

Systems on the Move

Trace how body systems do different jobs and work together.

7.13.A “identify and model the main functions of the systems of the human organism, including the circulatory, respiratory, skeletal, muscular, digestive, urinary, reproductive, integumentary, nervous, immune, and endocrine systems;”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline each body system named in the passage, then circle the words that tell its main job.

A Body Team at Work

- ① During a fast run to catch a bus, body systems work as a team. The muscular system contracts to move bones, while the skeletal system supports the body and protects organs. The respiratory system brings oxygen into the lungs and removes carbon dioxide. The circulatory system carries oxygen, nutrients, and wastes in blood. The nervous system detects the starting signal, sends messages that coordinate movement, and helps the body respond quickly. In this moment, each system has a different job, yet its work affects the others.
- ② At lunch, the digestive system breaks food into nutrients that cells can use. The urinary system filters wastes and extra water from blood, making urine. The integumentary system, including skin, forms a barrier that helps keep pathogens out and helps regulate body temperature through sweating. If a cut lets pathogens enter, the immune system recognizes and attacks them. The endocrine system releases hormones, chemical messengers that regulate processes such as growth, stress responses, and metabolism in daily life.
- ③ The reproductive system produces sex cells and supports reproduction. Its major role differs from the systems needed for an individual's immediate survival, but it is essential for continuing a species. Systems also interact in less obvious ways. For example, hormones from endocrine glands can guide reproductive development, and immune defenses can respond to invading microbes. A useful model uses arrows to show what moves or what message passes between systems, such as oxygen in blood or signals from nerves.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 In the bus-run example, name three systems involved in starting and moving. State the main function of each one.

2 How do the respiratory and circulatory systems work together during a fast run?

3 Name the digestive, urinary, integumentary, and immune systems. State one main function of each from the passage.

4 How can the endocrine and reproductive systems be connected, according to the passage?

3 YOUR TURN _____ Your own words

Choose one daily action not named in the reading, such as climbing stairs or carrying groceries. Complete the table to model how four body systems work together during that action, including a connection between each system and another system.

DAILY ACTION	BODY SYSTEM	MAIN FUNCTION IN THIS ACTION	CONNECTION TO ANOTHER SYSTEM

PART 1 • READ AND MARK

Underline each body system named in the passage, then circle the words that tell its main job. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	In the bus-run example, name three systems involved in starting and moving. State the main function of each one.	Muscular system: contracts to move bones. Skeletal system: supports the body and protects organs. Nervous system: sends messages that coordinate movement and response.
2	How do the respiratory and circulatory systems work together during a fast run?	The respiratory system brings oxygen into the lungs and removes carbon dioxide. The circulatory system carries oxygen and wastes in the blood.
3	Name the digestive, urinary, integumentary, and immune systems. State one main function of each from the passage.	Digestive: breaks food into nutrients cells can use. Urinary: filters wastes and extra water from blood to make urine. Integumentary: forms a barrier against pathogens or helps regulate temperature by sweating. Immune: recognizes and attacks pathogens.
4	How can the endocrine and reproductive systems be connected, according to the passage?	The endocrine system releases hormones, and hormones can guide reproductive development. The reproductive system produces sex cells and supports reproduction.

PART 3 • YOUR TURN (SAMPLE ANSWER)

DAILY ACTION	BODY SYSTEM	MAIN FUNCTION IN THIS ACTION	CONNECTION TO ANOTHER SYSTEM
Climbing stairs	Nervous system	Sends messages that start and adjust leg movement.	Sends signals to the muscular system.
Climbing stairs	Muscular system	Contracts leg muscles to move the body upward.	Pulls on bones in the skeletal system.
Climbing stairs	Respiratory system	Brings oxygen into the lungs and removes carbon dioxide.	Moves oxygen into blood carried by the circulatory system.
Climbing stairs	Circulatory system	Carries oxygen to leg muscles and carries wastes away.	Delivers oxygen from the respiratory system to the muscular system.

Accept accurate equivalent wording for each system function. For the table, accept any daily action and four correctly named systems when each row gives a plausible function and a clear connection to another system.