1) In this interaction, the interacting species stay close together

(a) Predation, Parasitism, Commensalism

(b) Competition and Mutualism

(c) Amensalism, Commensalism

(d) Amensalism, Predation and Parasitism

Answer: (a)

2) 2. Predation can be considered as

(a) predator's way of controlling prey's energy level

(b) nature's way of controlling predators food chain

(c) nature's way of transferring energy to higher trophic levels

(d) prey's way to control the population

Answer: (c)

3) 3. This cannot be performed by predators

(a) allowing herbivores to be filled with energy fixed by autotrophs

(b) make the ecosystem stable

(c) controls the species of prey

(d) conduit for the transfer of energy

4) Mullerian mimicry is found when:

a) a prey species has camouflage to match to its background
b) a prey species is able to change its camouflage to match its background
c) shares a coloration with other species indicating they are all distasteful and poisonous
d) shares a coloration with other species that are distasteful or poisonous

5) Which of the following organisms is most likely to be a selective herbivore?

a) Browser
b) Ruminants
c) Grazers
d) Omnivores

6) One species will outcompete a competitor for a limited resource when:

a) each is regulated principally by the inhibiting effect of their intraspecific competition
b) its intraspecific competition inhibits a population's growth more than the pressure from its competiton
c) the effect of its competition on the competitor is greater than the effect of the competitor's intraspecific competition
d) each is principally regulated by the inhibiting effect of their interspecific competition on each other

1) Optimal foraging theory suggests a predator will switch to a single prey species when:

a) the reward from one prey exceeds the total reward from several prey species
b) one prey is more abundant than the other
c) one prey can be handled faster than the other
d) the reward from one prey does not exceed the total reward from consuming several prey species

2) In the SI model of the spread of an infection, the net reproductive rate (R0) refers to:

a) the rate of population growth in the host
b) the rate of population growth of the pathogen
c) the rate of recovery from infection
d) the rate of transmission of the infection

3) Male lions defending their pride use:

a) encounter competition
b) preemptive competition
c) scramble competition
d) territorial competition

4) Compensation by a plant to herbivory includes:

a) production of secondary metabolites used as general toxins only
b) production of secondary metabolites used as anti-feedants only
c) production of secondary metabolites and changes in growth form
d) changes in growth form only

5) The production of chemicals by some plants to prevent the establishment of competitors nearby is an example of:

a) overgrowth competition
b) interference competitio
c) exploitative competition
d) territoriality

6) Which of the following describes the social structure of termite colonies?

A) Solitary
B) Pairs
C) Small groups
D) Large colonies

Answer: D) Large colonies

7) What is the term for the reproductive termites that are responsible for laying eggs in the colony?

A) Workers
B) Soldiers
C) Nymphs
D) Alates

Answer: D) Alates

1) Which caste of termites is responsible for foraging and collecting food?

A) Workers
B) Soldiers
C) Nymphs
D) Alates

Answer: A) Workers

1) How do termites communicate with each other?

A) Chemical signals
B) Visual signals
C) Auditory signals
D) All of the above

Answer: A) Chemical signals

2) What is the term for the behavior of termites that involves building and maintaining the nest?

E) Foraging
F) Reproduction
G) Construction
H) Defense

Answer: C) Construction

3) Which caste of termites defends the colony against predators?

I) Workers
J) Soldiers
K) Nymphs
L) Alates

Answer: B) Soldiers

4) What is the primary food source for termites?

M) Leaves
N) Wood
O) Seeds
P) Insects

Answer: B) Wood

5) How do termites regulate the temperature and humidity in their nest?

Q) By building ventilation systems
R) By regulating the amount of moisture in the soil
S) By using their bodies to create a temperature gradient
T) By using a central heating system

Answer: C) By using their bodies to create a temperature gradient

6) Which of the following describes the role of the queen in a termite colony?

A) She is responsible for collecting food.

B) She is responsible for defending the colony.

C) She is responsible for laying eggs.

D) She is responsible for building the nest.

Answer: C) She is responsible for laying eggs.

7) Which of the following is an example of a eusocial insect?

a) Bumblebee

b) Ladybug

c) Termite

d) Dragonfly

Answer: c) Termite

8) What is the term used to describe the reproductive female in a eusocial colony?

a) Queen
b) Drone
c) Worker
d) Soldier

Answer: a) Queen

9) Which of the following is a benefit of eusociality in insects?

a) Increased genetic diversity
b) Ability to withstand environmental fluctuations
c) Decreased predation risk
d) All of the above

Answer: b) Ability to withstand environmental fluctuations

10) Which of the following is an example of a semi-social insect?

a) Honeybee
b) Ant
c) Earwig
d) Cockroach

Answer: c) Earwig

11) Which of the following is a characteristic of eusocial insect colonies?

a) Multiple reproductive females
b) Dominance hierarchy among workers
c) High levels of aggression between colony members
d) All of the above

Answer: b) Dominance hierarchy among workers

12) Which of the following is NOT a factor that influences the development of social behavior in insects?

a) Relatedness among colony members

b) Availability of resources
c) Predation risk
d) Sexual selection

Answer: d) Sexual selection

13) What is the term used to describe the behavior where a worker insect lays unfertilized eggs?

a) Altruism
b) Kin selection
c) Worker policing
d) Reproductive parasitism

Answer: d) Reproductive parasitism

14) What is the term used to describe the social organization where females are the dominant sex and control the resources?

a) Matriarchy
b) Patriarchy
c) Communalism
d) Anarchism

Answer: a) Matriarchy

15) Intersexual selection is:

a) The process by which males and females compete for mating opportunities
b) The process by which females select the best males for mating
c) The process by which males select the best females for mating
d) None of the above

16) Sexual conflict can result in:

a) Coevolution of male and female traits
b) The evolution of male traits that harm females
c) The evolution of female traits that harm males
d) All of the above

17) Harassment of females by males is an example of:

a) Intrasexual selection
b) Intersexual selection
c) Sexual conflict
d) None of the above

18) Infanticide by males is an example of:

a) Intrasexual selection
b) Intersexual selection
c) Sexual conflict
d) None of the above

19) Cryptic female choice refers to:

a) Female choice that is not easily observable by males
b) Female choice based on the size of male body parts
c) Female choice based on male coloration
d) None of the above

20) Sperm competition occurs when:

a) Multiple males mate with the same female
b) Multiple females mate with the same male
c) Males compete for access to females
d) None of the above

21) The sexual conflict hypothesis suggests that:

a) Males and females have different reproductive interests
b) Males and females have the same reproductive interests
c) Sexual selection is not influenced by conflict between the sexes
d) None of the above

22) What is the primary function of venom in snakes?

a) To aid in digestion of prey
b) To deter predators
c) To incapacitate prey
d) To help with thermoregulation

23) Which of the following is a common symptom of envenomation by a snake?

a) Swelling and redness around the bite site
b) Numbness or tingling in the affected limb
c) Difficulty breathing
d) All of the above

Which of the following snake species is known to have the most potent venom?

a) Black mamba
b) Inland taipan
c) King cobra
d) Rattlesnake

24) What is the name for the type of venom that affects blood clotting and tissue damage?

a) Neurotoxic venom
b) Hemotoxic venom
c) Cytotoxic venom
d) None of the above

25) Which of the following snake species has venom that primarily affects the nervous system?

a) Rattlesnake
b) Black mamba
c) King cobra
d) Sea snake

26) What is the name of the specific enzyme found in some snake venoms that can cause tissue damage?

a) Hemolysin
b) Neurotoxin
c) Myotoxin
d) Hyaluronidase

27) Which of the following is a common method for treating snakebite envenomation?

a) Applying a tourniquet above the bite site
b) Cutting open the bite wound to suck out the venom
c) Applying ice to the bite site
d) Administering antivenom

28) Which of the following statements is true about venomous snakes?

a) All venomous snakes are aggressive and likely to attack humans
b) Only a small percentage of snake species are venomous
c) Venomous snakes are more likely to be found in urban areas than in rural areas
d) Venomous snakes are not capable of inflicting fatal bites on humans.

29) In which type of primate mating system do males compete for access to females?

a. Monogamy
b. Polygyny
c. Polyandry

d. Promiscuity
e. None of the above

Answer: b. Polygyny

30) Which type of primate mating system is most common among great apes?
    a. Monogamy
    b. Polygyny
    c. Polyandry
    d. Promiscuity
    e. None of the above

Answer: b. Polygyny

31) Which type of primate mating system is most common among New World monkeys?
    f. Monogamy
    g. Polygyny
    h. Polyandry
    i. Promiscuity
    j. None of the above

Answer: d. Promiscuity

32) Which type of primate mating system is most common among Old World monkeys?
    k. Monogamy
    l. Polygyny
    m. Polyandry
    n. Promiscuity
    o. None of the above

Answer: b. Polygyny

33) Which type of primate mating system is most common among humans?
    p. Monogamy
    q. Polygyny
    r. Polyandry
    s. Promiscuity
    t. None of the above

Answer: a. Monogamy (although other mating systems also occur in some human societies)

34) Which of the following is an example of animal behavior leading to an increase in population size?
    u. Migration patterns leading to an increase in genetic diversity

v. Aggressive behavior towards members of other species
w. Mating behavior leading to successful reproduction
x. All of the above

Answer: c. Mating behavior leading to successful reproduction

35) How can animal behavior impact the age structure of a population?
y. Through competition for resources that limits the survival of younger individuals
z. Through parental care behavior that increases the survival of young offspring
aa. Through aggressive behavior that leads to the death of older individuals
bb. None of the above

Answer: b. Through parental care behavior that increases the survival of young offspring

36) Which of the following is an example of animal behavior impacting population density?
cc. Territorial behavior leading to a concentration of individuals in certain areas
dd. Aggressive behavior towards members of other species
ee. Migratory behavior that leads to mixing of different populations
ff. None of the above

Answer: a. Territorial behavior leading to a concentration of individuals in certain areas

37) How can animal behavior impact the sex ratio of a population?
gg. Through mate selection behaviors that favor certain sexes
hh. Through parental care behaviors that increase the survival of offspring of a certain sex
ii. Through aggressive behaviors that lead to the death of individuals of a certain sex
jj. All of the above

Answer: d. All of the above

38) Which of the following is an example of animal behavior impacting the genetic diversity of a population?
a. Migration patterns that lead to mixing of different populations
b. Territorial behavior leading to the concentration of individuals in certain areas
c. Parental care behavior that increases the survival of offspring
d. None of the above

Answer: a. Migration patterns that lead to mixing of different populations

39) How can animal behavior impact the dispersal of individuals in a population?
a. Through mating behaviors that lead to the migration of individuals to different areas

b. Through aggressive behaviors that lead to the expulsion of individuals from a certain area
c. Through social learning behaviors that encourage individuals to move to new areas
d. All of the above

Answer: b. Through aggressive behaviors that lead to the

40) Which of the following is a benefit of territorial behavior?
a) Increased competition for resources
b) Increased predation risk
c) Increased mating opportunities
d) Increased likelihood of disease transmission

Answer: c) Increased mating opportunities

41) Which of the following is not a factor that influences the size of a territorial area?
a) Availability of resources
b) Number of competitors
c) Genetic makeup
d) Physical ability to defend the area

Answer: c) Genetic makeup

42) Which of the following is a type of territorial behavior?
a) Hibernation
b) Migration
c) Courtship display
d) Predation

Answer: c) Courtship display

43) Which of the following is an example of scent marking, a common behavior associated with territoriality?
a) A bird singing a complex song
b) A lioness roaring to establish her presence
c) A dog urinating on a tree
d) A dolphin emitting a series of clicks and whistles

Answer: c) A dog urinating on a tree

Which of the following is not a function of territorial behavior?

a) Defense of resources
b) Establishment of social hierarchies

c) Facilitation of predator evasion
d) Promotion of gene flow

Answer: c) Facilitation of predator evasion

44) Which of the following factors can lead to escalated territorial aggression?
a) Limited resource availability
b) Increased genetic diversity
c) Lowered hormone levels
d) Lack of prior territorial experience

Answer: a) Limited resource availability

45) Which of the following is an example of parental care behavior in bird chicks?
a) Huddling together for warmth
b) Vocalizing to attract predators
c) Competing with each other for food
d) Flying long distances to forage for food

Answer: a) Huddling together for warmth

46) What is brood parasitism in birds?
a) A form of parental care where both parents incubate the eggs
b) A behavior where a bird lays its eggs in another bird's nest
c) A technique where birds camouflage their nests to avoid predation
d) A method of communication between parent and offspring birds

Answer: b) A behavior where a bird lays its eggs in another bird's nest

47) Which of the following is an example of parental care in some bird species where the male provides most of the care?
a) Incubating the eggs
b) Building the nest
c) Feeding and protecting the chicks
d) None of the above
48) Answer: c) Feeding and protecting the chicks

What is fledging in birds?

a) The act of building a nest
b) The process of egg laying
c) The development of flight feathers and the ability to fly
d) The time period when chicks are most vulnerable to predators

Answer: c) The development of flight feathers and the ability to fly

49) Which of the following is an example of parental care behavior in birds that can continue after chicks have fledged?

a) Nest building
b) Incubation
c) Feeding
d) None of the above

Answer: c) Feeding

50) What is migration in fishes?

a. Seasonal movement of fishes from one habitat to another
b. Random movement of fishes in a given habitat
c. Movement of fishes for hunting purposes
d. Movement of fishes in search of breeding partners

51) What is the most common reason for migration in fishes?

a) To find better feeding grounds
b) To escape from predators
c) To find suitable breeding grounds
d) To avoid adverse environmental conditions

52) What cues do fishes use to navigate during migration?

a) Magnetic fields, celestial cues, and visual landmarks
b) Sound waves, olfactory cues, and visual landmarks
c) Electric fields, sound waves, and celestial cues
d) Magnetic fields, olfactory cues, and visual landmarks

53) What is the name for the phenomenon where juvenile fishes imprint on the magnetic field of their natal stream?

a) Olfactory imprinting
b) Magnetic imprinting
c) Visual imprinting
d) Acoustic imprinting

54) Which of the following is not a potential threat to migratory fishes?

a) Overfishing
b) Dams and other barriers
c) Climate change
d) Increased nutrient levels in the water

55) What is the name for the phenomenon where fish change their behavior in response to the behavior of other individuals in their group?

a) Shoaling
b) Schooling
c) Herding
d) Swarming

56) Which of the following is an example of a fish that exhibits schooling behavior during migration?
    a) Salmon
    b) Eel
    c) Tuna
    d) Catfish
57) Which of the following is an example of classical conditioning in mammals?
    a) A rat learns to press a lever to receive food.
    b) A dog learns to avoid eating spoiled food after getting sick from it.
    c) A monkey learns to associate a specific sound with receiving a treat.
    d) A cat learns to jump up to catch a toy.

Answer: b) A dog learns to avoid eating spoiled food after getting sick from it.

58) What type of learning involves acquiring new behaviors through observation and imitation of others?
a) Classical conditioning
b) Operant conditioning
c) Insight learning
d) Social learning

Answer: d) Social learning

59) What is the process by which a learned behavior becomes less frequent or disappears altogether in the absence of reinforcement?
a) Extinction
b) Habituation
c) Sensitization

d) Discrimination

Answer: a) Extinction

60) What type of learning involves trial-and-error learning, where an animal learns to associate a behavior with a consequence?
a) Classical conditioning
b) Operant conditioning
c) Insight learning
d) Social learning

Answer: b) Operant conditioning

61) What is the term for the type of learning that involves the ability to understand cause-and-effect relationships?

a) Insight learning
b) Classical conditioning
c) Operant conditioning
d) Spatial learning

Answer: a) Insight learning

62) Which of the following is an example of habituation in mammals?
a) A mouse learning to navigate a maze to reach food.
b) A cat learning to jump on a counter to get a treat.
c) A dog learning to sit when given a command.
d) A deer learning to ignore loud noises made by humans.

Answer: d) A deer learning to ignore loud noises made by humans.

63) What type of learning involves learning to associate a previously neutral stimulus with a specific behavior or outcome?
a) Classical conditioning
b) Operant conditioning
c) Insight learning
d) Social learning

Answer: a) Classical conditioning

64) Which of the following is an example of spatial learning in mammals?
a) A rat learning to press a lever to receive food.
b) A dog learning to associate a specific sound with receiving a treat.
c) A monkey learning to navigate a complex maze to reach a reward.
d) A cat learning to jump up to catch a toy.

Answer: c) A monkey learning to navigate a complex maze to reach a reward.

65) What type of learning involves a sudden realization or understanding of a problem that leads to a solution?
a) Classical conditioning
b) Operant conditioning
c) Insight learning
d) Social learning

Answer: c) Insight learning

66) Male kangaroos engage in physical fights during mating season, using their _____ to throw off their opponents.
a) Antlers

b) Claws
c) Tail

d) Hind legs

Answer: d) Hind legs

67) Which of the following is a characteristic of female kangaroo behavior during times of drought or food scarcity?
a) Abandoning their young
b) Moving to new territories
c) Delaying the development of their embryos
d) Hiding in burrows

Answer: c) Delaying the development of their embryos

68) Kangaroos communicate with each other through:
a) Vocalizations
b) Visual displays
c) Chemical signals
d) All of the above

Answer: d) All of the above

69) Kangaroos have been observed exhibiting a behavior known as "boxing," which involves:
a) Fighting with their front legs
b) Fighting with their hind legs
c) Wrestling
d) None of the above

Answer: a) Fighting with their front legs

70) Which of the following is NOT a factor that can increase intraspecific competition?
- High population density
- Limited resources
- Low genetic diversity
- A decrease in predator population

Answer: D) A decrease in predator population

71) Which of the following is an example of scramble competition?
A) Two male deer locking antlers to fight for a mate
B) Two male lions fighting over a female lion
C) A group of birds rushing to feed on a newly discovered food source
D) A group of ants attacking and killing another ant colony

Answer:C) A group of birds rushing to feed on a newly discovered food source

72) Which of the following is an example of contest competition?
    E) Two squirrels fighting over a nut
    F) Two squirrels both collecting nuts in the same area
    G) A group of birds rushing to feed on a newly discovered food source
    H) A group of ants attacking and killing another ant colony

Answer: A) Two squirrels fighting over a nut

73) Which of the following is an example of a behavioral adaptation that can reduce intraspecific competition?
    I) Mating with individuals outside of their own group
    J) Developing stronger muscles to fight off competitors
    K) Nesting in different areas to avoid overcrowding
    L) Growing larger teeth to defend resources

Answer: C) Nesting in different areas to avoid overcrowding

74) Intraspecific competition can result in all of the following EXCEPT:
    M) Decreased population size
    N) Increased genetic diversity
    O) Changes in behavior
    P) Changes in morphology

Answer: B) Increased genetic diversity

75) How do honey bees recognize members of their own colony?
    Q) By their size and shape
    R) By their coloration and markings
    S) By their scent
    T) By their behavior

Answer: C

76) What is the function of the queen bee in a honey bee colony?
    U) To collect nectar and pollen
    V) To defend the colony from predators
    W) To lay eggs
    X) To care for the developing brood

Answer: C

77) Which bee is responsible for reproducing in a honey bee colony?
    a) Drones

b) Queen bees
c) Worker bees
d) All of the above

Answer: B

78) Which type of bee has a barbed stinger and can only sting once before dying?
a) Drones
b) Queen bees
c) Worker bees
d) None of the above

Answer: C

79) How do honey bees regulate the temperature inside their hive?
A) By fanning their wings to cool the hive
B) By clustering together to generate heat
C) By adjusting the size of the hive entrance
D) By burrowing deeper into the ground

Answer: B

80) How do bees communicate the location of food sources to other members of the hive?
a) Through vocalizations
b) Through visual displays
c) Through pheromones
d) Through a complex dance

81) Which of the following is NOT a factor that influences the division of labor among worker bees?
a) Age
b) Size
c) Genetics
d) Environmental conditions

Set 2

1) What is the term for the behavior in which worker bees surround the queen to regulate the temperature and humidity of the hive?
a) Pollination
b) Swarming
c) Brood care
d) Clustering
2) Which of the following is a function of the wax that bees produce?

a) To provide insulation for the hive
b) To build the honeycomb structure
c) To attract pollinators
d) All of the above
3) What is the process by which bees convert nectar into honey?
a) Regurgitation
b) Fermentation
c) Dehydration
d) None of the above
4) Which of the following is NOT a threat to the social behavior of bees?
a) Habitat destruction
b) Pesticides
c) Climate change
d) Antibiotic resistance
5) Which of the following is NOT a form of parental care?
a) Providing food and shelter
b) Protecting offspring from predators
c) Teaching offspring survival skills
d) Competing with offspring for resources
6) What is the primary benefit of parental care to offspring?
a) Increased survival and growth rate
b) Increased competition with other offspring
c) Increased independence from parents
d) Increased social status within the group
7) Which of the following factors influences the extent of parental care provided by a species?
a) The size and number of offspring
b) The degree of competition for resources
c) The presence of predators
d) All of the above
8) What is the cost of parental care to parents?
a) Reduced reproductive success
b) Increased predation risk
c) Increased competition for resources
d) All of the above
9) How do cuttlefish use camouflage to evade predators?
a) They change color to match their surroundings
b) They emit a cloud of ink to confuse the predator
c) They create a distraction to lure the predator away
d) They release a foul odor to deter the predator

10) What is the primary advantage of a cuttlefish's ability to change color and texture?
a) To attract mates
b) To blend in with the surroundings
c) To intimidate predators
d) To communicate with other cuttlefish
11) How do some species of cuttlefish use mimicry to avoid being eaten?
a) They mimic the appearance of a poisonous animal
b) They mimic the sound of a dangerous animal
c) They mimic the behavior of a territorial animal
d) They mimic the scent of a predator's prey
12) What is the primary purpose of nest building in mammals?
a) To provide shelter from predators
b) To attract mates
c) To store food
d) To mark territory
13) Which mammal is known for constructing large, complex underground burrow systems?
a) Prairie dog
b) Kangaroo
c) Koala
d) Armadillo
14) Which of the following is NOT a factor that influences nest building behavior in mammals?
a) Habitat type
b) Temperature
c) Mating season
d) Availability of building materials
15) Which of the following mammals builds the largest nests relative to its body size?
a) Hamsters
b) Otters
c) Chimpanzees
d) Beavers
16) Which of the following is a type of nest built by some marsupials?
a) Leaf nest
b) Log nest
c) Ice nest
d) Cactus nest
17) Mate guarding is a behavior observed in which of the following animals?
a) Lions
b) Penguins
c) Gorillas

d) All of the above

18) Mate guarding is most commonly observed in animals that:

a) Live in large groups
b) Are monogamous
c) Are polygamous

19) Are solitary

20) Which of the following is NOT a reason why male lions engage in mate guarding?

a) To prevent females from mating with other males
b) To reduce the risk of infanticide
c) To ensure their offspring receive enough resources
d) To impress potential mates

21) Mate guarding in lions typically involves:

a) Following females at a distance
b) Physically blocking access to females
c) Fighting with rival males
d) All of the above

Mate guarding in gorillas is typically observed in:

a) Monogamous pairs
b) Polygamous groups
c) Solitary individuals
d) Small family groups

22) Which of the following is a disadvantage of mate guarding for male lions?

a) Increased risk of injury from fighting with other males
b) Reduced ability to hunt for food
c) Reduced time spent with offspring
d) All of the above

23) In penguins, mate guarding behavior is typically observed:

a) During the breeding season
b) Year-round
c) Only during the incubation period
d) Only after the chicks have hatched

24) Mate guarding in lions has been observed to increase in response to:

a) Changes in temperature
b) Changes in prey availability
c) The presence of rival males
d) The presence of human observers

25) Which of the following is a benefit of mate guarding for male gorillas?

a) Increased likelihood of fathering offspring
b) Reduced risk of injury from fighting with other males
c) Increased access to food resources
d) Increased survival of offspring

26) Which of the following is NOT a factor that influences the frequency and intensity of mate guarding behavior in animals?
a) Mating system
b) Group size
c) Habitat type
d) Temperature and climate

27) Marking territory is a behavior observed in which of the following animals?
a) Lions
b) Wolves
c) Cats
d) All of the above

28) Which of the following is NOT a method used by mammals to mark their territory?
a) Scent marking
b) Vocalization
c) Physical aggression
d) Building structures

29) Which of the following is a disadvantage of territory marking for mammals?
a) Increased risk of injury from fighting with other individuals
b) Reduced access to resources
c) Reduced likelihood of mating success
d) All of the above

30) Which of the following is a method used by male meerkats to mark their territory?
a) Rubbing glands on trees
b) Spraying urine
c) Making visual displays with their tails
d) Singing loudly

Weaver birds typically build their nests using which of the following materials?

a) Grasses and twigs
b) Mud and clay
c) Leaves and bark
d) Feathers and fur

Which of the following is NOT a reason why weaver birds are known for their nest-building behavior?

a) Their nests are often highly complex and ornate

b) They build communal nests with multiple chambers
c) They build nests in a variety of shapes and sizes
d) They build nests using only their beaks and feet

Weaver birds are most likely to build their nests in which of the following types of habitat?

a) Grasslands and savannas
b) Forests and woodlands
c) Wetlands and marshes
d) Urban areas and gardens

The male weaver bird is primarily responsible for which of the following tasks during nest building?

a) Collecting materials
b) Constructing the nest
c) Incubating the eggs
d) Feeding the young

Which of the following is a benefit of building a communal nest for weaver birds?

a) Increased protection from predators
b) Increased access to resources
c) Increased likelihood of mating success
d) All of the above

Weaver birds are known for their ability to weave intricate knots and loops in their nests using which of the following techniques?

a) Bill-weaving
b) Foot-weaving
c) Tail-weaving
d) Wing-weaving

Which of the following is NOT a factor that influences the construction and location of weaver bird nests?

a) Availability of nesting materials
b) Predation risk
c) Competition with other bird species
d) Weather patterns

Which of the following is a disadvantage of building a large, conspicuous nest for weaver birds?

a) Increased risk of predation
b) Increased energy expenditure
c) Reduced access to resources
d) All of the above

What is the "fight or flight" response?

a) A response to a perceived threat that involves either fighting or fleeing
b) A response to a perceived threat that involves freezing in place
c) A response to a perceived threat that involves playing dead
d) None of the above

Stress can have negative effects on which of the following cognitive functions?

a) Memory
b) Attention
c) Decision-making
d) All of the above

Which of the following is NOT a common method of managing stress in mammals?

a) Exercise
b) Social support
c) Medication
d) Ignoring the source of stress

Which of the following is a type of stress that results from exposure to chronic or repeated stressors?

a) Acute stress
b) Traumatic stress
c) Chronic stress
d) None of the above

Which of the following is a hormone that is often referred to as the "feel-good" hormone and can help to reduce stress?

a) Cortisol
b) Dopamine
c) Serotonin
d) Adrenaline

What is a common reproductive strategy among turtles?

a) Internal fertilization

b) External fertilization
c) Self-fertilization
d) None of the above

Which of the following is a characteristic of turtles that makes their reproduction unique?

a) They lay eggs on land
b) They give birth to live young
c) They mate for life
d) They reproduce asexually

How long does it typically take for turtle eggs to hatch?

a) 1-2 weeks
b) 1-2 months
c) 3-6 months
d) 6-12 months

Which of the following is a common predator of turtle eggs and hatchlings?

a) Snakes
b) Birds
c) Raccoons
d) All of the above

Which of the following is a term used to describe the number of eggs laid by a female turtle in a single nesting season?

a) Clutch size
b) Hatchling size
c) Incubation size
d) None of the above

In some turtle species, what is the term used to describe the phenomenon of female turtles retaining sperm from previous mating events and using it to fertilize eggs in future nesting seasons?

a) Multiple paternity
b) Superfecundation
c) Sperm storage
d) None of the above

What is the main reason why female turtles may sometimes move to different nesting sites during a nesting season?

a) To avoid predators
b) To find better-quality nesting sites
c) To lay more eggs
d) None of the above

In which of the following turtle species do males engage in a behavior called "head bobbing" during courtship?

a) Green sea turtles
b) Box turtles
c) Painted turtles
d) None of the above

What is the term for the process by which turtle hatchlings emerge from their eggs?

a) Copulation
b) Incubation
c) Nesting
d) Hatching

What is hibernation?

a) A state of decreased activity and metabolism in response to cold temperatures
b) A state of increased activity and metabolism in response to cold temperatures
c) A state of decreased activity and metabolism in response to hot temperatures
d) A state of increased activity and metabolism in response to hot temperatures

What is aestivation?

a) A state of decreased activity and metabolism in response to cold temperatures
b) A state of increased activity and metabolism in response to cold temperatures
c) A state of decreased activity and metabolism in response to hot temperatures
d) A state of increased activity and metabolism in response to hot temperatures

Which of the following animals is known to hibernate?

a) Crocodile
b) Snake
c) Turtle
d) Bear

Which of the following animals is known to aestivate?

a) Crocodile
b) Snake
c) Turtle
d) Frog

What triggers aestivation in animals?

a) Decreasing temperatures and food availability
b) Increasing temperatures and food availability
c) Decreasing temperatures and increasing food availability
d) Increasing temperatures and decreasing food availability

Which of the following is an example of a hibernating animal that relies on stored body fat for energy?

a) Black bear
b) Groundhog
c) Woodchuck
d) All of the above

Which of the following is an example of an aestivating animal that relies on stored body fat for energy?

a) Desert tortoise
b) Toad
c) Lizard
d) None of the above

What happens to an animal's body temperature during hibernation?

a) It remains constant
b) It decreases slightly
c) It decreases significantly
d) It increases slightly

What is bird migration?

a) The process of birds laying eggs
b) The process of birds flying south for the winter
c) The process of birds molting their feathers
d) The process of birds building nests

What is the purpose of bird migration?

a) To mate and reproduce

b) To find new habitats
c) To escape harsh environmental conditions
d) All of the above

Which of the following is an example of a behavioral adaptation that birds have for migration?

a) Ability to store large amounts of food
b) Ability to camouflage
c) Ability to follow landmarks
d) None of the above

Which of the following is a danger that migrating birds face?

a) Predators
b) Harsh weather conditions
c) Loss of habitat
d) All of the above

Which of the following is not a method used to study bird migration?

a) Radio tracking
b) Satellite tracking
c) Citizen science
d) Video surveillance

How do gorillas communicate with each other?

a) By making vocalizations

b) By using sign language

c) By using facial expressions

d) All of the above

What is a way that gorillas bond with each other?

a) Through grooming
b) Through play
c) Through vocalizations
d) None of the above

What is the name of the dominant male in a gorilla group?

a) King
b) Silverback

c) Alpha
d) None of the above

What is the name of the female that is in charge of a gorilla group?

a) Queen
b) Matriarch
c) Alpha female
d) None of the above

What is a way that humans have negatively impacted gorilla populations?

a) Through deforestation
b) Through hunting
c) Through disease transmission
d) All of the above

What is a way that chameleons defend themselves against predators?

a) By changing color to blend into their surroundings
b) By biting
c) By puffing up their body
d) All of the above

What is a way that chameleons attract a mate?

a) By changing color
b) By making vocalizations
c) By puffing up their body
d) None of the above

What is a group of chameleons called?

a) Flock
b) Herd
c) Colony
d) None of the above

What is a way that chameleons regulate their body temperature?

a) By basking in the sun
b) By swimming in water
c) By burrowing in the ground
d) All of the above

What is a way that chameleons catch insects?

a) By flying
b) By chasing them on the ground
c) By waiting for them to come close
d) None of the above

What is a way that chameleons defend their territory?

a) By vocalizing
b) By biting
c) By puffing up their body
d) All of the above

What is the name of the chameleon's unique ability to move their eyes independently of each other?

a) Binocular vision
b) Monocular vision
c) Stereoscopic vision
d) None of the above

What is a way that humans have negatively impacted chameleon populations?

a) Through habitat destruction

b) Through hunting for their skin and meat

c) Through introduction of non-native species

d) All of the above

Which of the following is not a reason for bird migration?

a) Avoiding harsh weather conditions
b) Taking advantage of seasonal food availability
c) Escaping from predators
d) Mating with birds from different species

What is the name of the mechanism that birds use to navigate during migration?

a) Magnetic field detection
b) Visual landmarks
c) Smell
d) All of the above

What is the name of the phenomenon where birds fly in a V-formation during migration?

a) Aerodynamics
b) Leader-follower formation
c) Drafting
d) None of the above

How do birds know when to migrate?

a) They rely on cues from the environment, such as changes in temperature and daylight
b) They have an internal biological clock that triggers migration
c) Both A and B
d) Neither A nor B

What is the name of the process where birds build up fat stores to fuel their migration?

a) Hyperphagia
b) Hypothermia
c) Hibernation
d) None of the above

What is the name of the bird species that is famous for its long-distance migration from the Arctic to Antarctica?

a) Sandhill crane
b) Swainson's thrush
c) Arctic tern
d) Yellow-rumped warbler

Which of the following is not a type of bird migration?

a) Latitudinal migration
b) Altitudinal migration
c) Diurnal migration
d) Oceanic migration

What is the name of the phenomenon where birds return to the same breeding ground year after year?

a) Philopatry
b) Nomadism
c) Dispersal
d) Migration

Which of the following factors can impact bird migration patterns?

a) Climate change
b) Habitat loss
c) Predation
d) All of the above

What is the term used to describe the phenomenon where birds stop to rest and refuel during migration?

a) Pit stop
b) Flyover
c) Stopover
d) None of the above

Which of the following animals uses its quills as a physical defense mechanism?

a) Porcupine
b) Skunk
c) Badger
d) None of the above

Which of the following is a defensive behavior used by gazelles?

a) Mobbing
b) Camouflage
c) Running away
d) None of the above

What is the term used to describe the act of an animal spreading its wings or flaring its tail to appear larger and more threatening?

a) Display
b) Aggression
c) Submission
d) None of the above

Which of the following animals uses its sharp claws to climb trees and escape predators?

a) Sloth
b) Armadillo
c) Pangolin
d) None of the above

Which of the following is a defensive behavior used by meerkats?

a) Mobbing

b) Playing dead
c) Spraying a foul-smelling liquid
d) None of the above

Which of the following is not a type of tortoise shell?

a) Dome-shaped
b) Saddle-shaped
c) Circular
d) None of the above

What is the term used to describe the top part of a tortoise shell?

a) Plastron
b) Scutes
c) Carapace
d) None of the above

Which of the following is a common predator of tortoises?

a) Foxes
b) Hawks
c) Both a and b
d) None of the above

Which of the following is a defense mechanism used by some tortoises to deter predators?

a) Emitting a loud hissing noise
b) Retracting into their shell
c) Playing dead
d) None of the above

Which of the following is not a characteristic of a tortoise shell?

a) Made of keratin
b) Composed of bony plates
c) Flexible and pliable
d) None of the above

Which of the following is not a species of tortoise?

a) Galapagos tortoise
b) Leopard tortoise
c) Box turtle
d) None of the above

Which of the following is not a method of offense used by chameleons?

a) Biting
b) Clawing
c) Projectile tongue
d) None of the above

Which of the following is a characteristic of a chameleon's skin?

a) Capable of changing color
b) Covered in scales
c) Both a and b
d) None of the above

Which of the following is a type of chameleon?

a) Panther chameleon
b) Gecko chameleon
c) Iguana chameleon
d) None of the above

What is the term for a challenge to an individual's dominance status?

a) Submission
b) Affiliation
c) Aggression
d) None of the above

Which of the following is a type of social organization that is based on a dominance hierarchy?

a) Monogamy
b) Polygyny
c) Polyandry
d) None of the above

Which of the following is not a benefit of high social status in a dominance hierarchy?

a) Access to resources
b) Increased mating opportunities
c) Higher survival rates
d) None of the above

Which of the following is a behavior that can indicate an individual's status in a dominance hierarchy?

a) Submissive posturing
b) Aggression towards lower-ranking individuals
c) Both a and b
d) None of the above

Which of the following is not a mammalian species that exhibits a dominance hierarchy?

a) Lions
b) Elephants
c) Cows
d) None of the above

What is the term for the process of establishing dominance hierarchies within a group of individuals?

a) Agonistic behavior
b) Territorial behavior
c) Mating behavior
d) None of the above

What is altruism in animals?

a) Behavior that benefits the individual performing it
b) Behavior that benefits the recipient of the behavior
c) Behavior that benefits both the individual performing it and the recipient
d) None of the above

Which of the following is not a potential benefit of social behavior in animals?

a) Increased foraging efficiency
b) Protection from predators
c) Decreased mating opportunities
d) All of the above are potential benefits

Which of the following is not a potential cost of social behavior in animals?

a) Increased competition for resources
b) Increased risk of disease transmission
c) Increased risk of predation
d) All of the above are potential costs

Which of the following is not a factor that can influence the evolution of social behavior in animals?

a) Relatedness between individuals
b) Ecological conditions
c) Availability of resources
d) None of the above

What is kin selection?

a) Selection for traits that benefit the individual performing them
b) Selection for traits that benefit the recipient of the behavior
c) Selection for traits that benefit an individual's relatives
d) None of the above

What is the primary mode of movement for chameleons?

a) Running
b) Jumping
c) Crawling
d) None of the above

How do chameleons use their tails when moving?

a) They use their tails to balance
b) They use their tails to grip onto branches
c) They do not use their tails when moving
d) None of the above

How do chameleons change the color of their skin?

What is the primary method of hunting for chameleons?

a) Pursuit hunting
b) Ambush hunting
c) Scavenging
d) None of the above

How do chameleons capture their prey?

a) By chasing it down
b) By using their long tongues to grab it
c) By spraying it with venom
d) None of the above

How long can a chameleon's tongue be?

a) Up to twice its body length
b) Up to three times its body length
c) Up to four times its body length
d) None of the above

What is the name of the specialized joint in a chameleon's skull that allows it to aim its tongue accurately?

a) Mandibular joint
b) Occipital joint
c) Maxillary joint
d) None of the above

How do chameleons drink water?

a) They use their tongues to lap it up
b) They soak it up through their skin
c) They do not drink water, but get it from their food
d) None of the above

What is the primary cause of intergroup violence in chimpanzees?

a) Competition for food and territory
b) Protection of group members
c) Revenge for past conflicts
d) None of the above

Which of the following behaviors is commonly observed during intergroup conflicts in chimpanzees?

a) Loud vocalizations
b) Physical aggression
c) Displaying of body posture
d) All of the above

Which of the following is a common tactic used by male chimpanzees during intergroup conflicts?

a) Physical aggression towards the other group

b) Displaying of dominance and strength
c) Abduction and killing of infants
d) All of the above

Which of the following non-human primates is known for using tools as weapons during conflicts?

a) Gorillas
b) Bonobos
c) Orangutans
d) Chimpanzees

Which of the following senses do most aquatic animals use to communicate?

a) Vision
b) Smell
c) Sound
d) Touch

Which of the following aquatic animals is known for its complex system of vocal communication?

a) Whales
b) Sharks
c) Sea turtles
d) Jellyfis

What is the purpose of vocal communication in dolphins?

a) To locate prey
b) To establish social bonds
c) To defend territory
d) All of the above

How do humpback whales communicate with each other?

a) Through physical gestures and body language
b) Through complex vocalizations known as songs
c) Through chemical signals in the water
d) Through visual cues and flashing bioluminescence

Which of the following is a way that some fish communicate with each other?

a) Through bioluminescent displays
b) By releasing pheromones into the water

c) Through visual displays of color and pattern
d) All of the above

Which of the following is an example of chemical communication among aquatic animals?

a) Octopuses releasing ink to confuse predators
b) Sharks using electric fields to locate prey
c) Clownfish changing color to indicate social status
d) Lobsters releasing pheromones to attract mates

What is the purpose of acoustic communication among aquatic animals?

a) To attract mates
b) To defend territory
c) To locate prey
d) All of the above

What is the primary way that carnivorous mammals secure food?

a) Foraging
b) Herbivory
c) Hunting
d) Scavenging

Which of the following is a tool that some primates use to extract food from hard-to-reach places?

a) Claws
b) Teeth
c) Fingers
d) Sticks

How do some rodents secure food during times of scarcity?

a) By hibernating
b) By storing food in caches
c) By migrating to new areas
d) By becoming more aggressive in their hunting behaviors

What is the primary way that herbivorous mammals secure food?

a) By browsing on a variety of plants
b) By grazing on a specific type of grass
c) By scavenging for plant material
d) By hunting smaller prey animals

Which of the following is a way that some primates secure food from fruit trees?

a) By shaking the trees to knock the fruit down
b) By climbing the trees and picking the fruit
c) By digging up the roots of the tree
d) By using tools to cut the fruit from the tree

What is the term used to describe a relationship in which both species benefit from the association?

a) Commensalism
b) Mutualism
c) Parasitism
d) Predation

What is the term used to describe a relationship in which one species benefits while the other is harmed?

a) Commensalism
b) Mutualism
c) Parasitism
d) Predation

Which of the following is an example of mutualism?

a) A bird of prey capturing and eating a mouse
b) A bee collecting nectar from a flower
c) A tick feeding on the blood of a host animal
d) A tapeworm living inside the intestines of a host animal

Which of the following is an example of commensalism?

a) A tick feeding on the blood of a host animal
b) A bird building its nest in a tree
c) A clownfish living among the tentacles of a sea anemone
d) A predator capturing and eating its prey

Which of the following is an example of parasitism?

a) A clownfish living among the tentacles of a sea anemone
b) A bee collecting nectar from a flower
c) A tapeworm living inside the intestines of a host animal
d) A predator capturing and eating its prey

What is the term used to describe a bird's courtship display?

a) Nest-building
b) Territory marking
c) Feeding behavior
d) Mating dance

Which of the following is an example of a bird using a visual display to attract a mate?

a) A male peacock displaying its colorful feathers
b) A female bird singing a song
c) A male bird bringing food to a female
d) A bird building a nest

Which of the following is an example of a bird using a vocalization to attract a mate?

a) A male peacock displaying its colorful feathers
b) A female bird singing a song
c) A male bird bringing food to a female
d) A bird building a nest

What is the term used to describe a bird's courtship feeding behavior?

a) Brood parasitism
b) Copulation
c) Nest-building
d) Regurgitation

Which of the following is an example of a bird using courtship feeding behavior?

a) A male bird building a nest for a female
b) A female bird bringing food to a male
c) A male bird displaying colorful feathers
d) A bird engaging in a mating dance

What is the term used to describe a bird's behavior of bringing food to its young?

a) Brood parasitism
b) Copulation
c) Nest-building
d) Parental care

Which of the following is an example of a bird engaging in parental care?

a) A female bird singing a song
b) A male bird displaying colorful feathers
c) A bird building a nest

d) A bird bringing food to its young

How does Bitis gabonica kill its prey?

a) By strangulation
b) By crushing
c) By suffocation
d) By injecting venom

What is the venom of Bitis gabonica primarily used for?

a) To kill prey
b) To deter predators
c) To attract mates
d) To mark territory

What is the primary method of attack for Bitis gabonica?

a) Striking
b) Constricting
c) Biting
d) Spitting

What is the primary method of defense for octopuses against predators?

a) Camouflage
b) Running away
c) Poisonous secretions
d) Physical aggression

How do octopuses use camouflage to evade predators?

a) They change color to match their surroundings
b) They emit a cloud of ink to confuse the predator
c) They create a distraction to lure the predator away
d) They release a foul odor to deter the predator

What is the primary strategy of an octopus when confronted by a predator?

a) To remain still and hope to go unnoticed
b) To attack the predator with venomous tentacles
c) To release ink and swim away
d) To change color and texture to blend in with the surroundings