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.

Section 1.2 STUDY GUIDE CONTINUED

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

9. What is homeostasis?

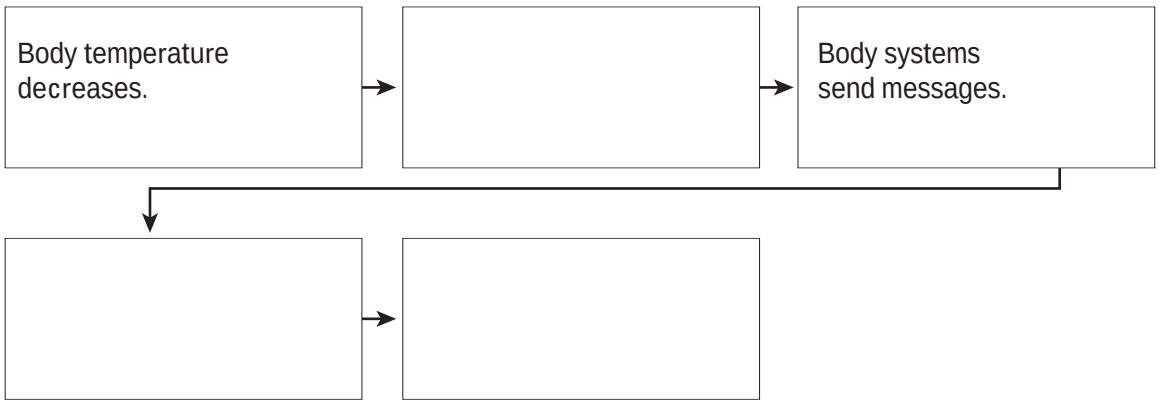
_____

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 _____.