

Book Notes: Evolution

Name _____

Per. _____

Date _____

pg# _____

CP Zebra Book

Section 15.1 Darwin's Theory of Natural Selection (continued)

Main Idea

I found this information on page _____

SE, pp. 418-421

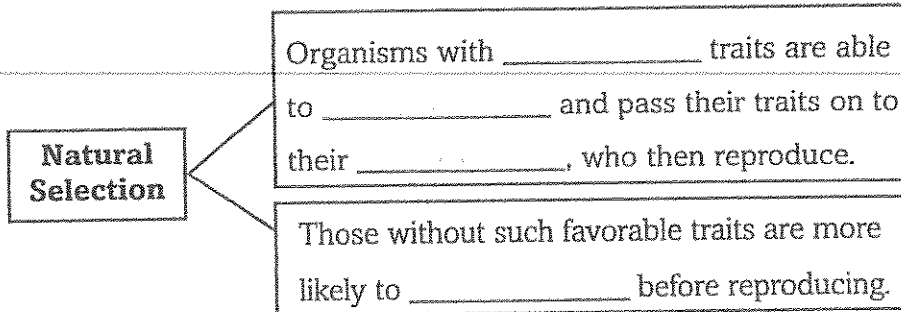
RE, pp. 169-171

Details

Identify the four principles of natural selection.

1. _____
2. _____
3. _____
4. _____

Summarize natural selection by completing the sentences below.



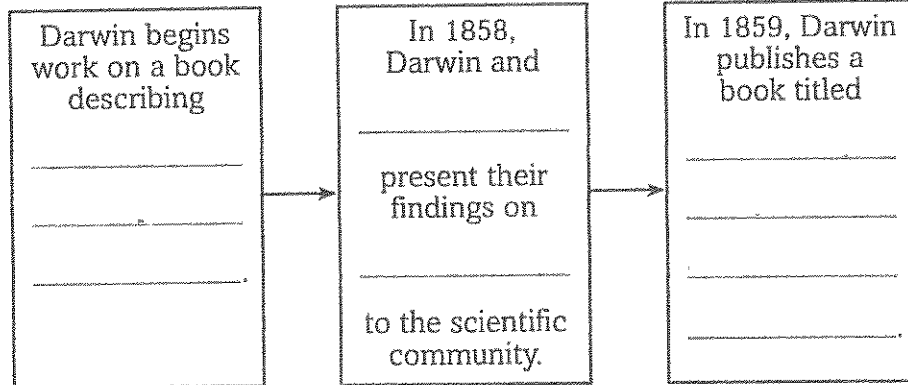
The Origin of Species

I found this information on page _____

SE, p. 422

RE, p. 171

Sequence the events that led to the publication of Darwin's ideas.



SUMMARIZE

Discuss Darwin's different observations that led him to propose the theory of natural selection.

Evolution

Section 15.3 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 15.3 Shaping Evolutionary Theory (continued)

Main Idea

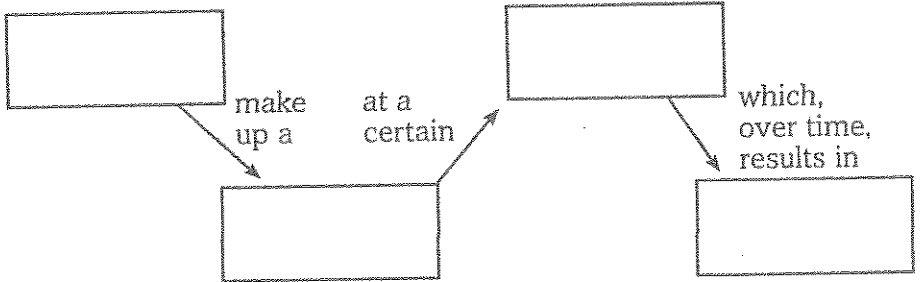
Mechanisms of Evolution

I found this information on page _____

SE, pp. 431–436
 RE, pp. 176–180

Details

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. _____

Reproductive Isolation

I found this information on page _____

SE, p. 437
 RE, pp. 180–181

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 15.3 Shaping Evolutionary Theory (continued)

Main Idea

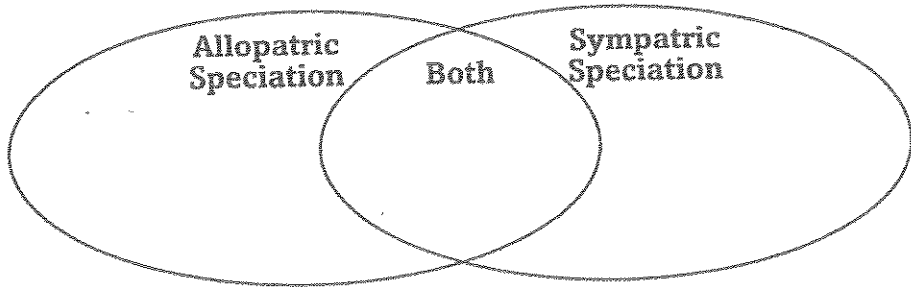
Speciation

I found this information on page _____

SE, p. 438
RE, p. 158

Details

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

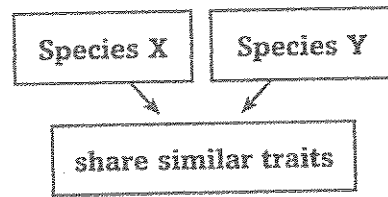
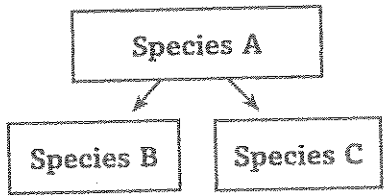


Speciation and Patterns of Evolution

I found this information on page _____

SE, pp. 439-441
RE, pp. 181-182

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.
