

Body Systems Worksheet

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Part 1: Building a Foundation

Which of the following is NOT a component of the circulatory system?

Hint: Think about the main organs and substances involved in circulation.

- A) Heart
- B) Lungs
- C) Blood
- D) Blood vessels

Which of the following are functions of the skeletal system? (Select all that apply)

Hint: Consider the roles of bones and joints in the body.

- A) Protects internal organs
- B) Produces hormones
- C) Enables movement
- D) Transports oxygen

List the main components of the nervous system and briefly describe their primary function.

Hint: Think about the brain, spinal cord, and nerves.

Identify and describe two key functions of the respiratory system.

Hint: Consider gas exchange and breathing.

1. Function 1

2. Function 2

Which system is primarily responsible for hormone production and regulation?

Hint: Think about the glands in the body.

- A) Nervous system
- B) Endocrine system
- C) DigestIVE system
- D) Integumentary system

Part 2: Application and Analysis

If a person has a broken leg, which body system is directly affected, and what is the immediate consequence?

Hint: Consider the system that supports the body structure.

- A) Nervous system; loss of sensation
- B) Skeletal system; impaired movement
- C) Circulatory system; blood loss
- D) Endocrine system; hormone imbalance

In a scenario where a person is dehydrated, which systems are involved in correcting this imbalance? (Select all that apply)

Hint: Think about systems that regulate fluid balance.

- A) Excretory system
- B) DigestIVE system
- C) Nervous system
- D) Integumentary system

Describe how the digestive system adapts when a person consumes a high-protein diet.

Hint: Consider changes in digestion and metabolism.

Which of the following best describes the relationship between the endocrine and nervous systems?

Hint: Think about how these systems communicate.

- A) They operate independently of each other.
- B) The nervous system controls the endocrine system through electrical signals.
- C) The endocrine system controls the nervous system through chemical signals.
- D) They both use blood to transport signals.

Analyze the role of the integumentary system in homeostasis. Which of the following are true? (Select all that apply)

Hint: Consider the functions of skin and related structures.

- A) Regulates body temperature
- B) Produces red blood cells
- C) Acts as a barrier to pathogens
- D) Synthesizes vitamin D

Part 3: Evaluation and Creation

Which of the following scenarios would most likely result in a compromised immune system?

Hint: Think about lifestyle factors that affect health.

- A) Regular exercise and a balanced diet
- B) Chronic stress and lack of sleep
- C) Adequate hydration and rest
- D) Consistent exposure to sunlight

Evaluate the impact of smoking on the respiratory and circulatory systems. Which of the following are potential consequences? (Select all that apply)

Hint: Consider the effects of tobacco on health.

- A) Reduced lung capacity
- B) Increased blood pressure
- C) Enhanced oxygen transport
- D) Decreased risk of infections

Design a daily routine that promotes the health of at least three different body systems. Explain how each activity benefits the respective system.

Hint: Think about activities like exercise, diet, and sleep.