

Study Guide - The Autonomic Nervous System (ANS)

1. How does the **Autonomic Nervous System (ANS)** **differ** from the **somatic nervous system**? How are they the **same**?
2. Describe the **effectors, efferent pathways and neurotransmitters** released in the ANS.
3. What are the two **divisions** in **the ANS**? How are they the **same** and **different**?
4. How do the **fiber pathways** **differ** between the two divisions? **Long vs short preganglionic fibers**.
5. List the five components of the **visceral reflex arc**. What are the **three key differences** between a **somatic reflex arc** and the **visceral reflex arc**?
6. What is an example of a **three-neuron reflex arc**?
7. What are the **two major ANS neurotransmitters**? What are each of their receptors called and where are they found? Are they **inhibitory** or **stimulatory**?

8. What are the *effects* of the *parasympathetic and sympathetic* on the heart, blood vessels, gastrointestinal tract, lungs, kidneys and the adrenal medulla?

9. What *regulates* the ANS? What happens when there are abnormalities in *smooth* muscle control?