

Evolution

Section 3 Shaping Evolutionary Theory

Main Idea _____ **Details** _____

Scan Section 3 of the chapter. Write two facts that you discover.

1. _____

2. _____

Review Vocabulary

Use your book or dictionary to define allele.

allele

New Vocabulary

Write the correct vocabulary term in the left column for each definition below.

- | | |
|-------|--|
| _____ | allele frequencies remain the same unless acted upon by a factor |
| _____ | random evolution that occurs in a small, separate subpopulation |
| _____ | process of a large population declining in number then rebounding to a large number again |
| _____ | mechanism that operates before fertilization occurs |
| _____ | change in the allele frequencies in a population by chance |
| _____ | selection which removes organisms with extreme expressions of a trait |
| _____ | mechanism that operates after fertilization occurs to ensure that resulting hybrid remains infertile |
| _____ | selection which shifts a population toward an extreme trait |
| _____ | selection which removes individuals with average traits |
| _____ | change in a trait based on competition for mates |
| _____ | speciation in the presence of a barrier |
| _____ | speciation without any barriers |

Section 3 Shaping Evolutionary Theory (continued)

Main Idea _____

Details _____

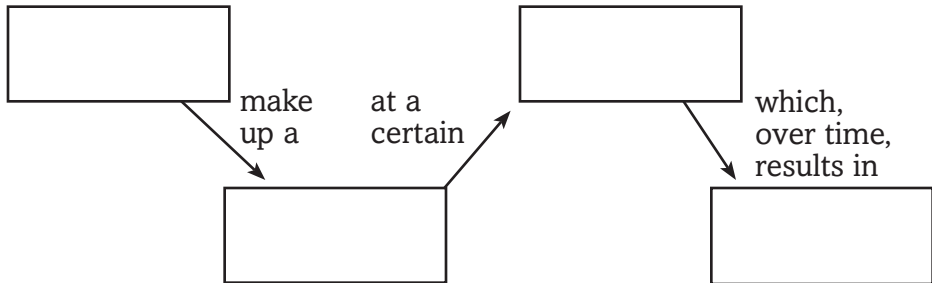
Mechanisms of Evolution

I found this information on page _____.

Reproductive Isolation

I found this information on page _____.

Sequence *the steps associated with genetic equilibrium by completing the graphic organizer below.*



Identify *three ways that genetic equilibrium can be disrupted.*

1. _____
2. _____
3. _____

Contrast *geographic isolation and reproductive isolation.*

Compare *natural selection and sexual selection by completing the table.*

	Species Changes Based on	Increases Fitness?
Natural selection		
Sexual selection		

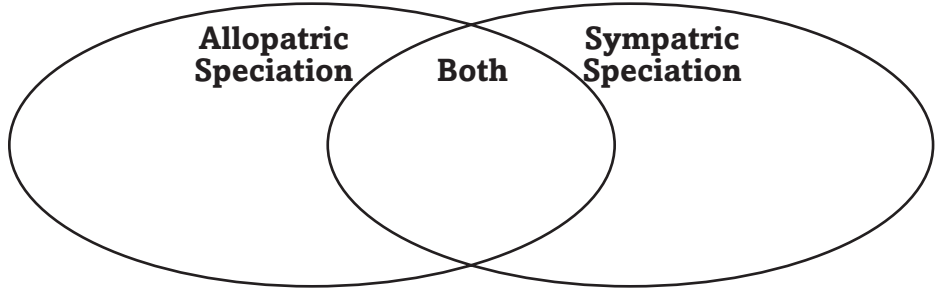
Section 3 Shaping Evolutionary Theory (continued)

Main Idea _____ **Details** _____

Speciation

I found this information on page _____.

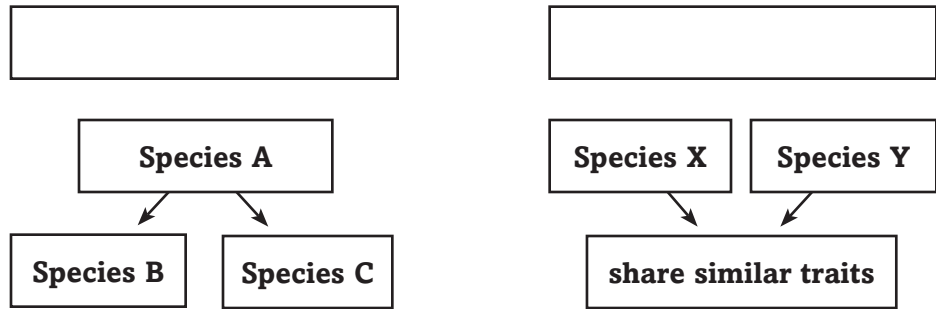
Compare *allopatric speciation and sympatric speciation by writing one fact in each segment of the Venn diagram below.*



Speciation and Patterns of Evolution

I found this information on page _____.

Label *each model as representing divergent evolution or convergent evolution.*



Summarize *the current thoughts about the rate of speciation by completing the table below.*

Gradualism	Punctuated Equilibrium

SUMMARIZE

List three possible patterns of evolution and an example of each.
