

BLM Answers

BLM 10-2 Research and Report on Roles in an Animal Community

- Answers will vary depending on animal community chosen. Sample answer for termite colony:
reproductives; king and queen produce eggs
soldiers; defend the colony
workers; do most of the work. They care for the eggs; make tunnels and chambers; repair damaged nests; collect food and feed the young, soldiers, king and queen, and each other; and help soldiers defend the colony.
- Paragraphs will vary depending on animal community chosen. Look for a main organizing idea and supporting points that describe the different roles. Sample paragraph:
Termite colonies include reproductives, soldiers, and workers. The reproductives include the king and queen who produce eggs. They depend on workers for food. The soldiers use their jaws to slash and crush intruders. They can't feed themselves and rely on workers for food. The workers do most of the work. They care for the eggs, make tunnels and chambers, and repair damaged nests. They collect food and feed the young, soldiers, king and queen, and each other, and help soldiers to defend the colony.

BLM 10-3 Ants at Work

- Look for statements such as:
 - Ants are pushing sand into piles.
 - There are many winding tunnels and chambers.

BLM 10-4 Research Safe Practices

- Look for four or five key ideas. For example:
 - All workers who have been in close contact with infected animals or after taking off gloves need to wash their hands frequently with soap and water for 15–20 seconds.
 - All workers need to be provided with personal protective equipment. Protective clothing includes: coveralls, an impermeable apron or surgical gowns with long sleeves plus an apron; gloves; respirator; goggles; boots or protective foot covers. All protective

clothing needs to be disinfected or disposed of properly after use.

- Environmental clean-up needs to be done in areas used for culling birds.
 - Unvaccinated workers should get an updated influenza vaccine.
 - Workers need to get a daily dose of an influenza antiviral drug for as long as they work in direct contact with infected birds or contaminated surfaces.
 - Workers should monitor their own health for symptoms such as fever, respiratory problems, and/or eye infections for one week after last exposure to infected birds. Workers who become sick should get medical care.
- Answers will vary. Accept any reasonable and accurate safety advice. For example,
 - Wear coveralls and an apron, gloves, respirator, goggles, and boots when working with infected birds or contaminated surfaces.

BLM 10-6 Chapter 10 Practice Test

- d) social structure
- b) role
- a) community
- Answers will vary. Look for four different roles such as: principal, teacher, student, custodian.
- a) Pecking order refers to what animals get to boss the others.
b) Look for two points about pecking order such as:
 - The top animal bosses everyone else.
 - The second animal bosses everyone but the top one.
 - The bottom animal in a pecking order does not get to boss anyone.
- Female lions hunt for the food to feed the pride. Male lions defend the territory of the pride and fight off other males who compete for leadership of the pride.
- Accept any two reasonable benefits and challenges of living in a small community. Sample answer:
 - sharing resources such as neighbours who help each other
 - more water, land, and green space
 - lack of recreation/theatres/large shopping complexes
 - lack of job opportunities
- Answers will vary. Look for at least one point to support the opinion. Sample answer: The greatest

challenge is the number of young people who leave small communities. The main reasons they leave are the lack of jobs and educational opportunities.

9. Examples will vary. Sample answers:

- a) benefit; black-capped chickadees call when predators are nearby
- b) benefit; adult emperor penguins watch over a crèche while parents look for food
- c) benefit; lionesses work in packs of four to catch large prey
- d) benefit; ants carry food back to the colony for the queen and other ants
- e) challenge; when food is scarce, young foxes need to find their own food
- f) challenge; chickens in close contact can spread disease easily
- g) challenge; horse with high rank keeps other horses away from food and water until it has its fill

10. a) Students should circle laying hens.

- b) Laying hens living close together can easily spread bird flu. Or, wild geese carry the virus but usually do not get sick.

11. a) and b) Look for any two of the following reasons.

- reduces wild animal populations
- reduces productivity of farm animals
- some diseases spread to humans

BLM 10-7 Chapter 10 Test

1. b) social structure

2. c) role

3. a) community

4. Female lions hunt for the food to feed the pride. Male lions defend the territory of the pride and fight off other males who compete for leadership of the pride.

5. Look for the idea that social structure helps a colony function. Each individual has a different role. For example:

- The queen lays eggs and takes care of larvae.
- Workers collect food, protect the colony, and enlarge the nest.
- Drones mate with the queen.

6. Answers will vary depending on the animal community chosen. Students should explain how the different roles that individuals play within its social structure help the community function.

7. Accept any two reasonable benefits and challenges of living in a city. Sample answer:

- a) sharing transportation services
- b) day care services for the young and elderly
- c) traffic congestion
- d) air pollution

8. Answers will vary. Look for an opinion and at least one supporting point. Sample answer: The greatest benefit is the career opportunities for young people. There are lots of different types of jobs and training opportunities, and public transit makes it easy to get there.

9. Look for a description and example for two benefits. For example:

- protection; individuals work together to intimidate enemies using calls and scents; black-capped chickadees call when predators are nearby
- sharing of resources; animals living in groups share resources; ants carry food back to the colony for the queen and other ants
- hunting success; animals hunting in groups are more likely to catch prey; lionesses work in packs of four to catch large prey
- caring for the young; animals living in groups share responsibility for the young; adult emperor penguins watch over a crèche while parents look for food

10. Animals living in close contact can easily spread disease and infections.

11. Look for a description and example for one challenge. For example:

- competing for resources; when resources are scarce, animals compete with each other for the resources; when food is scarce, young foxes need to find their own food
- competing for leadership; animals compete with each other for control; horse with high rank keeps other horses away from food and water until it has its fill

12. Look for three reasons.

- a) reduces wild animal populations
- b) reduces productivity of farm animals
- c) some diseases spread to humans