



Name _____

Period _____

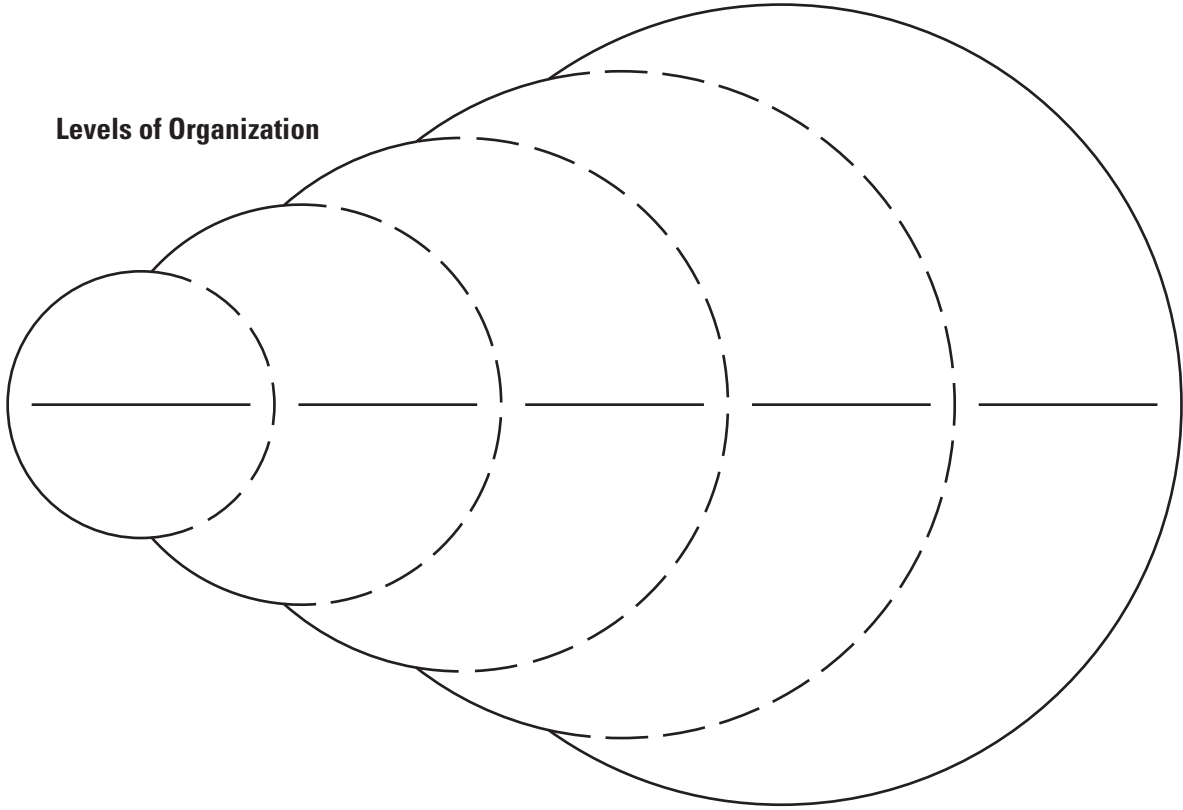
Date _____

SECTION
13.1

ECOLOGISTS STUDY RELATIONSHIPS

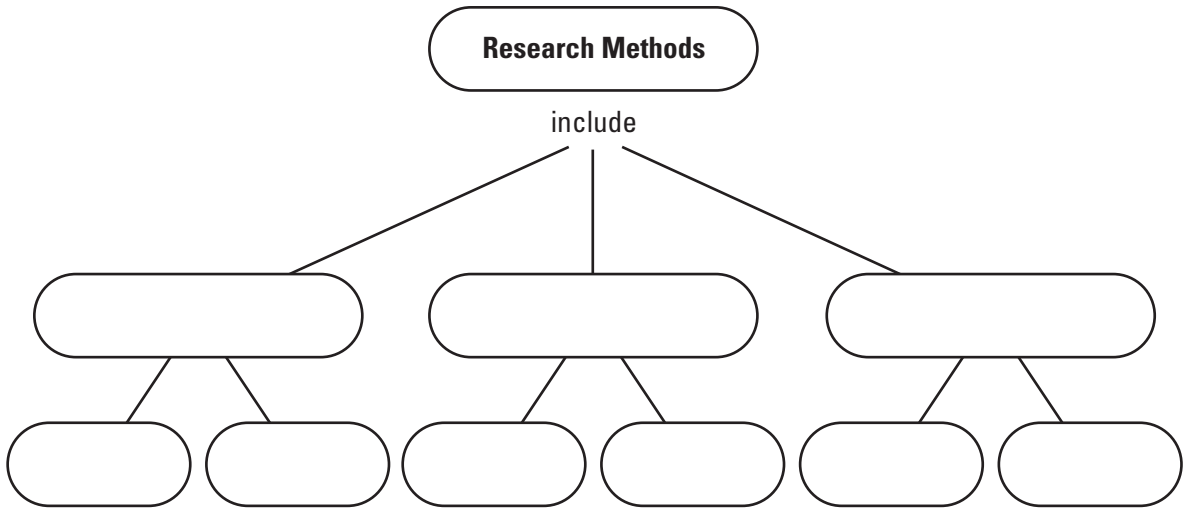
Power Notes

Levels of Organization



Research Methods

include





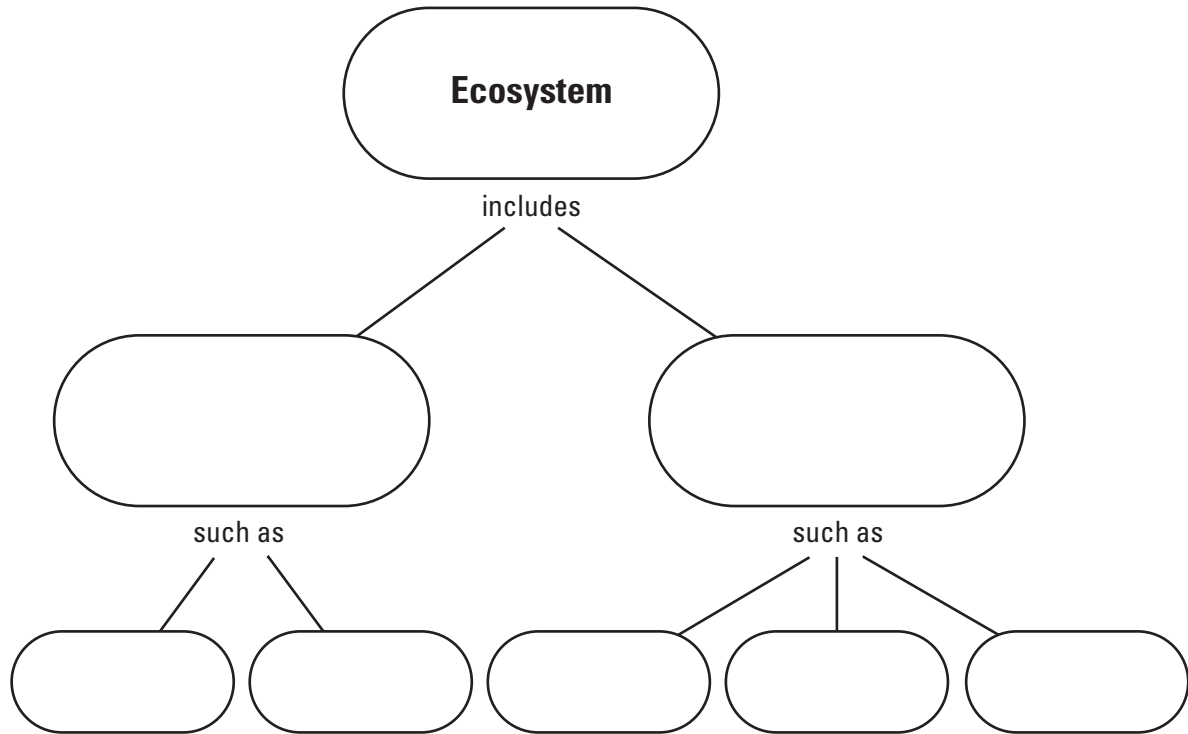
Name

Period

Date

SECTION
13.2

BIOTIC AND ABIOTIC FACTORS
Power Notes



Complex Relationships Within an Ecosystem

Biodiversity is...

A keystone species is...



Name _____

Period _____

Date _____

SECTION
13.3

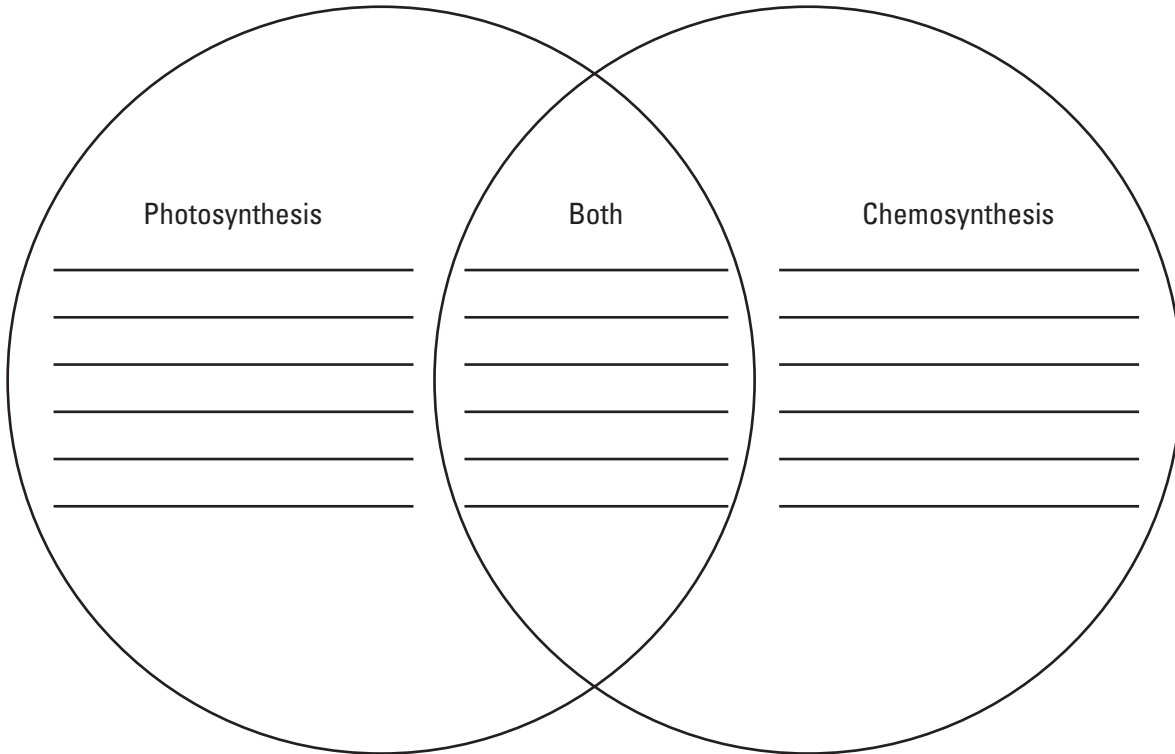
ENERGY IN ECOSYSTEMS

Power Notes

Producers and Consumers

Type	Also Called	Description

Processes by Which Producers Obtain Energy





Name _____

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Date _____

SECTION
13.4

FOOD CHAINS AND FOOD WEBS
Power Notes

Types of consumers:

1.

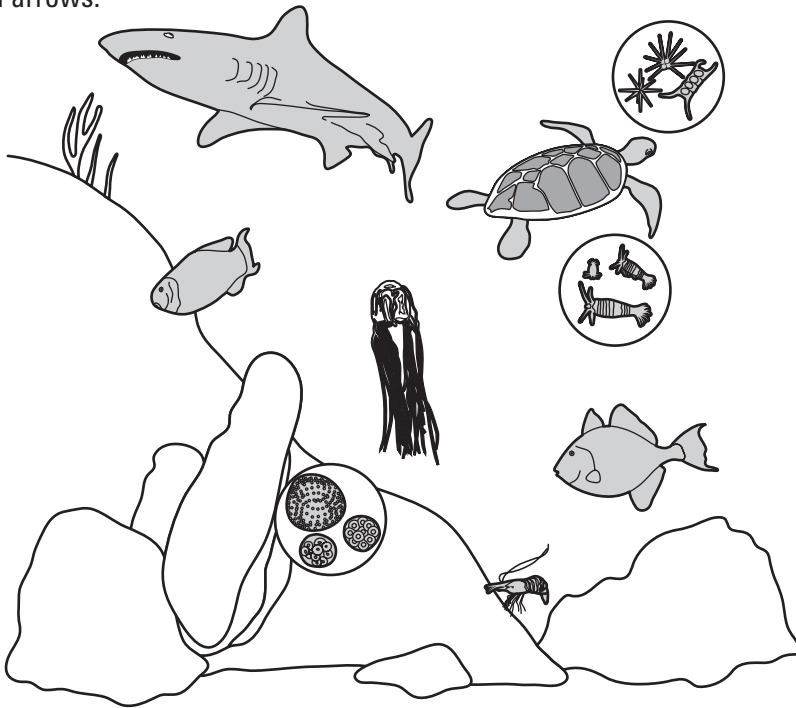
2.

3.

4.

A food web shows:

Add arrows:



Trophic Level

Producer

Primary consumers

Secondary consumers

Tertiary Consumer



Name

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Date

SECTION
13.5

CYCLING OF MATTER
Power Notes

Oxygen cycle:	Carbon cycle:
<div>Hydrologic cycle:</div>	
Nitrogen cycle:	Phosphorus cycle:



Name _____

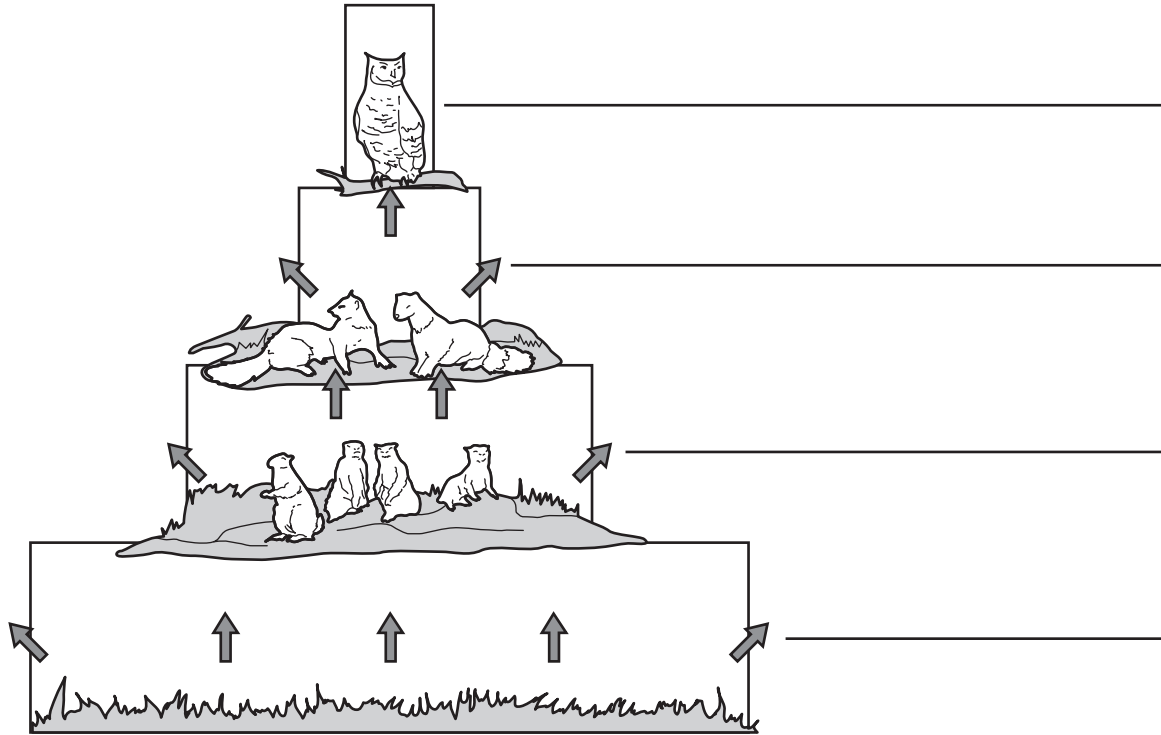
Period _____

Date _____

SECTION
13.6

PYRAMID MODELS
Power Notes

Trophic Levels



Energy pyramid:

Two other pyramid models:

1. _____

Measures: _____

2. _____

Measures: _____