



SECTION
11.5

SPECIATION THROUGH ISOLATION
Study Guide

KEY CONCEPT

New species can arise when populations are isolated.

VOCABULARY

reproductive isolation	geographic isolation
speciation	temporal isolation
behavioral isolation	

MAIN IDEA: The isolation of populations can lead to speciation.

Fill in the term from the box that best completes each statement.

speciation	gene flow	species	gene pools
environments	mutation	mate	genetic drift

- Two populations are said to be isolated if there is no longer any _____ between them.
- Over generations, the _____ of isolated populations may become more and more different.
- Isolated populations may become genetically different as they adapt to new _____, or through random processes such as mutation and _____.
- When members of two isolated populations can no longer _____ successfully, the populations are said to be reproductively isolated.
- Reproductive isolation is the final step of _____, which is the rise of new _____.
- The experiment illustrated in Figure 11.12 shows how just one _____ can provide enough genetic difference to result in reproductive isolation.

Section 11.5 STUDY GUIDE CONTINUED

MAIN IDEA: Populations can become isolated in several ways.

7. Name the three types of barriers that can isolate populations.

8. In the chart below, take notes about the three ways in which populations can become isolated, leading to reproductive isolation.

Type of Isolation	How It Works	Example
behavioral isolation		
geographic isolation		
temporal isolation		

Vocabulary Check

9. What is speciation?

10. Which type of isolation involves factors of time?

11. Which type of isolation can involve mating or courtship rituals?

12. Which type of isolation can involve physical barriers?
