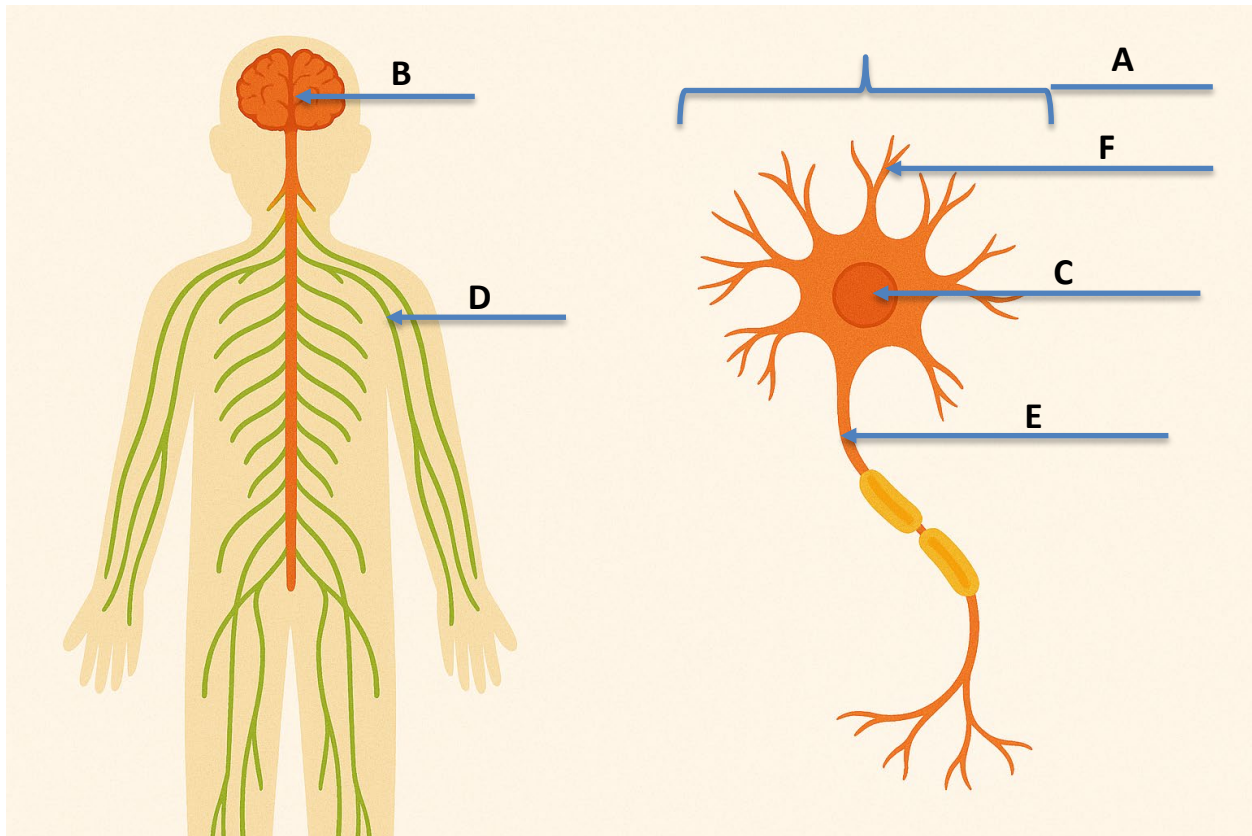


Anatomy Class 3: Nervous, Endocrine & Integumentary Systems

Home Activities

- Label the parts of the nervous system and neurons. Use these terms: (A) neuron, (B) central nervous system, (C) cell body, (D) peripheral nervous system, (E) axon, (F) dendrite.



- Reflex Relay (Reaction Time Test): To learn how sensory neurons, spinal cord, and motor neurons coordinate rapid reflex responses.
 - Goal: Demonstrate how quickly the nervous system responds to stimuli.
 - How: Have students work in pairs with a ruler.
 - One person holds the ruler vertically at the 0 cm mark between the other's fingers.
 - Without warning, they drop it and the partner tries to catch it as fast as possible.
 - Record how far the ruler falls — the shorter the distance, the faster the reflex!

- Sensory Mapping Activity: Shows that different areas of skin have different receptor densities — fingertips are more sensitive than the back!
 - Goal: Explore how touch receptors vary across the skin.
 - How: Use a two-point discrimination test: gently touch two points (like pencil tips or paperclips) at varying distances on the student's hand, arm, back, and fingertips.
 - Students record where they can feel one point or two.

Pre-Assessment Quiz: Nervous, Endocrine, Integumentary Systems

1. What is the main function of the nervous system?

- A. To protect the body from germs
- B. To send electrical messages that control body functions**
- C. To release hormones into the blood
- D. To store energy in the muscles

2. Which two parts make up the central nervous system (CNS)?

- A. Brain and spinal cord**
- B. Brain and heart
- C. Spinal cord and lungs
- D. Nerves and muscles

3. What part of the brain controls balance and coordination?

- A. Cerebrum
- B. Brainstem
- C. Cerebellum**
- D. Hypothalamus

4. What type of neuron part receives messages from other neurons?

- A. Axon
- B. Cell body
- C. Dendrite**
- D. Synapse

5. What is the main difference between the nervous system and the endocrine system?

- A. The nervous system uses hormones, the endocrine system uses electricity
- B. The endocrine system uses chemical messages, the nervous system uses electrical signals**
- C. They both use the same type of signals
- D. The endocrine system works faster than the nervous system

6. Which gland is called the “master gland” because it controls the others?

- A. Thyroid gland
- B. Pituitary gland**
- C. Adrenal gland
- D. Pancreas

7. Which hormone helps regulate blood sugar levels?

- A. Adrenaline
- B. Melatonin
- C. Insulin**
- D. Estrogen

8. What are the three main layers of the skin?

- A. Dermis, Fat, and Bone
- B. Epidermis, Dermis, and Hypodermis**
- C. Hair, Nail, and Gland layers
- D. Outer, Middle, and Inner Skin

9. Which part of the integumentary system helps keep the skin soft and waterproof?

- A. Sweat glands
- B. Oil (sebaceous) glands**
- C. Nerve endings
- D. Blood vessels

10. Which of the following systems is your body's *first line of defense* against the outside world?

- A. Endocrine system
- B. Digestive system
- C. Nervous system
- D. Integumentary system**