Name Period Date

SECTION 28.2

MECHANISMS OF HOMEOSTASIS

Study Guide

KEY CONCEPT

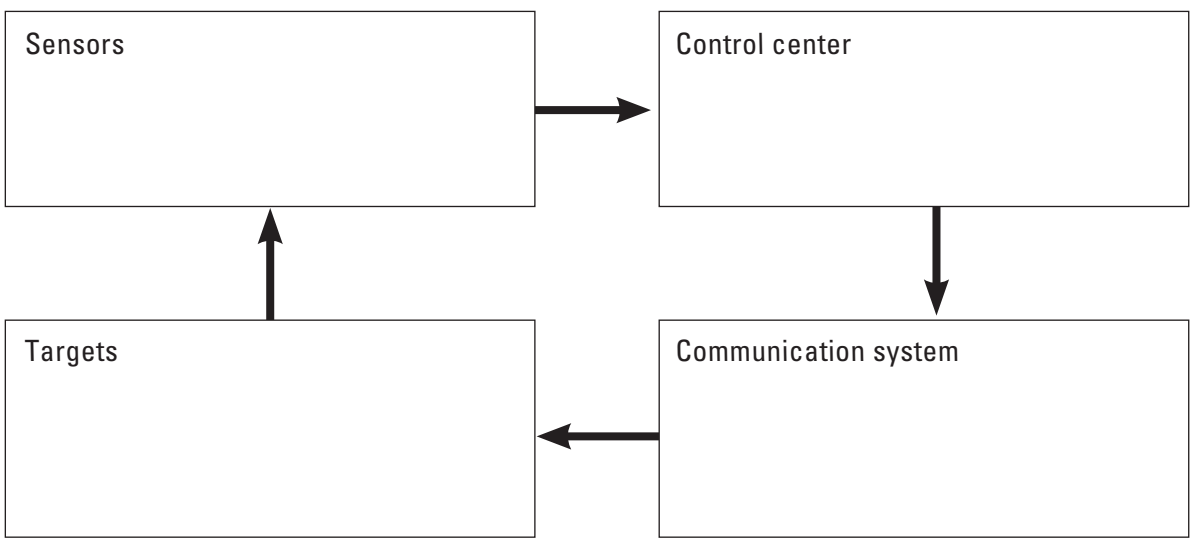
Homeostasis is the regulation and maintenance of the internal environment.

VOCABULARY	
homeostasis	negative feedback
feedback	positive feedback

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

1. Give two reasons why it is so important that the internal environment of the body remains stable.

2. Homeostasis is maintained by control systems. Fill in the name and function of the parts of the control system in the cycle diagram below.

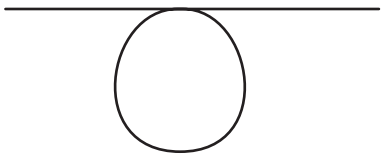


3. What might happen if a target organ cannot respond?

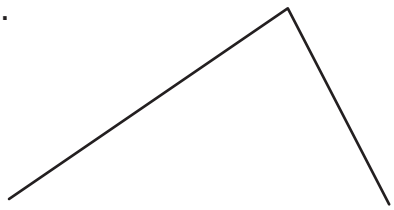
MAIN IDEA: Negative feedback loops are necessary for homeostasis.

4. Study the following line drawings. Which of the following diagrams represents negative feedback and which represents positive feedback? Explain your answer.

A.



B.



5. It's a hot day and you're sweating. Is this response an example of a positive or negative feedback loop? Explain your answer.

6. When you run, your muscles require more oxygen as their level of activity increases. Explain briefly how your control systems act to bring more oxygen into your body.

Vocabulary Check

7. What is the difference between positive and negative feedback loops?

8. Think of an analogy that would illustrate the process of feedback for someone who does not know what the word means.