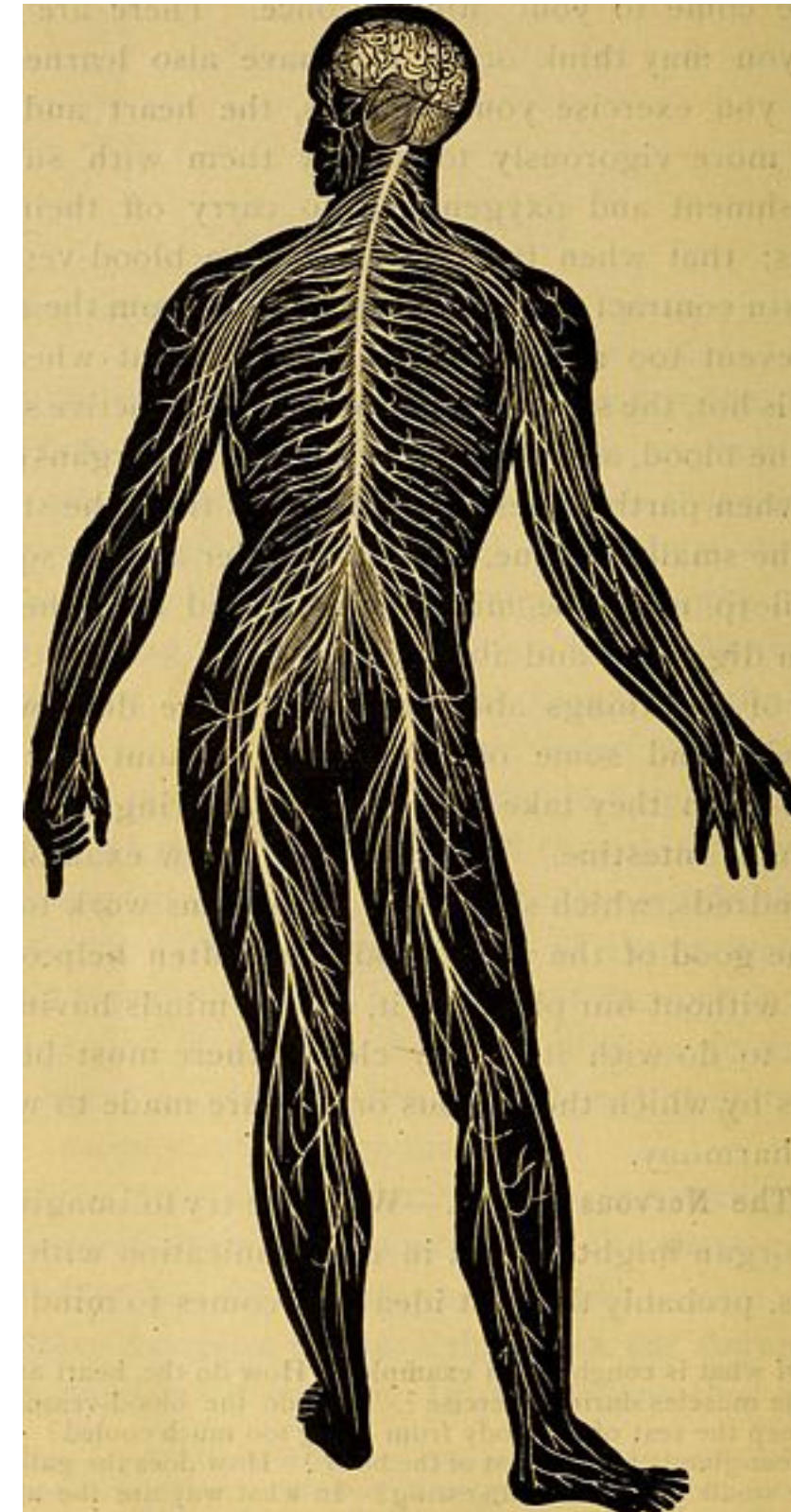
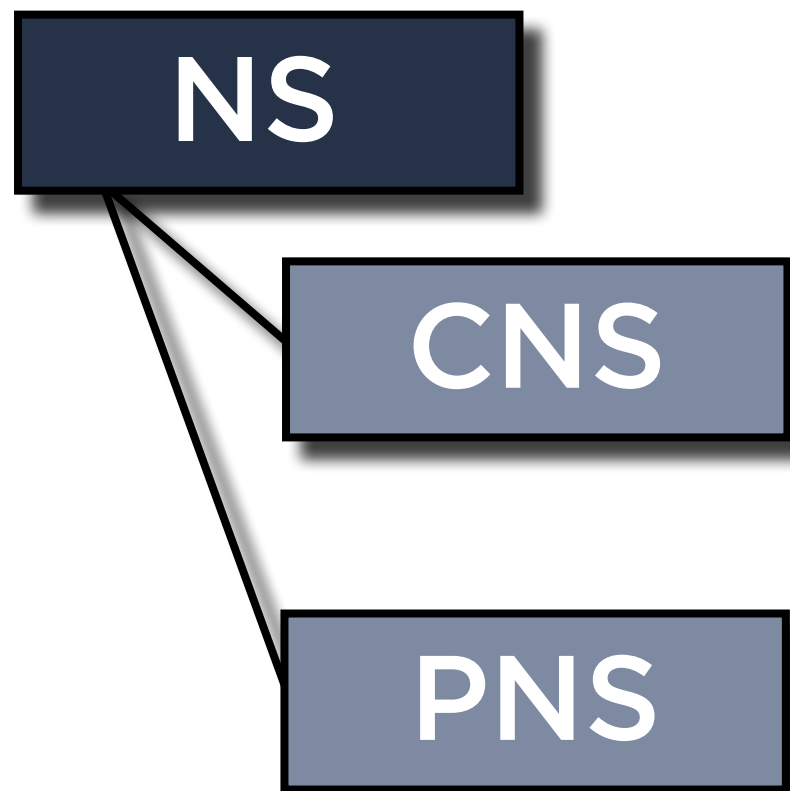


- Know the major divisions of the nervous system

# Lecture Learning Objectives

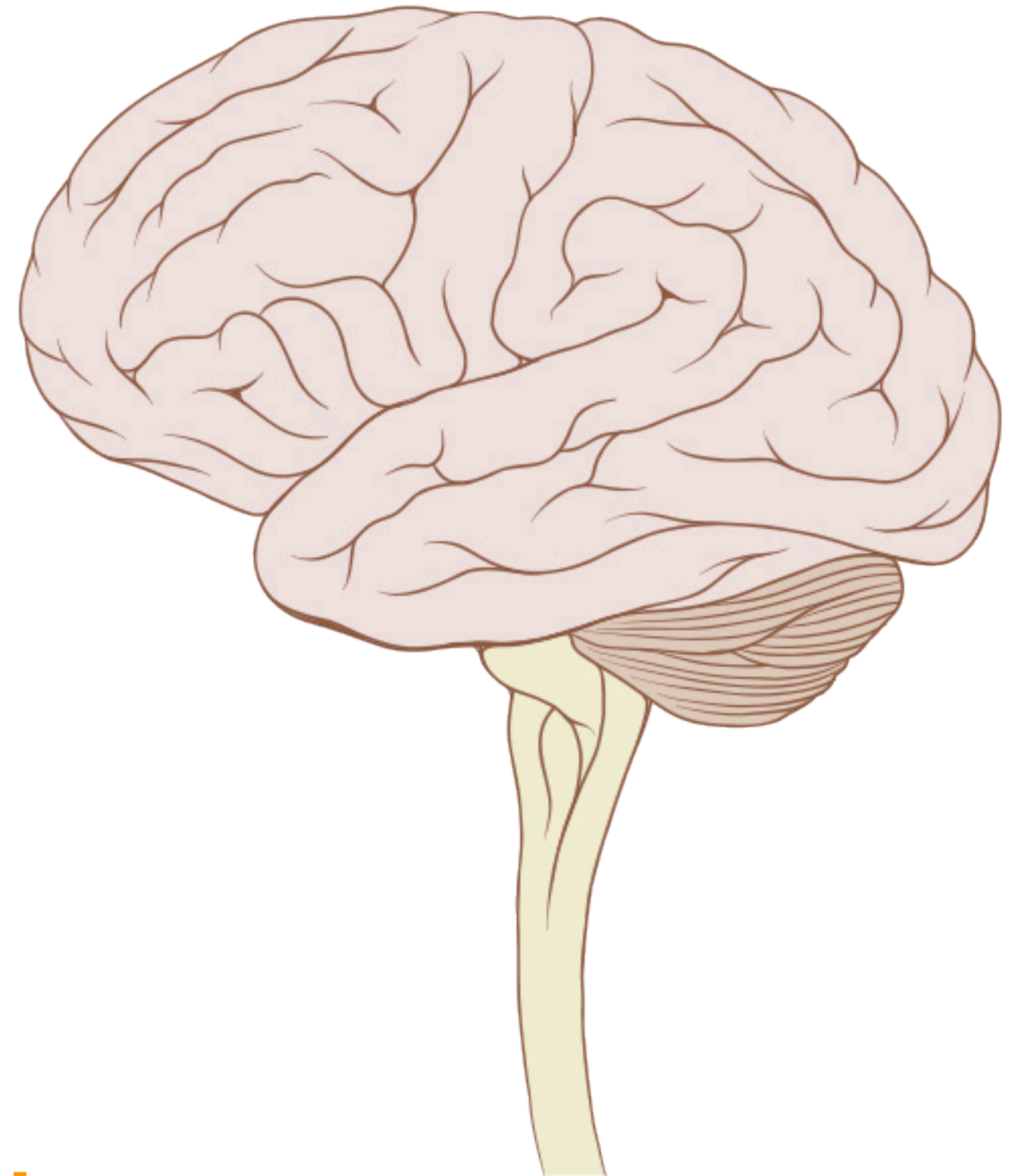
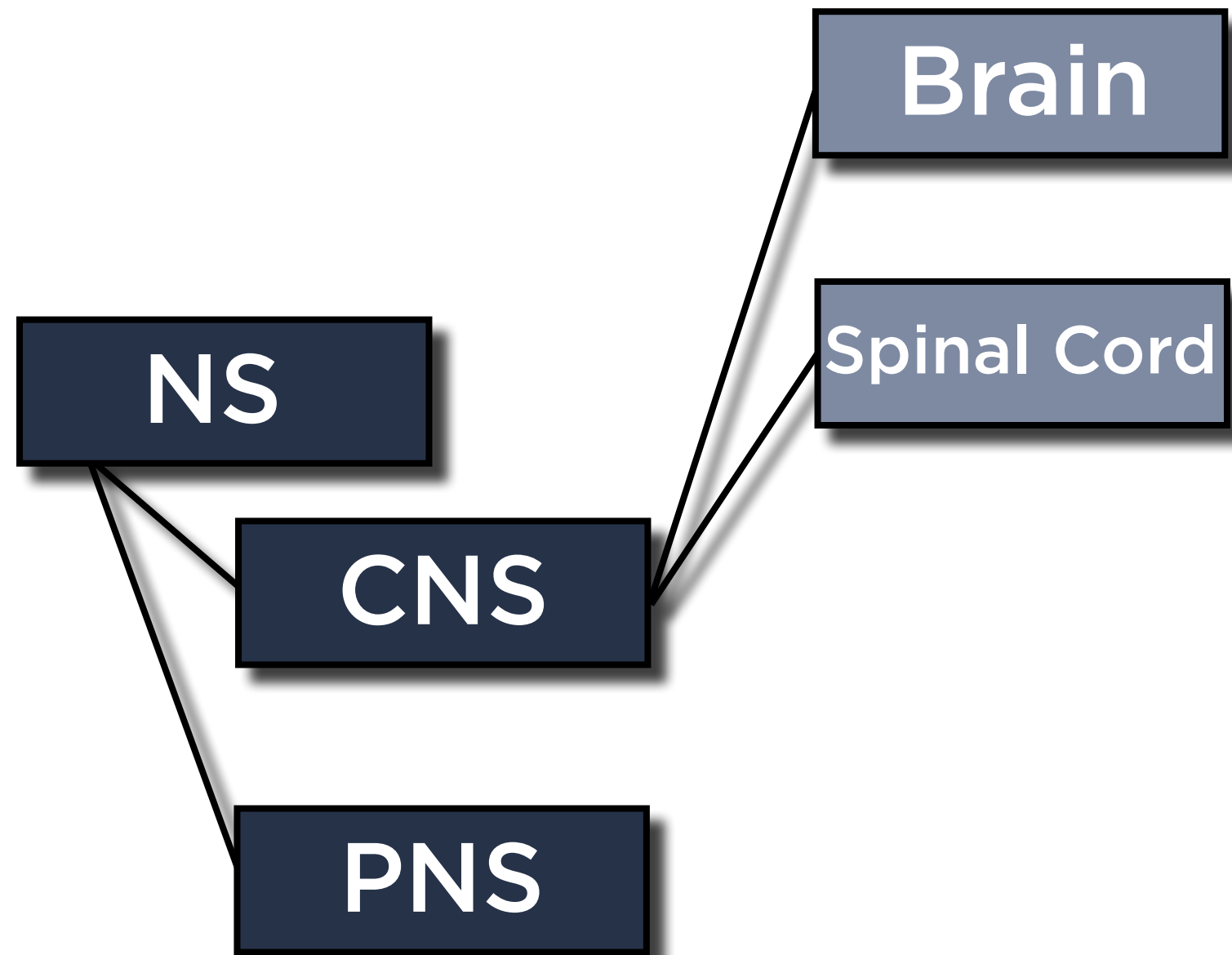
The vertebrate nervous system (NS) is composed of two divisions:

1. Central Nervous System (CNS).
2. Peripheral Nervous System (PNS).



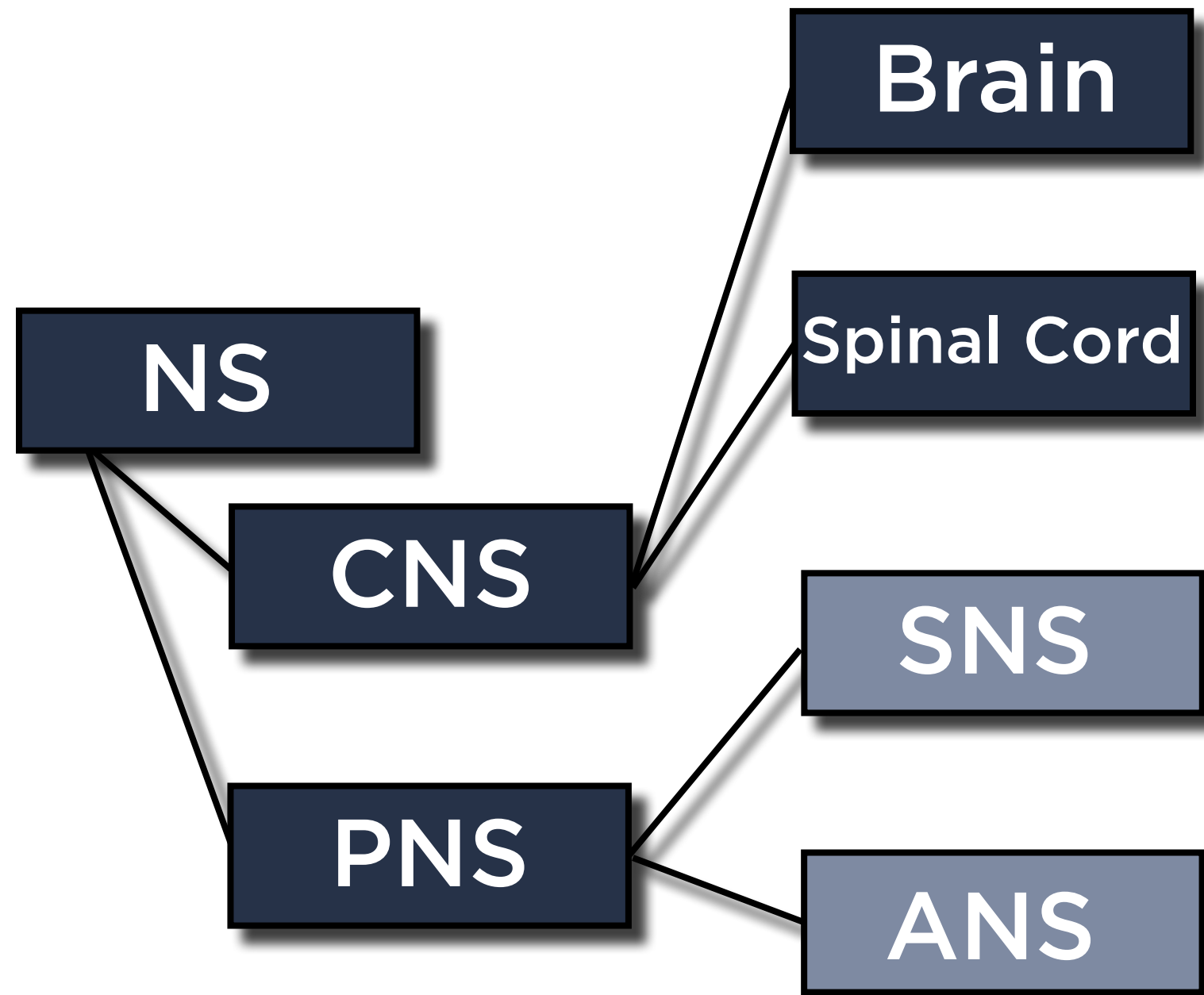
# Nervous System Layout

The CNS is composed of two divisions: Brain and Spinal Cord.



Nervous System Layout

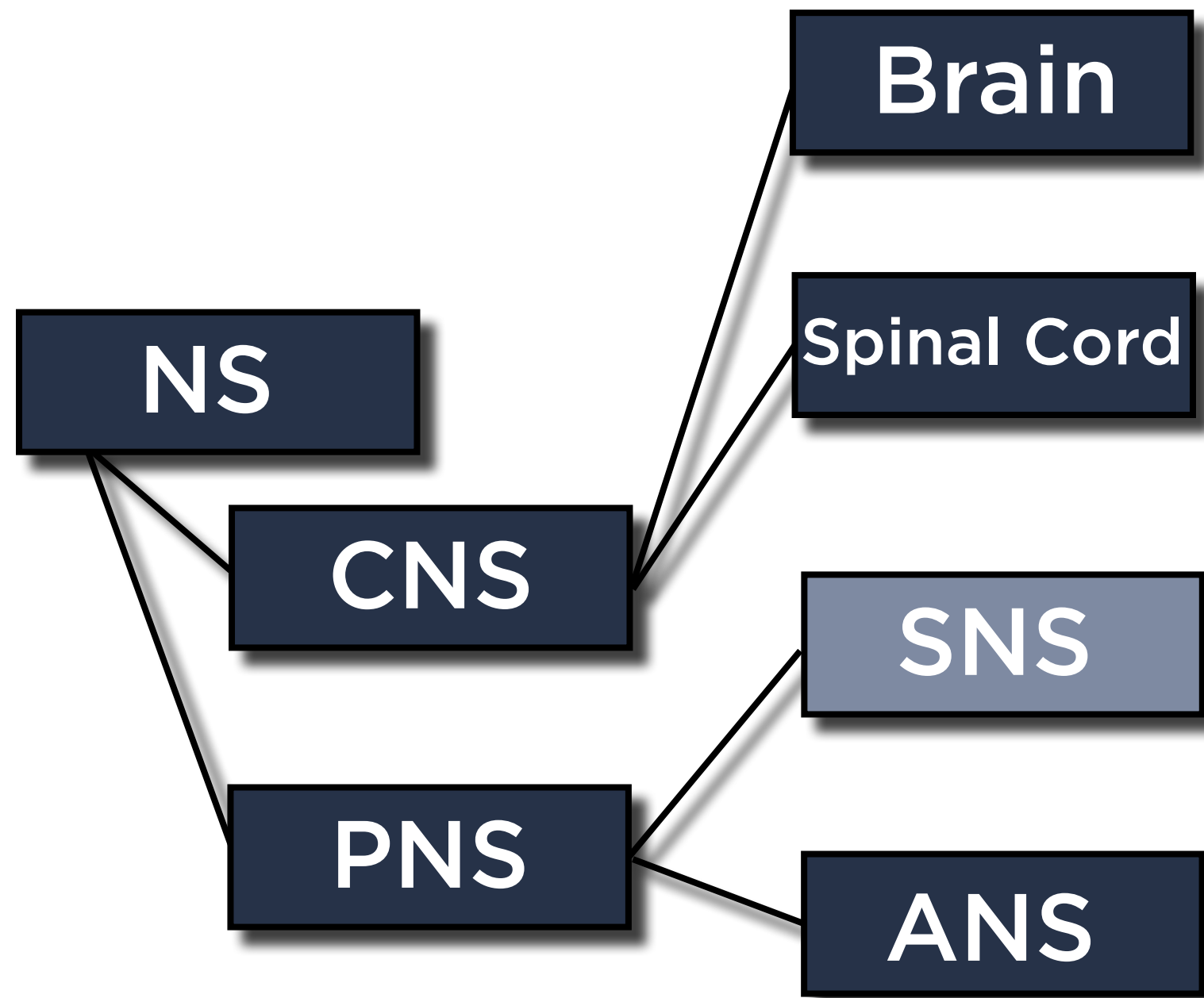
The peripheral nervous system (PNS) is also composed of two divisions: The somatic nervous system (SNS) and the autonomic nervous system (ANS).



# Nervous System Layout



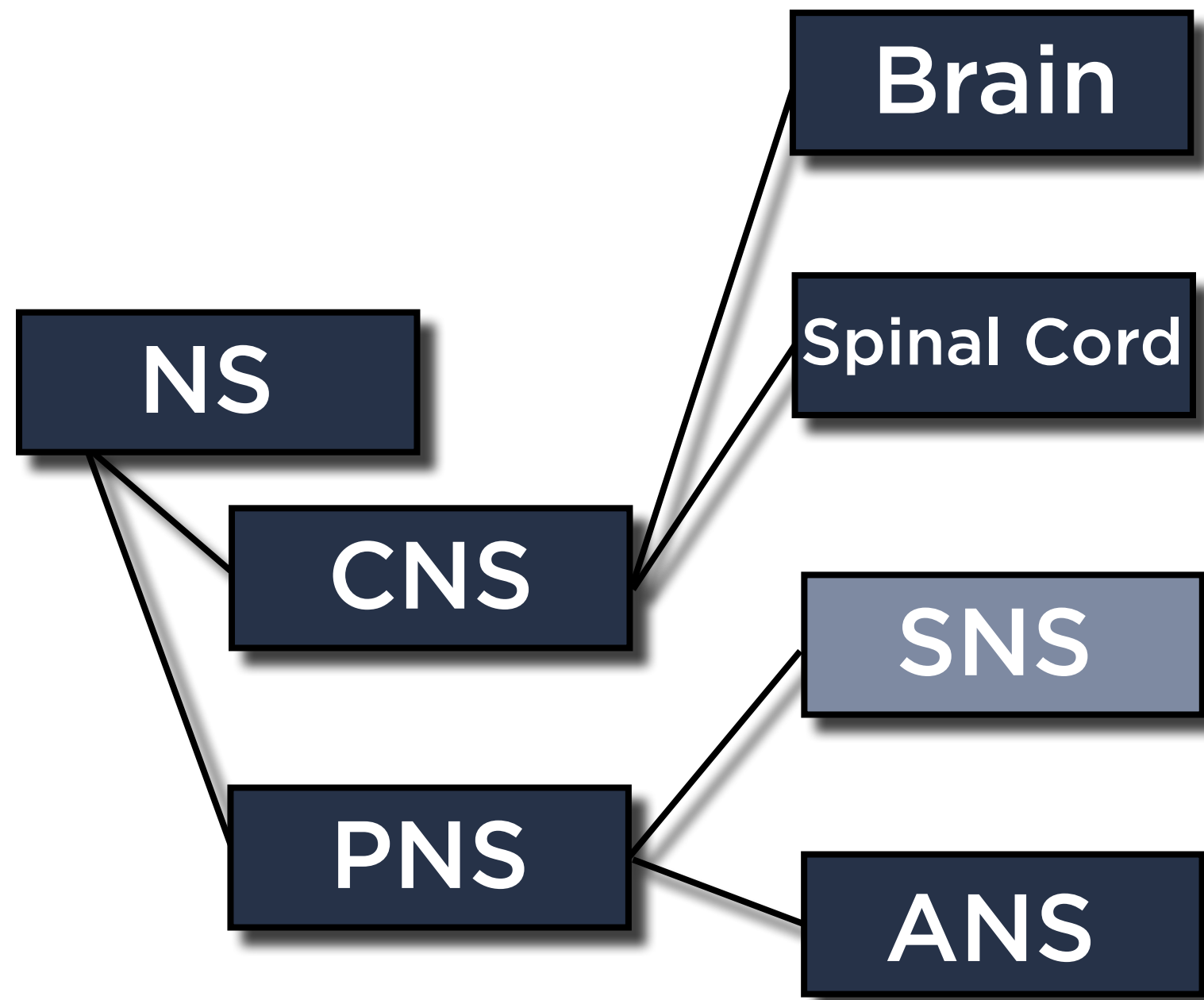
The peripheral nervous system (PNS) is also composed of two divisions: The somatic nervous system (SNS) and the autonomic nervous system (ANS).



The SNS interacts with the external environment.

# Nervous System Layout

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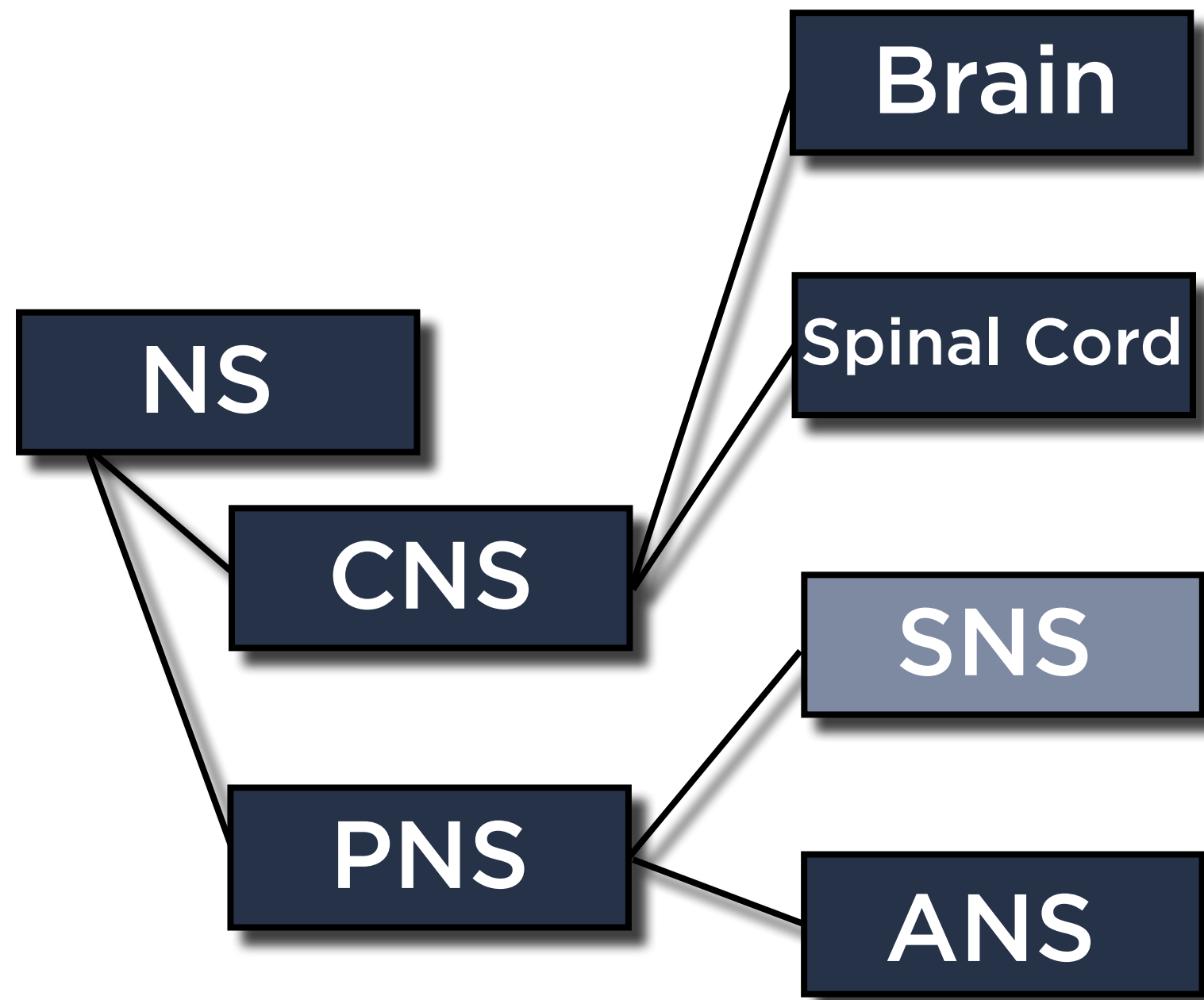


The SNS interacts with the external environment.

It has *afferent* nerves that carry sensory signals in from the skin, skeletal muscles, joints, eyes, ears, etc., into the CNS.

# Nervous System Layout

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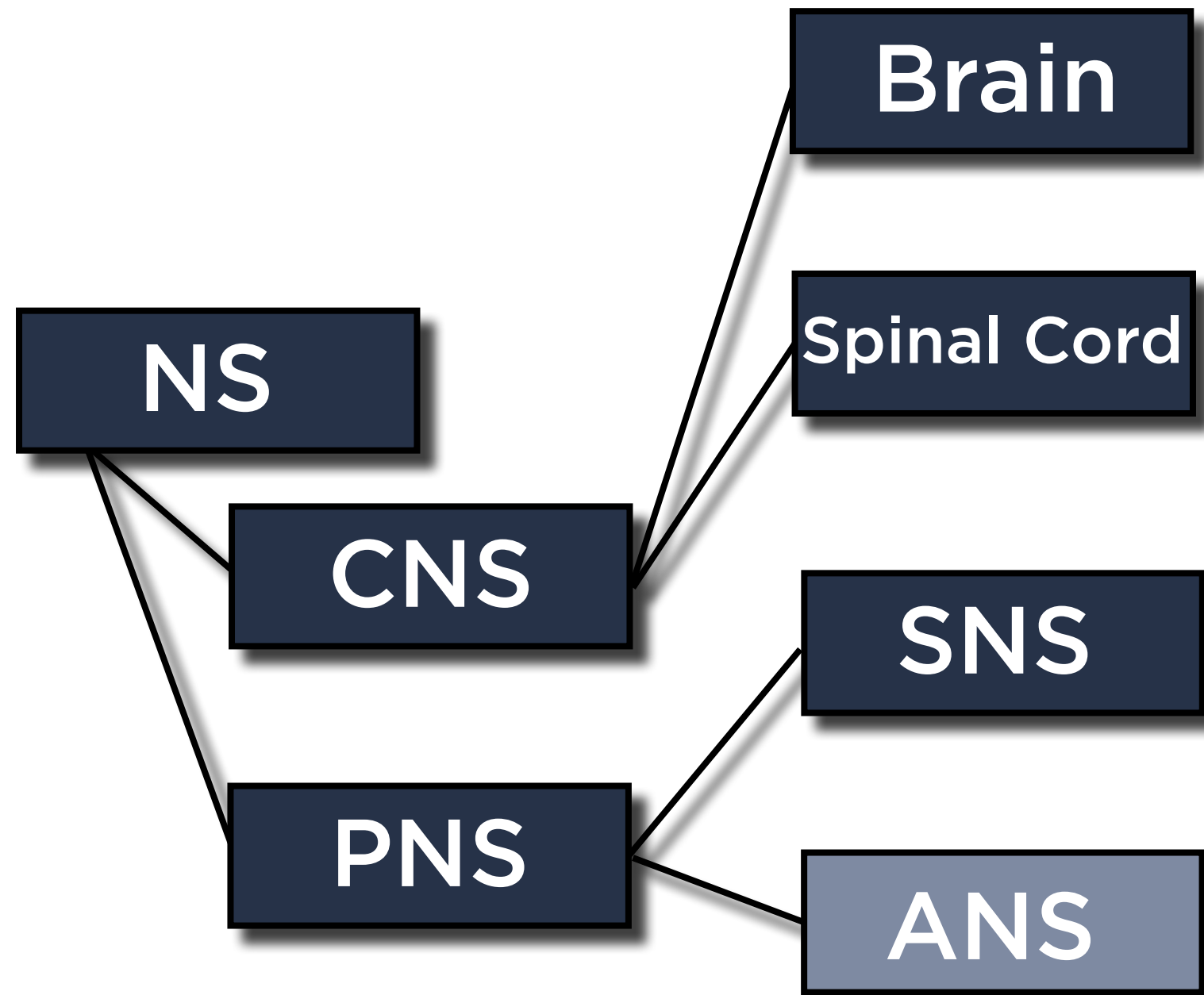
The SNS interacts with the external environment.

It also has *efferent* nerves that carry motor signals from the CNS out to the skeletal muscles.

# Nervous System Layout



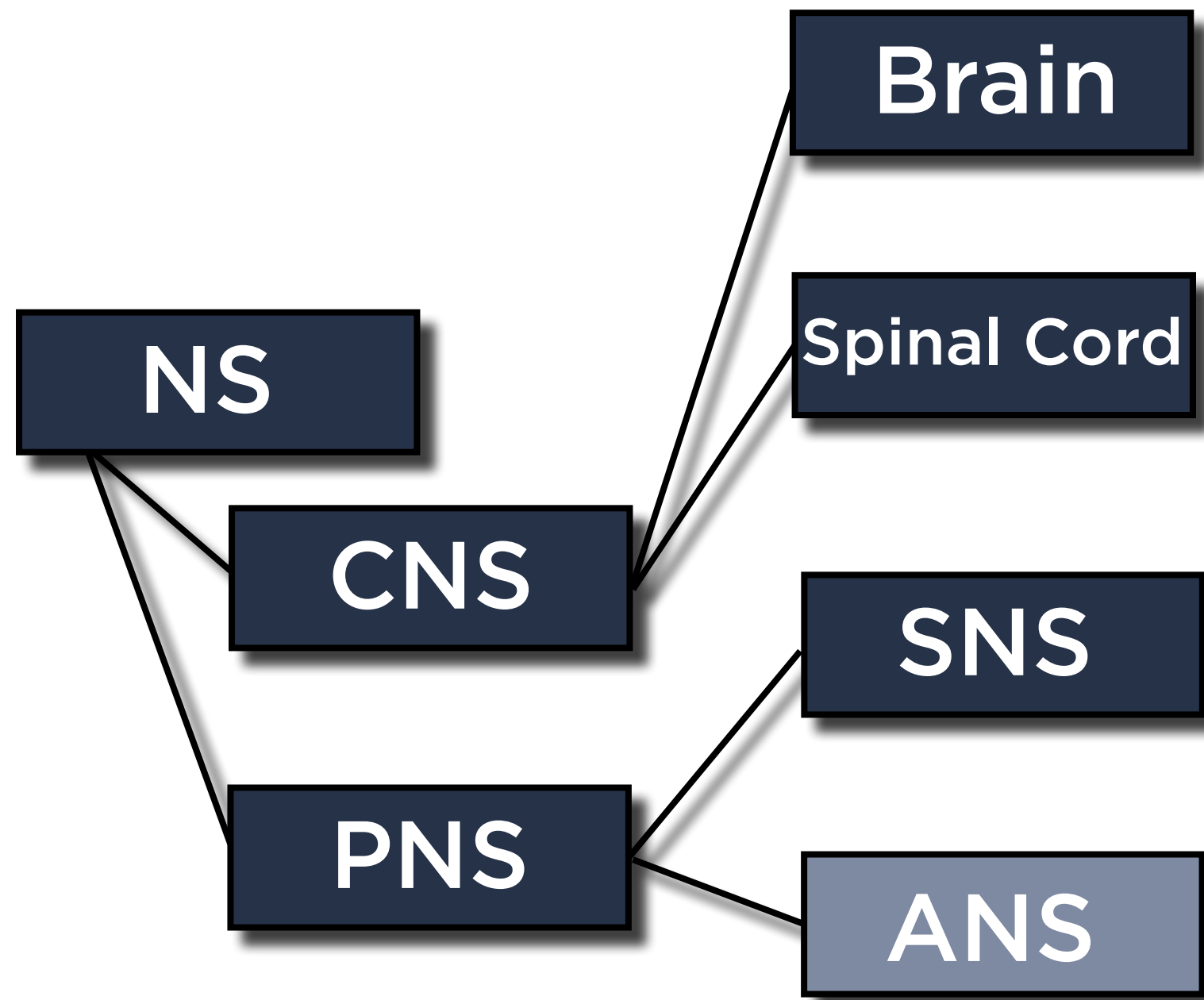
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The ANS participates in the regulation of the internal environment.

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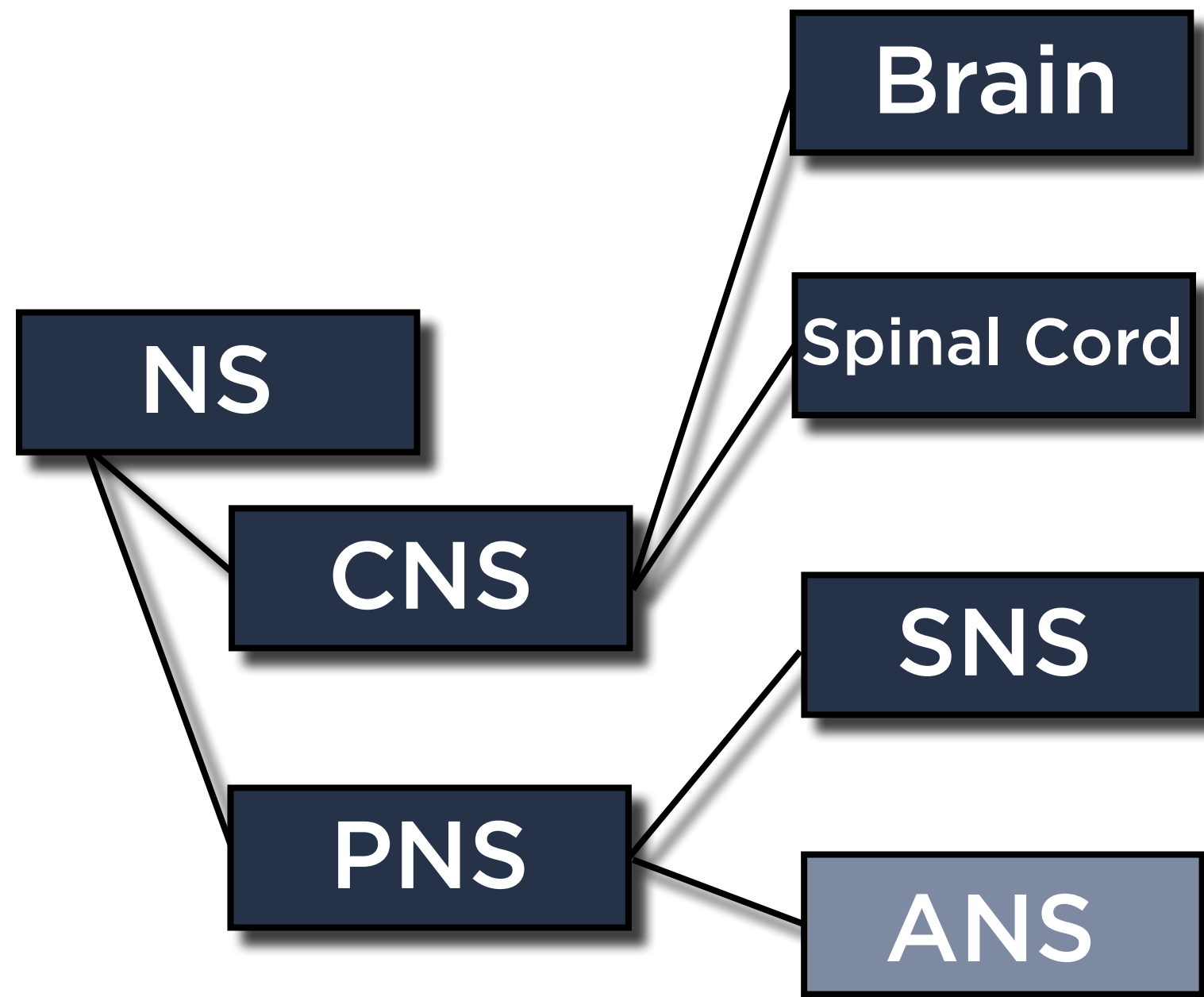


The ANS participates in the regulation of the internal environment.

It has *afferent* nerves that carry sensory signals from internal organs to the CNS.

# Nervous System Layout

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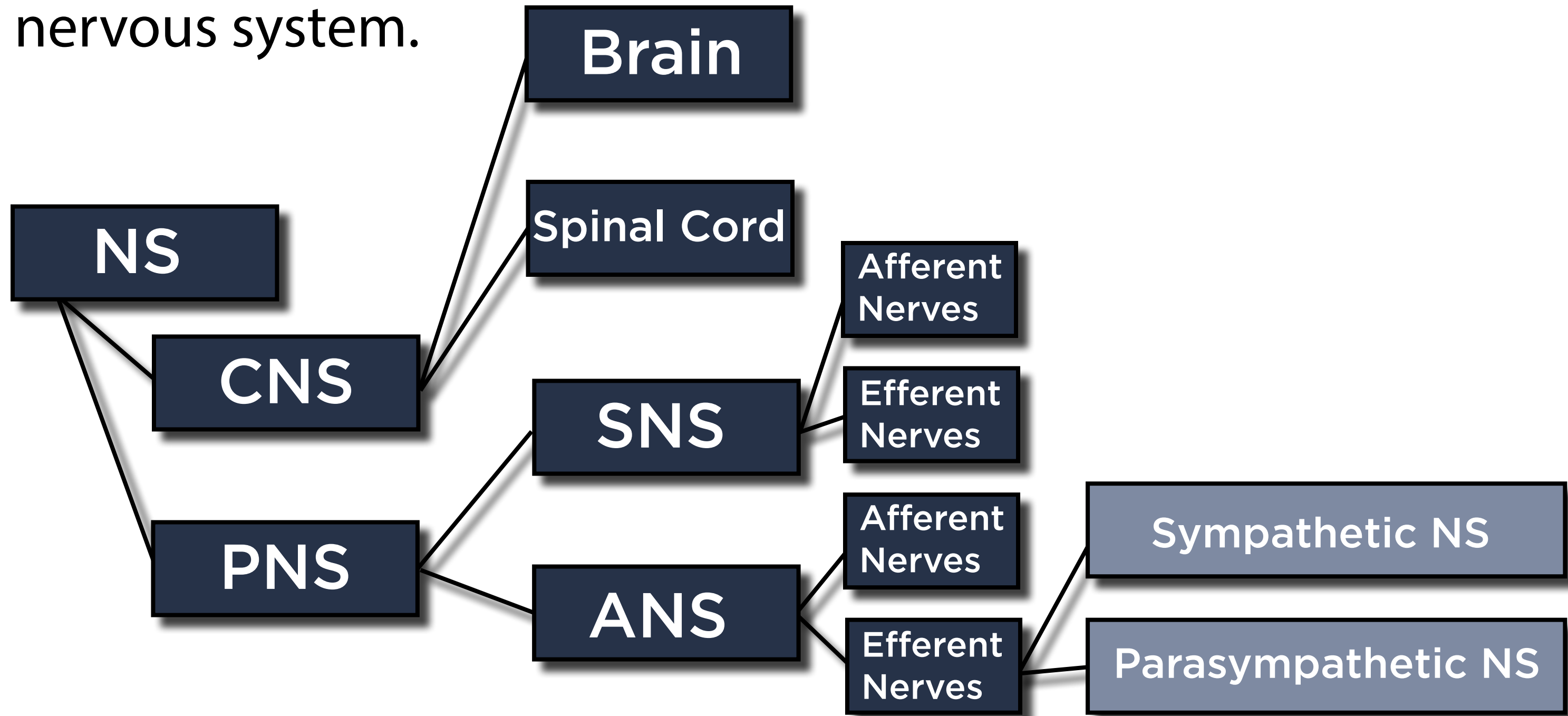


The ANS participates in the regulation of the internal environment.

It has *efferent* nerves that carry motor signals from the CNS to internal organs.

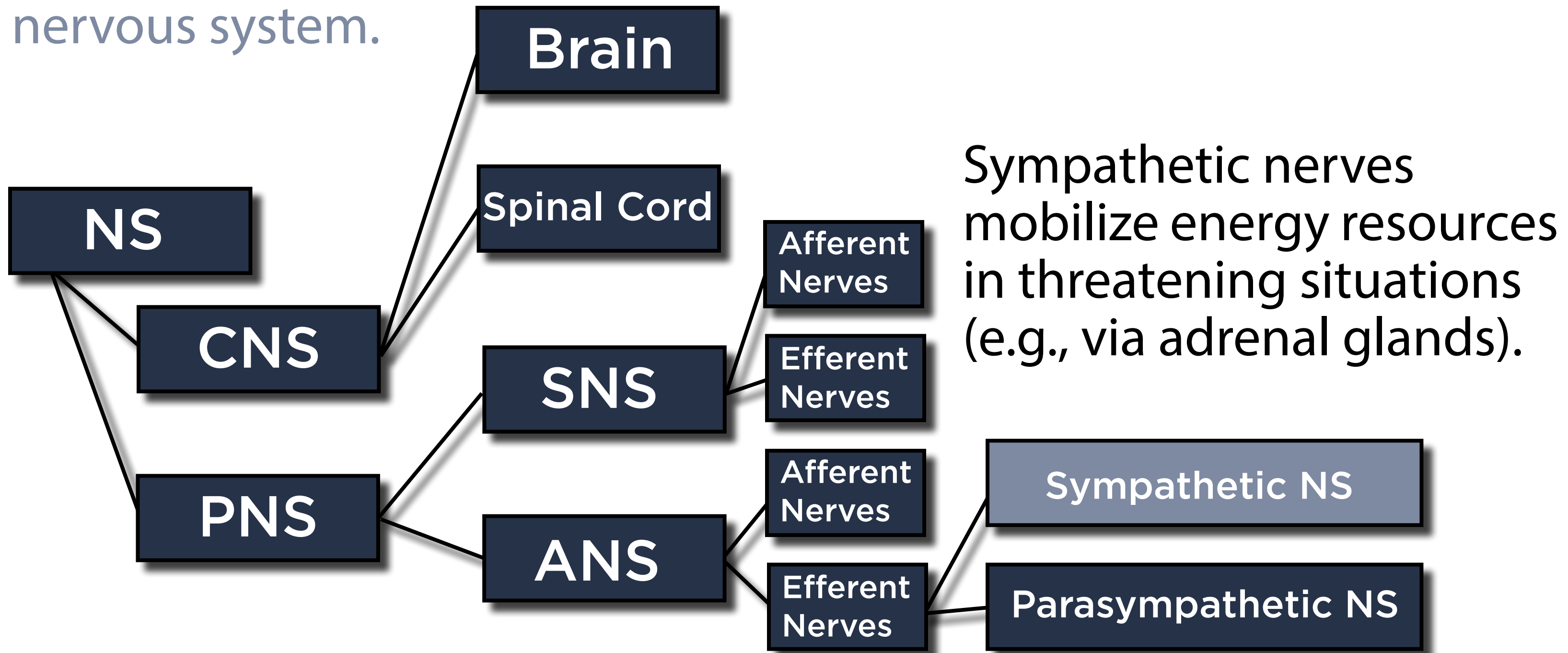
# Nervous System Layout

The efferent nerves of the autonomic nervous system (ANS) are of two types: sympathetic nerves and parasympathetic nerves. The sympathetic nerves comprise the sympathetic nervous system and the parasympathetic nerves comprise the parasympathetic nervous system.



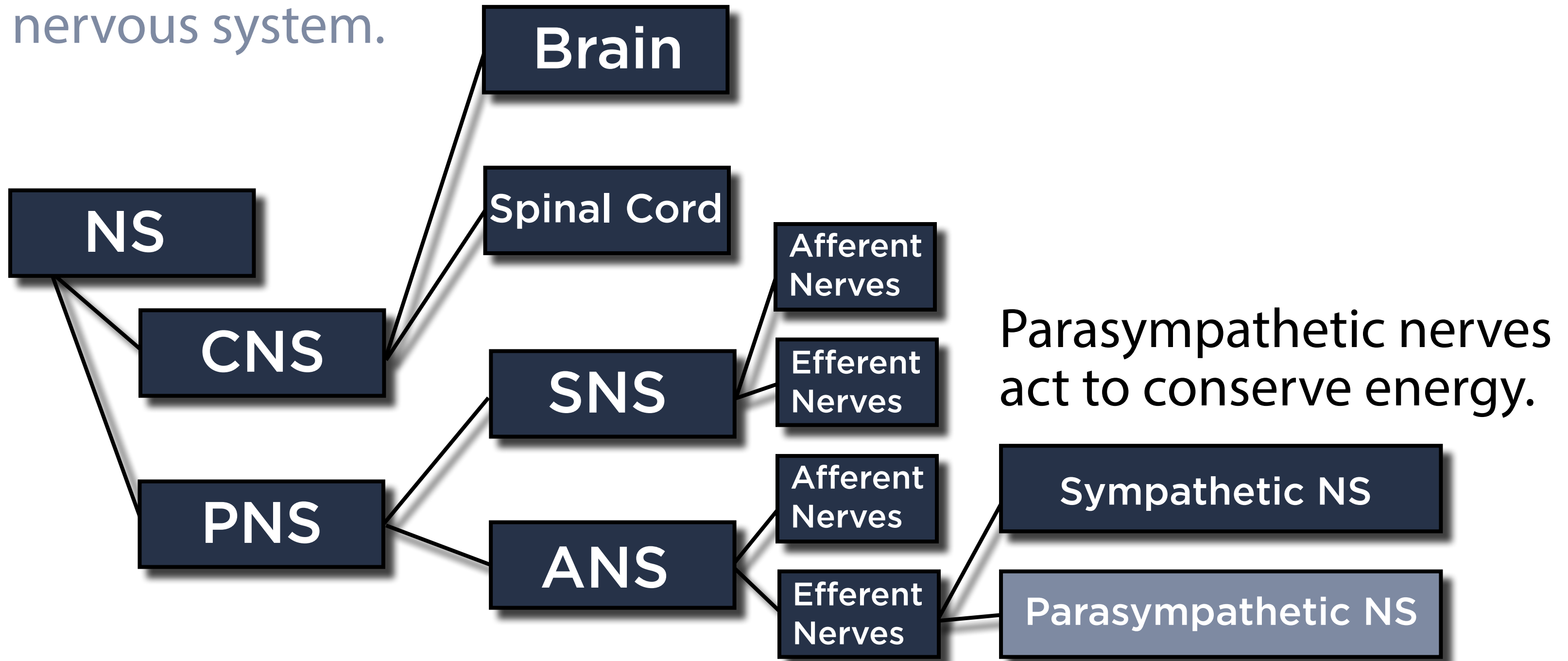
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# Nervous System Layout