Name Period Date

SECTION 1.2

UNIFYING THEMES OF BIOLOGY

Study Guide

KEY CONCEPT

Unifying themes connect concepts from many fields of biology.

VOCABULARY		
system	homeostasis	adaptation
ecosystem	evolution	

MAIN IDEA: All levels of life have systems of related parts.

1. What is a system?

2. What are some examples of systems?

Complete the table by writing either the level of life or an example of a system at that level of life.

Level	Example
3.	Chemicals and processes interact in a precise way so that a cell can function properly.
Cells	**4.**
5.	Different parts of a living thing work together so that the living thing can survive.
Ecosystem	**6.**

MAIN IDEA: Structure and function are related in biology.

7. What are structure and function?

8. Give an example of how structure and function are related on the cellular level.

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Section 1.2 STUDY GUIDE CONTINUED

MAIN IDEA: Organisms must maintain homeostasis to survive in diverse environments.

9. What is homeostasis?

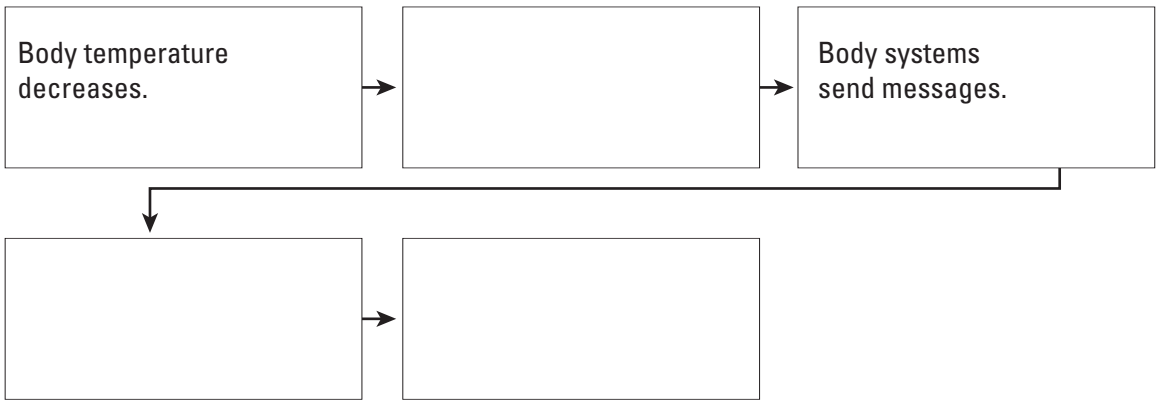
_____

10. Why is homeostasis important to the survival of an organism?

_____

_____

11. In the space below, draw a sketch to help you remember what negative feedback is.



MAIN IDEA: Evolution explains the unity and diversity of life.

12. What is evolution?

_____

13. Over the course of time, evolution _____ the genetic makeup of a population.

14. _____ are genetic traits that give an advantage to an individual and can be passed on to offspring.

Vocabulary Check

15. A system in which living and nonliving things in a certain area interact is called a(n) _____.

16. The maintenance of constant internal conditions in an organism is called _____.

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