

Name _____

Period _____

Date _____

SECTION
14.1

HABITAT AND NICHE
Power Notes

Habitat:

Ecological niche:

Competitive exclusion is a principle that states:

Two other results of competitive exclusion:

-
-

An ecological equivalent is:

CHAPTER 14
Interactions in Ecosystems

Name

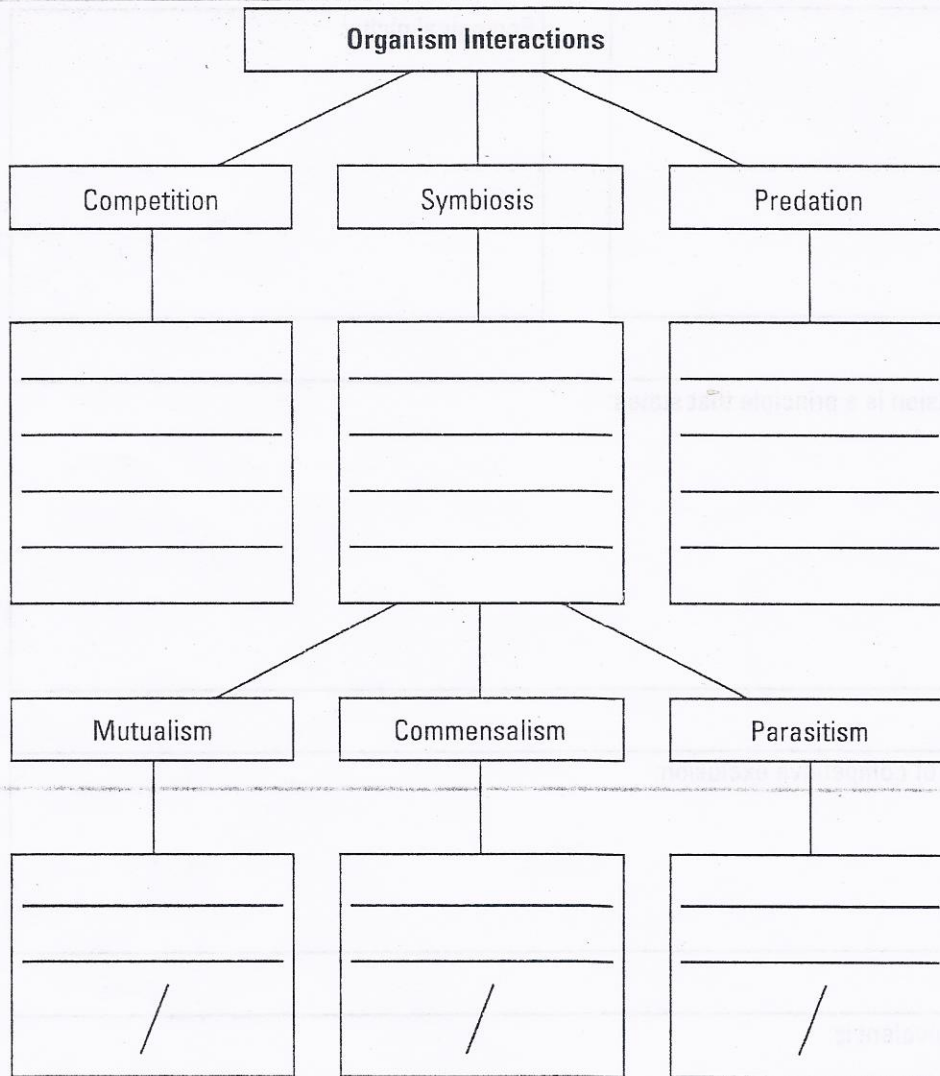
Period

Date

SECTION
14.2

COMMUNITY INTERACTIONS

Power Notes



CHAPTER 14
Interactions in Ecosystems

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Name _____

Period _____

Date _____

SECTION
14.3

POPULATION DENSITY AND DISTRIBUTION

Power Notes

Population density is:

Calculated Using the Formula:

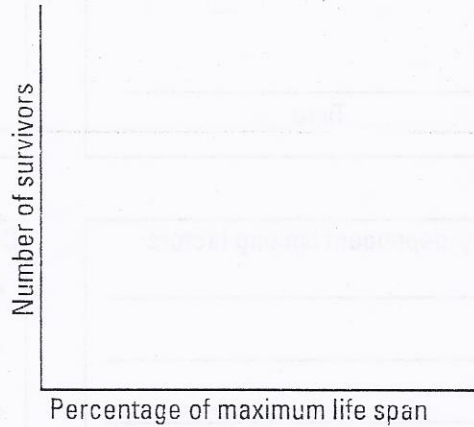
_____ = _____

Population dispersion is:

Three dispersion types:

_____ _____ _____

A survivorship curve is:

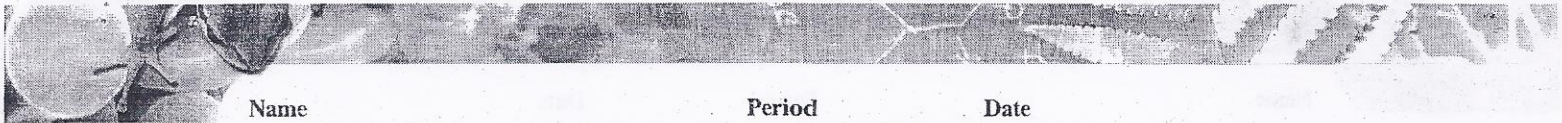


Three Types of Survivorship Curves

Type	Description
Type I	• •
Type II	• •
Type III	• •

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Interactions in Ecosystems

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Name _____

Period _____

Date _____

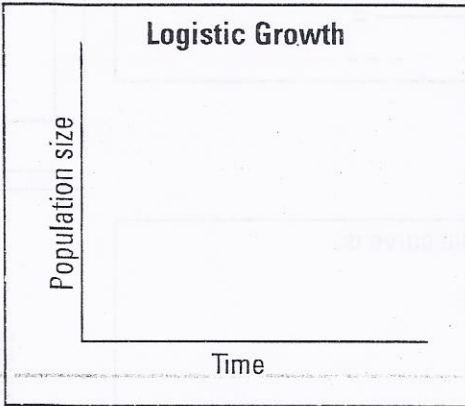
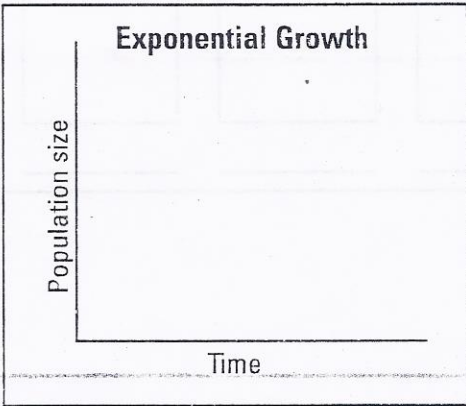
SECTION
14.4

POPULATION GROWTH PATTERNS

Power Notes

Four factors that affect the size of a population:

- _____
- _____
- _____
- _____



Density-dependent limiting factors:

- _____
- _____
- _____

Density-independent limiting factors:

- _____
- _____
- _____

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CHAPTER 14
Interactions in Ecosystems

Name _____

Period _____

Date _____

SECTION
14.5

ECOLOGICAL SUCCESSION
Power Notes

Primary succession is: _____

Secondary succession is: _____

CHAPTER 14
Interactions in Ecosystems

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BIOLOGY I SYMBIOSIS EXAMPLES: CHOOSE COMMENSALISM (C), MUTUALISM (M), OR PARASITISM (P) BESIDE THE ANIMALS INVOLVED BASED ON THE COMMENTS GIVEN.

ANIMALS	COMMENTS
Barnacle/Whale	Barnacles create home sites by attaching themselves to whales. This relationship neither harms nor benefits the whales.
Deer/Tick	Ticks feed on deer blood to the deer's detriment.
Ostrich/Gazelle	Ostriches and gazelles feed next to each other. They both watch for predators and alert each other to danger. Because the visual abilities of the two species are different, they each can identify threats that the other animal would not see as readily. Both species benefit.
Cowbird/Bison	As bison walk through grass, insects become active and are seen and eaten by cowbirds. This relationship neither harms nor benefits the bison.
Remora/Shark	Remoras attach themselves to a shark's body. They then travel with the shark and feed on the leftover food scraps from the shark's meals. This relationship neither harms nor benefits the shark.
Honey guide bird/Badger	Honey guide birds alert and direct badgers to bee hives. The badgers then expose the hives and feed on the honey first. Next the honey guide birds eat. Both species benefit.
Cuckoo/Warbler	A cuckoo may lay its eggs in a warbler's nest. The cuckoo's young will displace the warbler's young, and the warbler will raise the cuckoo's young.
Bee/Maribou stork	The stork uses its saw-like bill to cut up the dead animals it eats. As a result, the dead animal carcass is accessible to some bees for food and egg laying. This relationship neither harms nor benefits the stork.
Oxpecker/Rhinoceros	Oxpeckers feed on the ticks found on a rhinoceros. Both species benefit.
Silverfish/Army ants	Silverfish live and hunt with army ants, and share the prey. They neither help nor harm the ants.
Yucca plant/Yucca moth	Yucca flowers are pollinated by yucca moths. The moths lay their eggs in the flowers where the larvae hatch and eat some of the developing seeds. Both species benefit.
Mistletoe/Spruce tree	Mistletoe extracts water and nutrients from the spruce tree to the tree's detriment.
Mouse/Flea	A flea feeds on a mouse's blood to the mouse's detriment.
Wrasse fish/Black sea bass	Wrasse fish feed on the parasites found on the black sea bass's body. Both species benefit.