Name Period Date

SECTION 13.3

ENERGY IN ECOSYSTEMS

Study Guide

KEY CONCEPT

Life in an ecosystem requires a source of energy.

VOCABULARY	
producer	heterotroph
autotroph	chemosynthesis
consumer	

MAIN IDEA: Producers provide energy for other organisms in an ecosystem.

Complete the following sentences with the correct term.

autotrophs	eating	nonliving
consumers	heterotrophs	producers

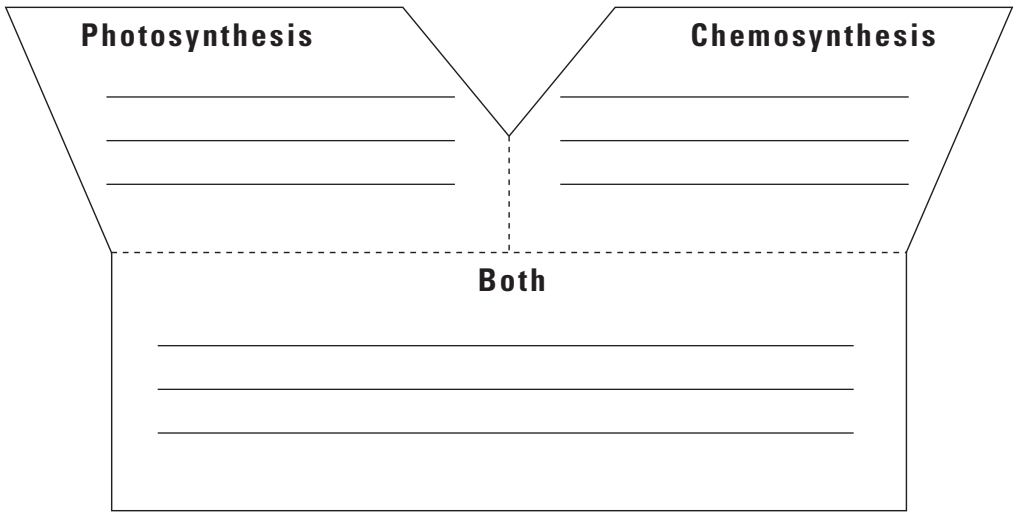
1. _____ are organisms that get their energy from _____ resources, meaning they make their own food. These organisms are also called _____.
2. _____ are organisms that get their energy by _____ other organisms. These organisms are also called _____.

3. Why are producers so important to an ecosystem?

4. Why is the Sun important to both producers and consumers?

MAIN IDEA: Almost all producers obtain energy from sunlight.

5. Complete the following Y-diagram to outline the similarities and differences between photosynthesis and chemosynthesis.



Vocabulary Check

6.

Word Part	Meaning
auto-	self
hetero-	other
-troph	nourishment

Use the above word origins to explain the difference between an autotroph and a heterotroph.

7. The prefix *photo-* means "light" while the prefix *chemo-* means "chemical." How do these word origins relate to the difference between photosynthesis and chemosynthesis?

8. What is the difference between a consumer and a producer?