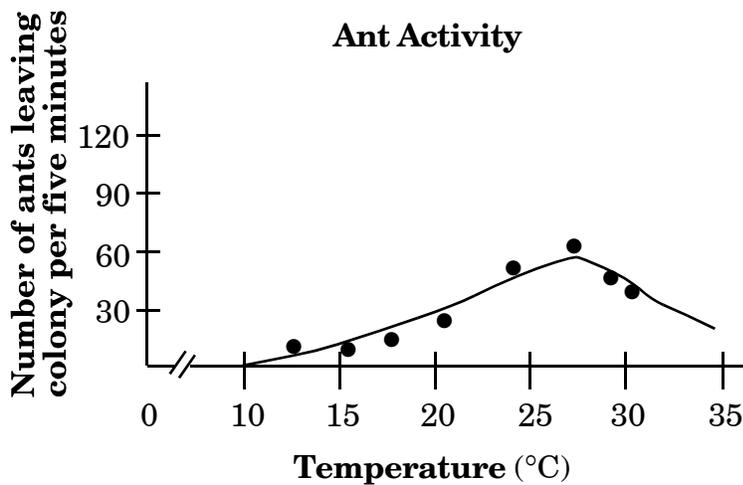


1. The snowshoe rabbit has white fur in winter and dark fur in summer. What is the **main** advantage of this fur color change to the rabbit?
- A The dark fur keeps the rabbit from getting sunburned in summer.
 - B The white fur absorbs more sunlight so the rabbit is warmer in winter.
 - C The fur color makes the animal blend better with its environment so that a predator is not as likely to see it.
 - D The white fur is more valuable to fur trappers, so the animal will be trapped and better fed in winter.
2. Some species protect themselves by spraying a foul-smelling chemical when threatened. Why would a spray defense be a useful mechanism for a species?
- A Predators would confuse the species with others that produce foul smells.
 - B Spray can turn a predator away before an individual is harmed.
 - C It is hard for other species to mimic a spraying defense.
 - D There is no known defense against foul-smelling sprays.
3. Which statement **best** describes the growth pattern of a population of organisms in nature?
- A It is limited by environmental factors.
 - B It continues to grow indefinitely.
 - C It is genetically determined.
 - D It never changes.
4. Which of the following exhibits a learned behavior?
- A Baby birds beg for food when a parent nears.
 - B A person blinks when an object nears his/her eyes.
 - C Salmon return to their birth place for mating.
 - D A chimpanzee catches termites by poking a stick in a log.
5. Which of the following is the **most important** advantage of instincts?
- A They reduce predator contacts.
 - B They improve food selection choices.
 - C They improve survival rates.
 - D They allow for smaller brains.

6. A student started laughing while eating her dessert and accidentally inhaled part of a cookie. She immediately began coughing and coughed up the cookie particle. This response is an example of which type of behavior?
- A conditioning
 - B instinct
 - C learned
 - D reflex
7. A Carolina wren is raised in an environment where it cannot hear adults of its species. Eventually, the bird sings a song that is similar to the song of Carolina wrens in the wild, but the song is not complete. What does this experiment suggest about Carolina wren behavior?
- A Wild wrens know their species' song by instinct.
 - B Wild wrens' songs are partly instinctive behavior and partly learned.
 - C Imprinting plays no role in bird song.
 - D Learned behavior is dominant over innate behavior.

8. The graph below documents observations of an ant colony.



What conclusion can be drawn from the graph?

- A Ant activity increases as temperature increases.
 - B Ant activity is greatest between 25°C and 30°C.
 - C Ant activity is greater in the evening than in the afternoon.
 - D Ant activity is probably related to light.
-

9. How is instinctive behavior acquired?

- A teaching
 - B experience
 - C reasoning
 - D inheritance
-

10. Which of the following is true of innate behavior?

- A requires practice to develop
 - B allows for adaptation and change
 - C may be influenced by reward
 - D is genetically determined
-

11. Soybeans planted early in the spring flower at the same time as soybeans planted early in the summer due to which factor?
- A age of the plant
 - B length of darkness
 - C amount of moisture
 - D amount of fertilizer
12. It has been observed that many bird species will defend a territory against certain other species. What is **most likely** true about those other species?
- A have same predators
 - B eat same foods
 - C have similar appearance
 - D use similar courtship routines
13. Which of the following is an example of a circadian rhythm?
- A estivation of frogs
 - B hibernation of squirrels
 - C migration of birds
 - D sleeping pattern of owls
14. In a population of walrus, a single male fathers most of the offspring. This is evidence that which of the following is occurring?
- A courtship behavior
 - B dominance hierarchy
 - C female aggression
 - D migration
15. Which behavioral adaptation may have evolved to enable members of the same species to recognize each other?
- A courtship behavior
 - B hibernation
 - C migration
 - D territoriality

End of Goal 5 Sample Items

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Answers to EOC Biology Sample Items

Goal 5

1. Objective 5.01

Evaluate the survival of organisms and suitable adaptive responses to environmental pressures.

Thinking Skill: Knowledge

Correct Answer: C

2. Objective 5.01

Evaluate the survival of organisms and suitable adaptive responses to environmental pressures.

Thinking Skill: Analyzing

Correct Answer: B

3. Objective 5.01

Evaluate the survival of organisms and suitable adaptive responses to environmental pressures.

Thinking Skill: Knowledge

Correct Answer: A

4. Objective 5.03

Assess, describe, and explain types of animal behaviors (taxis, reflexes, instincts, and learned behavior).

Thinking Skill: Knowledge

Correct Answer: D

5. Objective 5.03

Assess, describe, and explain types of animal behaviors (taxis, reflexes, instincts, and learned behavior).

Thinking Skill: Analyzing

Correct Answer: C

6. Objective 5.03

Assess, describe, and explain types of animal behaviors (taxis, reflexes, instincts, and learned behavior).

Thinking Skill: Analyzing

Correct Answer: D

7. Objective 5.03

Assess, describe, and explain types of animal behaviors (taxis, reflexes, instincts, and learned behavior).

Thinking Skill: Evaluating

Correct Answer: B

8. Objective 5.03

Assess, describe, and explain types of animal behaviors (taxis, reflexes, instincts, and learned behavior).

Thinking Skill: Generating

Correct Answer: B

Answers to EOC Biology Sample Items

Goal 5

9. Objective 5.03

Assess, describe, and explain types of animal behaviors (taxis, reflexes, instincts, and learned behavior).

Thinking Skill: Knowledge

Correct Answer: D

10. Objective 5.03

Assess, describe, and explain types of animal behaviors (taxis, reflexes, instincts, and learned behavior).

Thinking Skill: Knowledge

Correct Answer: D

11. Objective 5.04

Analyze the biological clocks and rhythmic behavior of organisms.

Thinking Skill: Applying

Correct Answer: B

12. Objective 5.03

Assess, describe, and explain types of animal behaviors (taxis, reflexes, instincts, and learned behavior).

Thinking Skill: Knowledge

Correct Answer: B

13. Objective 5.04

Analyze the biological clocks and rhythmic behavior of organisms.

Thinking Skill: Knowledge

Correct Answer: D

14. Objective 5.05

Evaluate and explain the evolution of behavioral adaptations and survival of populations.

Thinking Skill: Knowledge

Correct Answer: B

15. Objective 5.05

Evaluate and explain the evolution of behavioral adaptations and survival of populations.

Thinking Skill: Knowledge

Correct Answer: A