

## Week 2 discussion AP Bio 2

### Divisions of the Nervous System Involved in Claire's Morning Routine

The nervous system is divided into two main parts: the central nervous system (CNS) and the peripheral nervous system (PNS). The PNS is further divided into the somatic nervous system and the autonomic nervous system, which is further divided into the sympathetic and parasympathetic divisions.

#### Breakdown:

- Waking up to alarm: Auditory system (PNS), Reticular activating system (CNS)
- Standing up and stretching: Motor system (PNS)
- Walking to bathroom: Motor system (PNS), Somatosensory system (PNS)
- Checking water temperature: Somatosensory system (PNS)
- Salivating at breakfast smell: Olfactory system (PNS), Parasympathetic nervous system (PNS)

#### Key points:

- Central Nervous System (CNS):

Includes the brain and spinal cord, responsible for processing information and initiating responses.

- Peripheral Nervous System (PNS):

Nerves connecting the CNS to the rest of the body, further divided into somatic (voluntary movement) and autonomic (involuntary functions) systems.

- Somatic Nervous System:

Controls voluntary muscle movements like walking and stretching.

- Autonomic Nervous System:

Regulates involuntary bodily functions like digestion and heart rate, further divided into the sympathetic (fight-or-flight) and parasympathetic (rest-and-digest) divisions.