

Study Guide 28.2: Mechanisms of Homeostasis

KEY CONCEPT

Homeostasis is the regulation and maintenance of the internal environment.

VOCABULARY

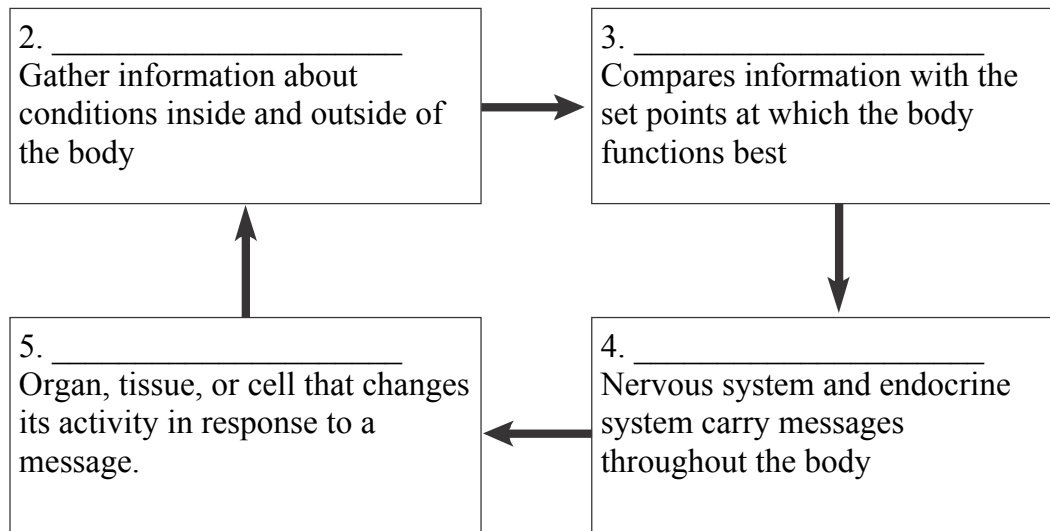
homeostasis	negative feedback
feedback	positive feedback

MAIN IDEA: Conditions within the body must remain within a narrow range.

Fill in the blank with the word or phrase that best completes the sentence.

- The body regulates its internal environment to stay within the normal range that supports life. This regulatory process is called _____.

Fill in the name of the parts of the control system in the Cycle Diagram below.

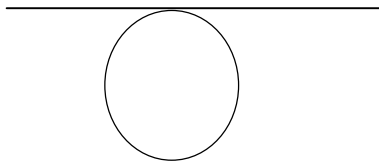


- Homeostasis cannot be maintained if a _____ organ cannot respond to a sensor's signal.

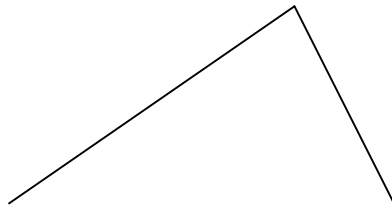
MAIN IDEA: Negative feedback loops are necessary for homeostasis.

7. Write the type of feedback, *positive* or *negative*, next to the correct description and diagram.

- a. _____ Counteracts a change in a way that helps bring the body back to normal. Example: breathing faster while running to keep oxygen moving into muscle cells.



- b. _____ Increases change in a way that enables the body to accomplish a specific task. Example: blood clotting to begin healing a wound.



Fill in the blank with the word or phrase that best completes the sentence.

8. It's a hot day and you're sweating. Sweating helps keep body temperature from rising too high. This response is an example of _____ feedback.
9. Human growth hormone is produced during the years that a child's body is growing. When adulthood is reached, the body's cells no longer need the same amount of growth hormone, so hormone production is reduced. This response is an example of _____ feedback.

Vocabulary Check

Fill in the blank with the word or phrase that best completes the sentence.

10. Information that allows a control center to compare current conditions with the best conditions for the body is called _____.
11. To survive, the human body must maintain an internal environment that stays the same regardless of what happens outside the body. The process of maintaining a stable internal environment is called _____.