



FIGURE 18

Parasitism

Ticks feed on the blood of certain animals. **Predicting** How will the tick affect its host?

Parasitism **Parasitism** (PA ruh sit iz um) involves one organism living on or inside another organism and harming it. The organism that benefits is called a **parasite**, and the organism it lives on or in is called a **host**. The parasite is usually smaller than the host. In a parasitic relationship, the parasite benefits from the interaction while the host is harmed.

Some common parasites are fleas, ticks, and leeches. These parasites have adaptations that enable them to attach to their host and feed on its blood. Other parasites live inside the host's body, such as tapeworms that live inside the digestive systems of dogs, wolves, and some other mammals.

Unlike a predator, a parasite does not usually kill the organism it feeds on. If the host dies, the parasite loses its source of food. An interesting example of this rule is shown by a species of mite that lives in the ears of moths. The mites almost always live in just one of the moth's ears. If they live in both ears, the moth's hearing is so badly affected that it is likely to be quickly caught and eaten by its predator, a bat.



Reading
Checkpoint

Why doesn't a parasite usually kill its host?

Section 4 Assessment

S 6.5.c; E-LA: Reading 6.1.0

Vocabulary Skill Use Related Words Complete the sentence by using the correct form of *prey* or *predation*. _____ affects the population size of owls, mice, rabbits, and other animals.

Reviewing Key Concepts

1. a. **Defining** What are adaptations?
- b. **Explaining** How are a snake's sharp fangs an adaptation that helps it survive in the saguaro community?
- c. **Developing Hypotheses** Explain how natural selection in snakes might have led to adaptations such as sharp fangs.
2. a. **Reviewing** What are three main ways in which organisms interact?
- b. **Classifying** Give one example of each type of interaction.
3. a. **Listing** List the three types of symbiotic relationships.
- b. **Comparing and Contrasting** For each type of symbiotic relationship, explain how the two organisms are affected.

- c. **Applying Concepts** Some of your classroom plants are dying. Others that you planted at the same time and cared for in the same way are growing well. When you look closely at the dying plants, you see tiny mites on them. Which symbiotic relationship is likely occurring between the plants and mites? Explain.

Lab
zone

At-Home Activity

Feeding Frenzy You and your family can observe interactions among organisms at a bird feeder. Fill a clean, dry, 2-liter bottle with birdseed. With paper clips, attach a plastic plate to the neck of the bottle. Then hang your feeder outside where you can see it easily. Observe the feeder at different times of the day, using binoculars if available. Keep a log of all the organisms you see near it and of how they interact.

