

**Study Guide****CHAPTER 31****Section 1: Basic Behaviors**

**In your textbook, read about behavior.**

*Respond to each statement.*

- 1. Describe** what is meant by behavior. **Cite** an example.

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- 2. Specify** the two factors that both influence behavior.

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- 3. Name** the process by which behavior evolves, resulting in advantages for a species.

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**In your textbook, read about innate behavior and learned behavior.**

*Complete the table by checking the correct column(s) for each behavior.*

| Behavior   | Innate | Learned |
|--|--------|---------|
| 4. A dog catches a ball in the park.                               |        |         |
| 5. A chimpanzee uses a rock to break open nuts.                    |        |         |
| 6. A goose rolls her egg back to the nest.                         |        |         |
| 7. A blue jay avoids eating a butterfly that looks like a monarch. |        |         |
| 8. A parent bird feeds its chirping chick.                         |        |         |
| 9. A dog salivates at the sound of a bell without food present.    |        |         |
| 10. Birds no longer fly away from a scarecrow in a cornfield.      |        |         |
| 11. A rat presses a lever to get a food pellet.                    |        |         |
| 12. Members of a species of mammals begin to walk at the same age. |        |         |

## Study Guide, Section 1: Basic Behaviors continued

Match the definition in Column A with the term in Column B.

### Column A

- \_\_\_\_\_ 13. behaviors that are genetically based and not linked to past experiences
- \_\_\_\_\_ 14. a regular set of actions usually carried out in order in response to a stimulus
- \_\_\_\_\_ 15. behavior that results from an interaction between innate behavior and past experiences within a particular environment
- \_\_\_\_\_ 16. a decrease in an animal's response to a stimulus that has no positive or negative effects
- \_\_\_\_\_ 17. a type of learned behavior that was shown by Pavlov's experiment with a dog, meat powder, and a ringing bell
- \_\_\_\_\_ 18. a type of behavior in which an animal learns to associate its response to a stimulus with reward or punishment
- \_\_\_\_\_ 19. learning that only occurs within a set time period in an animal's life and is permanent
- \_\_\_\_\_ 20. thinking, reasoning, and processing information to understand complex concepts and solve problems

### Column B

- A. classical conditioning
- B. imprinting
- C. innate behavior
- D. learned behavior
- E. cognitive behavior
- F. fixed action pattern
- G. operant conditioning
- H. habituation

Complete the table by checking the correct column(s) for each behavior.

| Behavior  | Imprinting | Habituation |
|---|------------|-------------|
| 21. A new clock with chimes keeps you awake for two nights. After that, you do not notice the chimes and sleep all night.       |            |             |
| 22. You put a large stone owl in your garden to keep birds away. After two days, the birds come back to your garden.            |            |             |
| 23. Zookeepers use a mother owl puppet to raise baby owls. When released to the wild, the owls relate to their own species.     |            |             |
| 24. Three newly hatched ducklings first see a boy next to their nest. The ducklings ignore other ducks and only follow the boy. |            |             |

# Study Guide

## CHAPTER 31

### Section 2: Ecological Behaviors

**In your textbook, read about types of behaviors.**

*For each answer below, write an appropriate question.*

- 1. Answer:** It is a ranking system in which the top animal gets resources without fighting other animals in the group.

**Question:** \_\_\_\_\_

- 2. Answer:** An animal finds and eats food.

**Question:** \_\_\_\_\_

- 3. Answer:** Birds and grazing mammals move long distances every season to new areas.

**Question:** \_\_\_\_\_

*Complete the table by checking the correct column(s) for each behavior.*

| Behavior   | Competitive | Communication | Courting | Cooperative | Biological Rhythm |
|--|-------------|---------------|----------|-------------|-------------------|
| 4. A polar bear threatens interaction.             |             |               |          |             |                   |
| 5. A male bird inflates his red throat sac.        |             |               |          |             |                   |
| 6. Naked mole rats lie by their queen to warm her. |             |               |          |             |                   |
| 7. A cheetah sprays trees with pheromones.         |             |               |          |             |                   |
| 8. A mammal's sleep/wake cycle is 24 h.            |             |               |          |             |                   |

**In your textbook, read about advantages and disadvantages.**

*For each statement below, write true or false.*

- \_\_\_\_\_ 9. Spending large amounts of energy nurturing offspring can be a disadvantage.
- \_\_\_\_\_ 10. An advantage of migration is that it might reduce predation on the migrating animal.
- \_\_\_\_\_ 11. Pheromones have a larger range of communication than auditory or visual signals.
- \_\_\_\_\_ 12. Nurturing increases an offspring's chance of survival.
- \_\_\_\_\_ 13. Pheromones can be used to relay messages of alarm within a species.
- \_\_\_\_\_ 14. Nurturing is an advantage because the genes of parents continue into future generations.

## Study Guide, Section 2: Ecological Behaviors continued

In your textbook, read about communication behaviors.

Use each of the terms below only once to complete the passage.

**auditory  
language**

**behavior  
odors**

**communication  
pheromones**

**innate  
vocal organs**

Through various forms of (15) \_\_\_\_\_, animals exchange information that affects their (16) \_\_\_\_\_. Animals communicate with visual signals, by touching each other, and by (17) \_\_\_\_\_ communication. They also communicate with (18) \_\_\_\_\_, using (19) \_\_\_\_\_, which are species-specific chemicals that can affect behavior. Some types of communication involve both (20) \_\_\_\_\_ and learned behavior. Human (21) \_\_\_\_\_ is a way of communicating complex information through (22) \_\_\_\_\_ to produce groups of sounds that have shared meanings.

In your textbook, read about different behaviors.

Below are excerpts from the field notebook of a behavioral biologist. Identify the behavior exhibited in each case.

23. **Field Notes**  
A male baboon stares at another male and then yawns to show sharp fangs.  
  
Behavior exhibited:  
\_\_\_\_\_

25. **Field Notes**  
At a water hole, the oldest female drinks first, then three females with calves drink, and finally a young male drinks.  
  
Behavior exhibited:  
\_\_\_\_\_

24. **Field Notes**  
A female chimpanzee nurses and protects her baby.  
  
Behavior exhibited:  
\_\_\_\_\_

26. **Field Notes**  
Large numbers of monarch butterflies fly south for the winter.  
  
Behavior exhibited:  
\_\_\_\_\_