

# Chapter 7

## Animal Behavior

### Section 1 Types of Behavior

A. Behavior—the way an organism \_\_\_\_\_ with other organisms and its environment

1. Animals are \_\_\_\_\_ with certain behaviors, and they learn others.
2. Stimulus—anything in the environment that causes a(n) \_\_\_\_\_

B. Innate behavior—a behavior that an organism is born with

1. Reflex—\_\_\_\_\_ response that does not involve a message from the brain
2. Instinct—\_\_\_\_\_ pattern of innate behavior (For example, spiders know how to spin a web on the first try.)
3. Reflexes happen in a(n) \_\_\_\_\_, while instinctive behaviors might take weeks to complete.

C. Learned behavior develops during an animal's lifetime as a result of \_\_\_\_\_ or practice.

1. In changing \_\_\_\_\_, animals that have the ability to learn a new behavior are more likely to survive.
2. Learning can \_\_\_\_\_ instincts.
3. Imprinting—when an animal forms a(n) \_\_\_\_\_ attachment to another organism after birth or hatching
4. Trial and error learning—behavior modified by \_\_\_\_\_
5. In \_\_\_\_\_, behavior is modified so that a response to one stimulus becomes associated with a different stimulus.
6. Insight—allows animals to use past \_\_\_\_\_ to solve new problems

### Section 2

#### Behavioral Interactions

A. Social behavior—interactions among organisms of the same \_\_\_\_\_

1. Examples: courtship and mating, caring for the young, claiming territories, \_\_\_\_\_ each other, and getting food
2. A society is a group of animals of the same species living and working together in a(n) \_\_\_\_\_ way.

B. Territorial behavior

1. A territory is an area that an animal \_\_\_\_\_ from other members of the same species.
2. Territories contain food, \_\_\_\_\_, and potential mates.
3. Defending territory from members of the same species is a(n) \_\_\_\_\_ behavior.
  - a. Aggression is a forceful behavior used to \_\_\_\_\_ or control another animal.
  - b. Submission—animals might show submissive behavior to avoid \_\_\_\_\_, to avoid being injured, or to show that another animal is dominant.

C. \_\_\_\_\_ is an action by a sender that influences the behavior of a receiver.

1. One type of communication, courtship behavior, is performed before \_\_\_\_\_.
2. Chemical communication uses \_\_\_\_\_, which are chemicals produced by one animal that influence the behavior of another animal of the same species.
3. Sound communication is used by \_\_\_\_\_ and many insects.
4. Light Communication
  - a. Certain kinds of flies, \_\_\_\_\_ organisms, and beetles have a special form of communication called bioluminescence.
  - b. Bioluminescence may be used to lure prey, escape predators, or serve as marks of \_\_\_\_\_.

D. Cyclic behavior is an innate behavior that occurs in a repeating \_\_\_\_\_, often in response to changes in the environment.

1. Circadian rhythm—behavior based on a(n) \_\_\_\_\_ cycle
  - a. Animals that are active during the day are \_\_\_\_\_.
  - b. Animals that are active at night are \_\_\_\_\_.
2. Hibernation is a cyclic response to \_\_\_\_\_ temperatures and limited food supplies.
  - a. An animal in hibernation remains inactive until the weather becomes \_\_\_\_\_ in the spring.
  - b. Body response—body temperature and breathing rate \_\_\_\_\_
  - c. Some mammals and many amphibians and \_\_\_\_\_ hibernate.
3. Estivation
  - a. State of \_\_\_\_\_ activity similar to hibernation
  - b. \_\_\_\_\_ animals sometimes estivate due to lack of food or periods of drought.
4. Migration is the instinctive \_\_\_\_\_ movement of animals.
  - a. Many birds and \_\_\_\_\_ move to new locations when the seasons change.

b. Most animals that migrate do so in order to find food or to \_\_\_\_\_ in an environment that is more favorable for the survival of its offspring.